Wise Choices? The Economics Discourse of a High School Economics and Personal Finance Course

Tamara L. Sober
Virginia Commonwealth University

Follow this and additional works at: https://scholarscompass.vcu.edu/etd

Part of the Curriculum and Social Inquiry Commons, Secondary Education Commons, and the Social and Philosophical Foundations of Education Commons

© The Author

Downloaded from https://scholarscompass.vcu.edu/etd/5033
Wise Choices? The Economics Discourse of a High School Economics and Personal Finance Course

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

By

Tamara Leigh Sober
MS, Educational Theory and Practice, Florida State University, 1995
BS, Political Science, Florida State University, 1988

Director: Gabriel Reich, Ph.D.
Associate Professor, Department of Teaching and Learning,
School of Education

Virginia Commonwealth University
Richmond, Virginia
July 10, 2017
This dissertation is dedicated to
my Mom Susan, who is my rock (life doesn’t come with a manual, it comes with a Mom!)
and to my daughter Amelia Marie, who is my inspiration!
Acknowledgment

This is the best part of writing the dissertation. Anyone who has written a dissertation may likely recall a time when they were writing or conducting analysis when they stopped and daydreamed about writing the Acknowledgment. I saved it for the very last task. I am grateful to so many people. I’ll start with my committee and with Dr. Kurt Stemhagen. I wouldn’t have my PhD if it weren’t for Kurt. He encouraged and inspired me to apply for the CCC track, helped me secure a fellowship to pursue the degree full-time, and he models a life committed to phronesis. The countless hours he spent mentoring me was as close as we can get in our time to the existential, philosophical discussions meant for the pursuit of a doctorate of philosophy. I am thankful for my Chair, Dr. Gabriel Reich, who provided such clear and consistent direction and feedback throughout the entire process. In so many facets, Gabriel’s attention to my scholarship is best described as going the extra mile. How rewarding it was to experience the process of writing and editing that revealed the capacity of two minds to grasp, interpret and share meaning and understanding. I can’t imagine a better way to learn qualitative methods than to have worked alongside Dr. Jesse Senechal to undergo the development of a case study from the ground up, providing the path for my own research. I am thankful to Dr. Terry Dozier for providing a graduate assistantship to support my final year of the degree to complete the dissertation, and for her professional mentorship. Thanks also to Dr. Katy Swalwell and Dr. Hillary Parkhouse for their thoughtful and detailed dissertation feedback.
I am extremely grateful to Ms. Morgan, her colleagues, and her students for volunteering for this research, for being so gracious with their time and so candid in sharing their viewpoints with me. I’m thankful for my colleagues in the program for the energy and support they provided over the last four years, and thanks go out to my neighbors and Crestwood Church family for their prayers and the countless hours of childcare during my evening coursework. Thanks to my extended family for their encouragement and support (a shout out to my cousin Angel!).

Mom, I’d need about 10 pages to thank you for all you have done for me. It started with you believing in me and has continued with your unwavering love and support of every dream I’ve pursued. Thank you for being there whenever I need you: late night stressed out calls about how to get it all done; last minute trips to pick up Amelia; and the countless times you showed up with dinner, cleaned my house and caught up my laundry. Most importantly thanks for reminding me to slow down, chill out and take time for myself and Amelia. Your insight and life wisdom should earn you an honorary doctorate.

Amelia, I can only imagine that you are pretty tired of hearing about this PhD stuff! When I started this journey, you were a little girl and we sat beside each other doing our homework. Over the last year as you are maturing and moving into your teen-years you have become such a wonderful source of strength. Our time together provides perspective on how small this academic achievement is in the scheme of life. I love you and your big heart!

Kanyon thanks for being so solid in who you are and in life’s priorities. I’m grateful for your steadfast love and patience, and for modeling that life is what happens while we are making plans. Looking forward to less planning and more life!

Tamara Sober
July 2017
# Table of Contents

LIST OF TABLES .............................................................................. xi
LIST OF FIGURES ........................................................................... xii
Abstract .......................................................................................... xiii

## CHAPTER 1 INTRODUCTION ................................................................. 1
  Overview of the Study ..................................................................... 2
  Research Questions ....................................................................... 3
  Definition of Terms ....................................................................... 3
  Rationale ....................................................................................... 6
  A Brief Review of the Literature .................................................... 9
  Gaps in the Literature .................................................................. 11

## CHAPTER 2 LITERATURE REVIEW ..................................................... 13
  Economics and Democratic Citizenry ........................................... 13
  Defining Economics ..................................................................... 13
  Economics as a Social Science .................................................... 15
  K-12 Social Sciences for Democratic Citizenry ............................ 16
    Teaching history for democratic citizenry ................................ 17
    Teaching civics for democratic citizenry .................................... 21
    Teaching economics for democratic citizenry .......................... 25
  Economics Education Research .................................................. 28
    The Goals of Economics Education ........................................ 28
    Instructional Practices and Teacher Preparation ....................... 30
    Assessing the Impact of Economics Education ......................... 31
    Critical Economics ................................................................... 37
  History and Overview of the Economics and Personal Finance Standards ........................................................................................................... 39
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracing the Origin of the Standards: The Council for Economic Education</td>
<td>39</td>
</tr>
<tr>
<td>Economic Literacy’s Shift Towards Financial Literacy</td>
<td>43</td>
</tr>
<tr>
<td>Virginia’s Standards of Learning for Economic and Personal Finance</td>
<td>48</td>
</tr>
<tr>
<td>Conceptual Framework</td>
<td>50</td>
</tr>
<tr>
<td>Orthodox and Non-Orthodox Schools of Economic Thought</td>
<td>51</td>
</tr>
<tr>
<td>Orthodox</td>
<td>51</td>
</tr>
<tr>
<td>Non-Orthodox</td>
<td>52</td>
</tr>
<tr>
<td>More on Positive and Normative Economics</td>
<td>54</td>
</tr>
<tr>
<td>Positive</td>
<td>54</td>
</tr>
<tr>
<td>Normative</td>
<td>54</td>
</tr>
<tr>
<td>Microeconomic and Macroeconomic Branches of Economics</td>
<td>56</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>56</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>57</td>
</tr>
<tr>
<td>Applying the Conceptual Framework</td>
<td>57</td>
</tr>
<tr>
<td>Competing Purposes for Public Education and Economics Education</td>
<td>58</td>
</tr>
<tr>
<td>Conclusion</td>
<td>62</td>
</tr>
<tr>
<td>CHAPTER 3 METHODS</td>
<td>64</td>
</tr>
<tr>
<td>Introduction</td>
<td>64</td>
</tr>
<tr>
<td>Seeking Understanding in a Socially Constructed Context</td>
<td>65</td>
</tr>
<tr>
<td>Seeking Understanding of the Expression of Social Science Values</td>
<td>67</td>
</tr>
<tr>
<td>Case Study</td>
<td>68</td>
</tr>
<tr>
<td>The Value of Case Study for Capturing the Economics Discourse</td>
<td>68</td>
</tr>
<tr>
<td>Researcher as the Primary Instrument</td>
<td>70</td>
</tr>
<tr>
<td>Case Selection</td>
<td>73</td>
</tr>
<tr>
<td>Data Collection</td>
<td>80</td>
</tr>
<tr>
<td>Multiple Sources of Evidence</td>
<td>80</td>
</tr>
<tr>
<td>Documents</td>
<td>80</td>
</tr>
<tr>
<td>Interviews</td>
<td>81</td>
</tr>
<tr>
<td>Classroom observations</td>
<td>82</td>
</tr>
<tr>
<td>Reflective memos</td>
<td>83</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>83</td>
</tr>
</tbody>
</table>
Reliability and Rigor .................................................................................................................85
Limitations ......................................................................................................................................87
Conclusion ......................................................................................................................................88
CHAPTER 4 FINDINGS ..................................................................................................................90
Introduction .................................................................................................................................90
Welcome to the Millionaire Game .............................................................................................90
Debt and Financial Crisis ..........................................................................................................92
The Power of Curriculum in Practice .........................................................................................98
Connecting with the Real World: Participants’ Perspectives ...................................................110
Hannah Morgan, EPF teacher .......................................................................................................111
The complicated nature of the enactment of an official curriculum ......................................112
Ms. Morgan’s lesson on how wealth is determined .................................................................123
Contradictory beliefs about wealth accumulation ..................................................................124
Student Participants ...................................................................................................................127
Money management expectations and a limited view of their role in the economy ..........128
Misunderstandings of who controls the economy persisted ....................................................132
The marginalization of economic values ..................................................................................142
Students’ expectations confirmed .............................................................................................149
Conclusion: The Limited Role of Economic Decision-Making and Economic Values...........151
Emphasis on Personal Finance Roles, Whose Values Went Undetected .................................152
Personal Finance Eclipsed Economics .....................................................................................153
Teacher’s Curricular Choices Reinforced Orthodox Economics ...........................................154
Students Positioned to Adopt Tenets of Orthodox Economics ...............................................155
Students’ Misunderstandings Persisted ......................................................................................155
Complicated Understandings of Wealth Accumulation ............................................................156
The Story Told by the Missing Data ..........................................................................................156
CHAPTER 5 DISCUSSION ............................................................................................................158
Introduction .................................................................................................................................158
Revisiting the Conceptual Framework .......................................................................................159
What’s Happening? ....................................................................................................................164
Who Gains and Who Loses, and by What Mechanisms of Power?........................................166
The financial industry gains and democracy loses .................................................................167
Economic inequality gains and democracy loses .................................................................165
The social studies discipline loses .........................................................................................168
Mechanisms of Power ...........................................................................................................169
Is this Desirable? What Should be Done? Research, Policy & Classroom Recommendations 172
Is this Desirable? ...................................................................................................................172
What Should be Done? ...........................................................................................................172
Research recommendations .................................................................................................172
Policy recommendations ......................................................................................................175
Classroom recommendations ...............................................................................................176
Challenges to significant changes in the EPF classroom .......................................................176
Simple, effective steps for implementing change in the EPF classroom ...............................177
Limitations ............................................................................................................................179
Conclusion .............................................................................................................................180
The Luxury of Time for Constructive Criticism .....................................................................180
Final Reflections ....................................................................................................................183
CODA .....................................................................................................................................184
References ..............................................................................................................................186
Appendix A Recruitment flyer and Informational Letter about the Study .............................206
Appendix B Student Participant Recruitment Script .............................................................207
Appendix C Teacher Consent Form .......................................................................................208
Appendix D Parent/Guardian Consent Form .......................................................................211
Appendix E Student Assent Form .........................................................................................215
Appendix F Student Demographic Data Form .....................................................................218
Appendix G Interview Protocols ..........................................................................................219
Appendix H Virginia Economics and Personal Finance Standards of Learning ..................221
Appendix I EPF Resource List ..............................................................................................226
Appendix J Welcome to the Millionaire Game .....................................................................232
Appendix K Frontline: Inside the Meltdown ......................................................................233
Appendix L Budgeting and Money Management Notes ......................................................235
Appendix M Financial Literacy in America: Individual Choices, National Consequences .... 238
Appendix N Budgeting and Money Management Vocabulary List ........................................ 240
Vita ........................................................................................................................................ 242
LIST OF TABLES

1. Table 1. Teacher Participants.................................................................77
2. Table 2. Student Participants.................................................................79
LIST OF FIGURES

1. Figure 1: Conceptual Framework for Observing and Capturing the High School Economics Discourse ........................................................................................................51

2. Figure 2: Mr. Daniel Walker, EPF Teacher ........................................................................101

3. Figure 3: Ms. Hannah Morgan, EPF Teacher ................................................................111

4. Figure 4: Student Participants ..............................................................................................129-130

5. Figure 5: Epistemological Continuum of Students’ Understanding of their Role in Shaping the Economy .........................................................................................135

6. Figure 6: Relationship of the Data to the Conceptual Framework for Observing and Capturing the High School Economics Discourse .........................................................161
Abstract

WISE CHOICES? THE ECONOMICS DISCOURSE OF A HIGH SCHOOL ECONOMICS AND PERSONAL FINANCE COURSE.

Tamara Leigh Sober, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2017

Major Director: Gabriel Reich, Ph.D., Associate Professor, School of Education

Today’s high school students will face a host of economic problems such as the demise of the social safety net, mounting college student debt, and costly health care plans, as stated in the rationale for financial literacy provided by the Council for Economic Education’s National Standards for Financial Literacy. These problems are compounded by growing income and wealth inequality and the widespread influence of neoliberal ideology. Although one of the major goals of economics education is to teach students to make reasoned economic choices in their public and private lives and provide the skills to solve personal and social economic problems, little empirical research has been conducted on how these goals are addressed. Secondary economics education research has primarily focused on measuring students’ grasp of
neoclassical economics while a separate body of literature provides theoretical critiques of that approach. This study responds to the gap presented by these separate camps by capturing the economics discourse of a high school economics and personal finance course in relation to the role of economic decision-making in a democracy, and the space to hold values discussions. Using case study methodology that included analysis of student and teacher interviews, classroom observations, the standards and official curriculum, lesson plans, and student-produced documents, the study provides deep, context-dependent knowledge about how the official curriculum is manifest in the classroom.

Findings reveal that the role of economic decision-making and values discussions were given very little space. The discourse was heavily focused on the acceptance of the science and mastery of technical knowledge about personal finance for the dual purposes of preparing students to succeed on the W!SE Financial Literacy Certification Test and preparing students to navigate and succeed in a fixed economic reality firmly committed to neoclassical economics. The role of economic decision-making was diminished by the foregrounding of financial literacy over economics, which served as a mechanism of power to send the silent message that economic circumstances (such as wealth inequality) change through individual choices and that economic and social phenomena can be understood and addressed through the application of technical approaches.
CHAPTER 1 INTRODUCTION

Most of us have chosen to study economics so as to acquire a deep understanding of the economic phenomena with which citizens of today are confronted. But the teaching that is offered, that is to say for the most part neoclassical theory or approaches derived from it, does not generally answer this expectation. ("Open Letter from Economics Students to Professors and Others Responsible for the Teaching of this Discipline" PAEN, 2000)

If U.S. high school students enrolled in an economics course were to write a letter to their teachers would it resemble anything close to this open letter written and circulated by international students majoring in economics? Do students make connections between what they are taught in economics class and their future responsibility as democratic citizens to make economic policy decisions that address problems such as our healthcare crisis, mounting economic inequality, financial crises, and climate change? “Economics educators agree that one of the major goals of economic education is to teach students to reason effectively using economic knowledge in their public and private lives” (VanSickle, 1992, p. 56), a sentiment echoed by VanFossen (1995), “economic educators have long emphasized that the teaching and learning of economics should result in the increased willingness and ability of students to use the discipline of economics in solving problems, both personal and social” (p. 1). In K-12 education in general, a 21st century skills focus calls for equipping students with the ability to use critical and analytical thinking to evaluate and solve problems (Bonney & Sternberg, 2011). The Council for Economic Education’s National Standards for Financial Literacy (NSFL) (2013a) open with a rationale for teaching America’s students’ financial literacy built on a host of
economic problems they face, such as the demise of the social safety net (e.g., shifting pension plans to defined contribution plans), mounting college student debt, and complex and costly health care plans. The question at the core of this study is how the discourse of the economics classroom considers the human construction of economic policies and their intended and unintended consequences, as they are debated in the democratic sphere.

Overview of the Study

This study begins with the premise that economics is one of the key disciplines that contributes to the social studies (NCSS, n.d.), and that K-12 economic literacy is a key component for democratic citizenry (Miller, 1988). Scholars in the history and civics social studies fields have taken up the mantel of tying their disciplines’ frameworks to the end goal of democratic citizenry (Barton & Levstik, 2004; Hess, 2008, 2009, 2011, 2012; Wineburg & Reisman, 2015). In contrast, a review of the economics education literature finds a dearth of research examining the relationship between economic education and democratic citizenry and a wealth of research measuring students’ grasp of neoclassical economics (Asarta & Rebeck, 2012; Grimes, 2012; Varum, Ferreira, & Breda, 2012). The few examples of scholarship examining economic education and democratic citizenry accept the tenets of neoclassical economics and discuss ways to incorporate more of those principles into civics (VanFossen, 2006).

A separate body of literature is critical of economics curricula’s commitment—in the academy and in K-12—to the neoclassical model, and argues its limitations and the consequences for democracy of economic literacy taught through the vehicle of financial literacy (Arthur, 2011; Davies, 2014; Emami & Davis, 2009; Maier, Figart & Nelson, 2014; Peterson & McGoldrick, 2009; Reardon, 2012; Warner & Agnello, 2012). They claim that economic literacy
for democratic citizenry must include teaching students about the role of economic decision-making in a democracy and must provide them with the skills to make reasoned judgments about economic policy decisions as opposed to teaching them to adapt to a hostile economic climate. These two bodies of literature exist in separate camps without empirical research about the K-12 economics classroom to bridge their gap.

This study will make a contribution to close that literature gap by providing insight into an economics and personal finance course. It will center on capturing the economics discourse in relation to the role of economic decision-making in a democracy, and the space to ask phronetic\(^1\) questions and hold values discussions about issues such as economic inequality, the redistribution of wealth, and other economic problems currently facing society. Using case study methodology, that includes student and teacher interviews, classroom observations and an analysis of the standards, curriculum, lesson plans and student-produced documents, the study provides deep, context-dependent knowledge about how the official curriculum is manifest in the classroom. The study employs the following research questions:

1. How is the role of economic decision-making in a democracy addressed in a high school economics and personal finance course?

2. What space is created for the role of economic values?

3. What are teachers and students’ understandings of how wealth is accumulated?

**Definition of Terms**

Becker (2001) provides a comprehensive definition of economics education, stating that it focuses on the scholarship of teaching economics and encompasses the content to be taught,

\(^1\) _Phronesis_ is defined by Flyvbjerg (2001) as “‘a true state, reasoned, and capable of action with regard to things that are good or bad for man’” (quoting Aristotle, p. 2). More detail is provided below under “Rationale.”
methods of teaching, evaluation of those methods, and information of general interest to teachers of economics in elementary through graduate school. Economic educators frequently use the term *economic literacy* in reference to students’ economic knowledge and skills. For the purposes of this study the term will be defined by the economics education goals in the *Voluntary National Content Standards in Economics* (hereinafter the *Standards*) (CEE, 2010), and in Virginia’s *Standards of Learning for Economics and Personal Finance* (*EPFSOL*) (Virginia Department of Education, 2009). The *Standards* “provide a tool for educators, specifying what students, kindergarten through grade 12, should learn about basic economics and the economy as they go through school, so that they will be better-informed workers, consumers and producers, savers and investors, and most important, citizens [emphasis added]” (CEE, 2010, p. ix). Similar goals are stated in Virginia’s *EPFSOL* (Virginia Department of Education, 2009) “Students need a strong foundation in economics and personal finance to function effectively as consumers, workers, savers, investors, entrepreneurs, and active citizens [emphasis added]” (n.p.).

*Financial literacy* is defined by the NSFL’s (CEE, 2013a) six content standards: earning an income, buying goods and services, saving, using credit, financial investing, and protecting and insuring. Financial literacy has long been considered a subfield or branch of economic literacy (Grimes, 2012) and within the academy finance is defined as “a subfield of economics distinguished by both its focus and its methodology” (Ross, 2008, p. 314).

Throughout the study the terms *official economics curriculum* or *official curriculum* will be used in reference to the neoclassical model of economics as shaped by the three sets of standards referenced above, the *Standards* (CEE, 2010) the *NSFL* (CEE, 2013a), and the *EPFSOL* (Virginia Department of Education, 2009).
The conceptual framework for this study presented in the final section of the literature review provides detailed definitions of economic terms. However, for the practical purpose of digesting the literature review definitions of *neoclassical economics, positive economics, and normative economics* are provided here. Classical economics holds that “the pursuit of self-interests by individual economic actors produces a socially beneficial outcome, in the form of maximum national wealth” (Chang, 2014, p. 84; cf. Smith, 1976). *Neoclassical economics* adds to the classical definition the willingness to intervene to protect the market, when deemed necessary. For example, neoclassical economics supports the Federal Reserve Bank’s intervention to control the money supply. Samuelson and Nordhaus (2010) define *positive economics* as the branch of economics that focuses on cause and effect behavior using empirical evidence to test economic theories (such as *neoclassical economics*) and *normative economics* as economics that expresses values or judgments about economic fairness or what the outcome of economic policies should be. Thus, *positive and normative economic* analysis can be applied to any economic theory, including *neoclassical economic theory*.

The definition of *democratic citizenry* to be examined in this study is captured by the National Council for the Social Studies in their *National Curriculum Standards for Social Studies: A Framework for Teaching, Learning, and Assessment* (2010), “The primary purpose of social studies is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world” (NCSS, 2010, Executive Summary).
Rationale

When I proposed this study, I noted that it was being conducted in the context of several important historical developments: the fall of Communism, the rise of globalization, the colossal growth of the corporate finance industry, and growing income and wealth inequality (Piketty, 2014; Saez, 2013; Saez & Zucman, 2014) combined with the widespread prevalence and influence of neoliberal\(^2\) ideology (Giroux, 2017; Harvey, 2005; Parker, 2008). As I draw the study to a close there have been rapid and significant changes to this context, including challenges to globalization on both the national and international stage built on populist\(^3\) movements, and a simultaneous push within the left for more progressive policies that address economic inequality.\(^4\)

These historical changes coincide with three significant developments in economics education. First, Grimes (2012) notes unprecedented growth in economics education; specifically, Walstad and Rebeck (2012) document high school economics course enrollment growth from 23% in 1982 to 57% in 2009. Second, there are numerous calls of the encroachment of financial literacy upon economic literacy (Grimes, 2012; Miller & VanFossen, 2016).

\(^2\) David Harvey (2005) defines neoliberalism as “a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong property rights, free markets, and free trade” (p. 2). He attributes the origin of neoliberal theory to a group of academic economists, historians and philosophers who gathered around Frederick von Hayek, and depicted themselves as liberals “because of their fundamental commitment to ideals of personal freedom. The neoliberal label signaled their adherence to those free market principles of neoclassical economics [attributed to Alfred Marshall]….They also held to Adam Smith’s view that the hidden hand of the market was the best device for mobilizing even the basest of human instincts such as gluttony, greed, and the desire for wealth and power for the benefit of all” (p. 20). This study operates from the premise that present day neoliberalism embodies the free market principles of neoclassical economics.

\(^3\) Guiso, Herrera, Morelli, and Sonno (2017) build their demand and supply analysis of the recent growth in populism on this definition: “populists claim to promote the interest of common citizens against the elites; they pander to people’s fear and enthusiasm; and they promote policies without regard to the consequences for the country” (p. 2).

\(^4\) Bernie Sanders’s (2016) ran his campaign for the Democratic Presidential nomination on a platform devoted to exposing concentrated wealth’s corruption of Democracy, “In the year 2015, with a political campaign finance system that is corrupt and increasingly controlled by billionaires and special interests, I fear… government of the people, by the people, and for the people is beginning to perish in the United States of America.”
2008) and of corporate support for financial literacy (Alpert & MacDowell, 2012). Third, from a broad field of economics (Chang, 2014; Reardon, 2009), K-12 economics education has committed to one theory, neoclassical economics (CEE, 2010). Scholars have critiqued economics education for the narrow focus on neoclassical theory, particularly after the failure of neoclassical economists to predict or explain the Great Recession, and lament that students at the beginning of the 21st century are being taught the same economics as students were taught at the beginning of the 19th century (Fullbrook, 2010; Otsch & Kapeller, 2010; and Reardon, 2012). However, neither the critical scholars nor the K-12 economic educators have made empirical contributions on how the neoclassical model influences the economics discourse of the actual classroom, in relation to students’ values discussions and their understanding of economic policy decision-making. What is unknown is if there are moments when the uncertainty of the neoclassical model is shaken, when real life issues—such as a parent’s job loss or foreclosure on a student’s home—enter into the economics discourse, and if so how they are addressed in the classroom.

It is this context that calls for a close examination of the economics discourse. Teaching students about the role of economic decision-making in a democracy requires space for values discussions about the kind of society and economy in which students prefer to live. In Making Social Science Matter, Flyvbjerg (2001) asserts that in contrast with the natural sciences, the social sciences excel in analysis and discussions of values. He argues that discussions of values and interests are crucial for society’s enlightened political, economic, and cultural development. Flyvbjerg presents a modern interpretation of the Aristotelian concept of phronesis, defined as practical wisdom or in his words “a true state, reasoned, and capable of action with regard to things that are good or bad for man” (quoting Aristotle, p. 2). He further explains, “phronesis
moves beyond analytical, scientific knowledge (episteme) and technical knowledge or know-how (techne) and involves judgments and decisions” (p. 2). Flyvbjerg reasons that attempts to reduce social science and theory either to episteme or techne are misguided. From this perspective, the official economics curricula as shaped by the neoclassical model of the Standards (CEE, 2010) ignore phronetic questions. However, the enacted curriculum—the dynamic nature of the classroom where students and teachers bring their own values and lived experiences (Gee & Green, 1998; Pinar, 1989)—may provide the space for phronetic questions and values discussions.

These values’ discussions of what ‘is good or bad for man’ are critical when economic disparity threatens democracy and more. Recent empirical work on growing inequality in industrial and post-industrial democracies raises phronetic questions about the wisdom of the policies that have facilitated wealth concentration among a small class of global elites (Piketty, 2014; Saez & Zucman, 2014). Piketty (2014) writes:

“When the rate of return on capital exceeds the rate of growth of output and income, as it did in the nineteenth century and seems quite likely to do again in the twenty-first, capitalism automatically generates arbitrary and unsustainable inequalities that radically undermine the meritocratic values on which democratic societies are based” (p. 1).

Wilkinson and Pickett (2009) document the numerous and varied costs of economic inequality that manifest themselves in dysfunctional community and social relations, mental and physical health problems, educational inequities, violence, crime and more.

In light of growing income and wealth inequality that Piketty (2014) has documented as the result of economic policies, economists, such as Chang (2014) have called for economic education that helps students become “aware of different types of economic arguments and
develops the critical faculty to judge which argument makes most sense in a given economic circumstance and in light of which moral values and political goals” (p. 4). In essence Chang is calling for the incorporation of a phronetic approach to economics education. This approach would teach students the skill of considering an economic context, applying value judgments about desired economic outcomes, and making reasoned choices about the most applicable economic theory to achieve desired outcomes.

**A Brief Review of the Literature**

The first section of the literature review considers the connection between economics and democratic citizenry and begins with a history of the evolving definition of economics, culminating in today’s definition of economics as the “science of choice” (Backhouse & Medema, 2008). This is contrasted with claims of economics as a social science (Frey, 1999; Lopus, Morton, & Willis, 2003; Solow, 1985; and VanFossen, 2006). The social studies commitment to education for democratic citizenry is reviewed (NCSS, 2010, 2013) through the lenses of the individual disciplines of history, civics and economics, noting a significant body of literature from history (Barton & Levstik, 2004; Lévesque, 2008; Levstik & Tyson, 2010; Seixas, 2004; Wineburg, 2001; Wineburg & Reisman, 2015) and civics (Hahn, 1996; Hess, 2008, 2009, 2011; Westheimer & Kahne, 2003, 2004; Kahne &Westheimer, 2003) that explored their respective disciplines’ contribution to this goal, and a lack of economics education research to this end (Levstik & Tyson, 2010).

The second section of literature considers economics education research, beginning with a review of studies examining students, teachers, economic educators and economists differing views on the goals of economics education (Armento, 1987; Highsmith, 1989; Morton, 1987;

The third section of the literature review provides the history and an overview of the economics and personal finance standards, including background on the Council for Economic Education, and the extent of their influence over the K-12 economics education curricula (Bach et al., 1961; CEE, 2010, 2013, 2013a, 2014, 2016, 2016a, 2016b, Grimes, 2012; Sasser & Meyers, 2012). Attention is drawn to early discussions and critiques of the first iterations of what would become the *Standards*, to the absence of current ideological debates within the economics education literature, and to K-12 economic literacy’s commitment to neoclassical
economics. The *National Standards for Financial Literacy* (CEE, 2013a) are described, and the sparse body of literature on these standards--that argued that economic literacy is shifting towards financial literacy--is reviewed. The section ends by defining Virginia’s *EPFSOL* and includes the specific standards that will be taught and observed during the data collection phase of this study.

The fourth section of the literature review presents the conceptual framework that will be used to capture the economics discourse during data collection. The framework addresses: the ontological assumptions of economics, with concepts such as the world is certain with calculable risks, or the world is uncertain; the positive and normative epistemological assumptions of economics; the axiological assumptions of economics and microeconomic and macroeconomic approaches to teaching economics.

The final section of this literature review begins with a discussion of the competing purposes of public education, defined by Labaree (1997) as: democratic equality, in preparation for citizenship; social efficiency, in preparation for employment; and social mobility in preparation for advancement in social position. A comparison is made to the struggle over the purposes of economics education which compete in the context of what Giroux (2017) described as a political landscape increasingly informed and influenced by a neoliberal ideology.

**Gaps in the Literature**

This study filled the void in the K-12 economics education literature of a lack of empirical research examining economic education’s furtherance of the democratic citizenry goal of social studies. More specifically it examined the economics discourse of a unit in a high school economics and personal finance course as it related to the role of economic decision-
making in a democracy, and specifically how phronetic questions and values discussions were expressed in the discourse. The study also addressed the following identified gaps in the K-12 economics education literature: the lack of studies that address students’ macroeconomic reasoning, the lack of qualitative studies, the lack of research based on direct classroom observation, (Miller & VanFossen, 2008), and the inadequacy of student test scores to capture students economic understanding for problem solving (Miller & VanFossen, 1994; VanFossen, 1995). It also responded to the calls to move economic education research beyond multiple-choice assessments of students’ content knowledge (Grimes, 2012) and specifically to Brenneke, Highsmith, Soper, Walstad, and Watts (1988) call for the use of case study methodology to capture context-dependent approaches to economics education.

This study makes contributions to close these gaps by providing concrete, context-dependent knowledge through case study methodology, a research process that Flyvbjerg (2001, 2006) holds is effective for the empirical study of phronetic questions and that Roth (2009) contends provides a different form of generalization, that does not abstract and remove context, but understands “context and experiential differences as different realizations of the same action possibilities” (p. 250). Campbell (1975) and Yin (2014) offer that case study research may shed light on phenomena that exist elsewhere. The study may be of interest to social studies and economics educators, to the economic and social justice communities interested in empirical data to inform their theoretical claims, to scholars interested in the interaction between hegemony and the articulated and unarticulated curricula, and to the general teaching and learning community. The results may be used to inform future decisions in regards to the policy and practice of K-12 economics education.
CHAPTER 2 LITERATURE REVIEW

Economics and Democratic Citizenry

Defining Economics

The discipline of economics can be defined in numerous ways. The earliest definitions were labeled political economy, “the term first used for the discipline that later became economics” (Backhouse & Medema, 2008, p. 720). These eighteenth century political-economy definitions were built around extending the idea of efficiently providing for the wants of a household to the whole of a nation. Adam Smith (1776/1976) viewed political economy as a legislator’s branch of science with two objectives: “providing the people with plentiful revenue or subsistence and providing the state with enough revenue to provide public services” (p. 428). His most well-known definition stated that economics is “an inquiry into the nature and causes of the wealth of nations” (as quoted by Groenwegen, 1987, p. 904). Early definitions of economics continued to describe it as the social science concerned with the study of wealth (Backhouse & Medema, 2008), until Marshall (1890) challenged it with his definition, adding the study of mankind, “Economics is a study of mankind in the ordinary business of life. It inquires how he gets his income and how he uses it. Thus, it is on the one side, the study of wealth and on the other and more important side, a part of the study of man” (pp. 1-2). In 1932 Robbins’ definition put scarcity and choice at the center of economic analysis with his definition, “economics is a science which studies human behavior as a relationship between ends and scarce means which
have alternative uses” (p. 16) that has now become the “most commonly accepted current definition” of economics (Backhouse & Medema, 2008, p. 225; Chang, 2014, p. 17). The American Economic Association (2015) defined economics as “the study of how people choose to use resources.” In the 19th edition of the mostly widely used collegiate economic textbook Samuelson & Nordhaus (2010) defined economics as “the study of how societies use scarce resources to produce valuable commodities and distribute them among people” (p. 4). Rather than defining economics as a subject matter, these recent definitions defined the discipline as an aspect of behavior, “just a short step to defining economics in terms of a method—that of rational choice—which could be applied not simply to production and consumption costs but to all of human behavior” (Backhouse & Medema, 2008, p. 721). Thus, in the early 20th century, the definition of economics was evolving from the study of how scarce resources are used into the study of mankind’s economic behavior.

After WWII and during the Cold War the emphasis on rational choice became ideologically attractive as both a methodological conceit and as an ideological bulwark against communism. During the 1960s economics became increasingly conceived of as the ‘science of choice,’ and bolstered by advances in empirical analysis and econometrics, economic theories and quantitative techniques began colonizing other social science fields outside the sphere of the market, in what came to be called “economic imperialism,” (Backhouse & Medema, 2008, p. 722).

Although Robbins’ definition is the most widely cited definition there are a significant number of economists who disagree with him. Noteworthy is Robbins’ reference to economics as a ‘science,’ omitting the word “social.” Backhouse and Medema (2008) noted that the prestige of science caused many economists to try to dispense with value judgments altogether
with an effect of significantly narrowing the subject. “Attempting to define economics thus was not and is not simply a descriptive exercise; it has consequences for what economists do, and how they go about doing it” (Backhouse & Medema, 2008, p. 722).

The evolving definitions of economics are significant for this study because they have consequences for how economics is recontextualized (Bernstein, 1996) for the classroom. Economics, and in particular neoclassical economics, has come to be defined as “a way of thinking” (Coyle, 2007, p. 232). In contrast, in Chang’s *Economics: The User’s Guide* (2014), his attempt to make economics layperson-accessible, he defined economics not by its approach but by its subject matter. He explained that it is “the study of the economy” (p. 18) and that the economy involves “money, work, technology, international trade, taxes and other things that have to do with the ways in which we produce goods and services, distribute the incomes generated in the process and consume the things thus produced” (Chang, 2014, p. 22). The “way of thinking” versus “subject matter content” distinction is apparent in the longstanding debate among economic educators over whether to teach students with an economic concepts approach or an economic way of thinking approach, and is addressed below in the review of economics education literature. The final section of this chapter addressing the conceptual framework for this study includes additional literature that further defines the economic discipline.

**Economics as a Social Science**

This study holds that economics is a social science, situated within the social sciences disciplines, “economics is a social science….economic activity is embedded in a web of social institutions, customs, beliefs and attitudes” (Solow, 1985, p. 328). Lopus, Morton, and Willis (2003) claimed that economics is not merely a collection of principles and ideas, but a social science that attempts to make sense out of human behavior. Frey (1999) wrote, “economics is
taken to be part of those sciences which deal with actual problems of society by providing insights, improving our understanding, and suggesting solutions” (p. vii). Samuelson (1976) labeled economics “the queen of the social sciences” (p. 6). VanFossen (2006) claimed that economics is a social science, despite states standards’ overemphasis on the science part of the discipline. The National Council for the Social Studies claimed economics under its umbrella, NCSS defines social studies as the integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology. (NCSS, n.d.)

Evans (2004) wrote that traditionally, the social studies are comprised of history, civics/political science and other social science disciplines, including economics.

**K-12 Social Sciences for Democratic Citizenry**

Historically the K-12 social sciences, known as the social studies, have supported the goal of creating informed and active public citizens (Barr, Barth & Shermis, 1977; NCSS, 1979; Parker, 1989; Shaver, 1977). On the ‘About’ page, the National Council for the Social Studies (NCSS) stated, “social studies promotes knowledge of and involvement in civic affairs. And because civic issues--such as health care, crime, and foreign policy--are multidisciplinary in nature, understanding these issues and developing resolutions to them requires multidisciplinary education. These characteristics are the key defining aspects of social studies” (n.d.). The social studies recently reiterated and highlighted their commitment to preparing students for democratic citizenry when they claimed it as the primary purpose of their disciplines (NCSS, 2010). Their 2013 *Social Studies for the Next Generation: Purposes, Practices, and Implications of the*
College, Career, and Civic Life (C3) Framework for the Social Studies State Standards:

Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography, and History (herein after The Framework) acknowledged a universal “goal of knowledgeable, thinking and active citizens” (p. 5) that can “act in ways that promote the common good” (NCSS, 2013, p. 5). A foundation has been provided for the social studies disciplines to create discipline-specific content that encourages students to think critically about ethical and values-based dilemmas in order to move toward a democratic citizenry goal. The following sections review the literature on the disciplinary literacies of history, civics and economics in pursuit of that goal.

**Teaching history for democratic citizenry.** A review of the literature suggested that despite the united support for a democratic citizenry goal, with the noted exception of history, the disciplines have not undertaken research to support this goal (Levstik & Tyson, 2010). Practitioner journals abound with teaching strategies to address social science concepts but “only a trickle of research informs our understanding of teaching and learning in other social sciences….we know relatively little about…the connections between teaching, learning, and personal or civic decision-making” (Levstik & Tyson, 2010, p. 5). Levstik & Tyson posited that history education’s exception may in part be due to the historical and current prevalence of history in the K-12 social studies curriculum. A review of that discipline’s research on the topic is taken up here. In line with this study’s interest, the scholarship reviewed examines the role of history education in teaching the applicable skills for values discussions in a democracy.

In *Teaching History for the Common Good* Barton & Levstik (2004) argued that students are best prepared for democratic citizenship through a democratic humanist approach that encourages them to thoughtfully consider the role of justice and the common good in society. They suggested that history should be guided by three elements of humanistic education. First, it
must promote reasoned judgment. Students must move beyond memorization of facts and be taught to weigh alternatives, determine significance and critically reason about important human matters in order to draw conclusions. Second, it should promote an expanded view of humanity and encourage students to move beyond their immediate world and consider the cares, concerns and ways of thinking of people different than themselves. “Well-planned history education can…help [students] understand the logic of alternative ways of thinking and acting” (Barton & Levstik, 2004, p. 37). Finally, it should involve deliberation over the common good. Barton and Levstik suggested moving beyond the classical and romantic humanist traditions’ emphasis on individual judgment and standards of ethical behavior to a social perspective. They referenced Dewey’s (1966) assertion that for any study to be truly humane it must produce “‘greater sensitiveness to social well-being and greater ability to promote that well-being’” (as quoted by Barton & Levstik, 2004, p. 38). Barton and Levstik contended that discussions about how to care for the public realm are key in preparing students for democratic citizenship. They suggested one criterion for making choices in a crowded curriculum is the extent to which a topic promotes consideration of the common good.

The disciplinary literacies of historical thinking, sourcing, contextualization, and historical significance provide students with skills for making reasoned judgment. Lévesque (2008) defined historical thinking as understanding that historical knowledge has been constructed from interpretations of historical traces (e.g., written documents and objects). “Without such sophisticated insight into ideas, people, and actions, it becomes impossible to adjudicate between competing versions (and visions) of the past” (Lévesque, 2008, p. 27). Wineburg (2001) claimed that “historical thinking requires us to reconcile two contradictory positions: first, that our established modes of thinking are an inheritance that cannot be sloughed
off, and, second, that if we make no attempt to slough them off, we are doomed to a mind-numbing presentism that reads the present onto the past” (p. 12). Historical thinking’s achievement is that it “changes the basic mental structures we use to grasp the meaning of the past” (Wineburg, 2001, p. 7). Thus, teaching students to think historically—forgoing presentism and applying alternative perspectives to why things happened the way they did—builds civic competence through the modeling of the skills needed to consider multiple perspectives, weigh options and make reasoned judgments about future problems.

Moje (2007), Gottlieb and Wineburg (2012), and Wineburg and Reisman (2015) explained that historical thinking, or historical literacy, prepares young people for democratic citizenship. For example, the historical-literacy skill sourcing (Wineburg, 2001; Martin, Wineburg, Rosenzweig & Leon, 2008) is the process in which readers query authors of primary and secondary historical sources about their motives for writing and the bases for their truth claims. These scholars suggested that teaching students to question and interrogate their historical texts builds a sense of agency and an active, participatory stance, similar to that required of active citizens.

The historical-literacy skill of contextualization requires students to question the social and political circumstances surrounding a given text (Seixas & Morton, 2013; Reisman & Wineburg, 2008). Lévesque (2008) argued that it is an essential step in evaluating evidence. “As teachers strive to identify enduring themes and patterns, they must teach students to appreciate the particular policies, institutions, worldviews, and circumstances that shape a given moment in time” (Reisman & Wineburg, 2008, p. 202), key skills for making informed decisions. Wineburg and Reisman (2015) declared that the focus of these and other historical disciplinary literacy skills, employed in the Stanford History Education Group’s (n.d.) Reading Like a
Historian curriculum, widely “used in all 50 states and 127 different countries…downloaded more than one million times” (Johnston, as referenced by Wineburg & Reisman, 2015, p. 637), is “the vocation of the citizen” (p. 637).

The act of determining what makes an event or character historically significant builds students’ agency for democratic citizenry. Seixas (1997) wrote that in contrast to previous years when history textbooks went unquestioned, today students confront their history classes with their own frameworks of historical understanding, gleaned from family stories, historical films, television fiction, commemorations, and…their earlier school history experiences. Students do not swallow whole what this year’s teachers and textbooks tell them is historically significant. Rather, they filter and sift and remember and forget, adding to, modifying, and reconstructing their frameworks of understanding, through their own often-unarticulated values, ideas, and dispositions. The outcome of this process may be seen as expressions of their own frameworks of historical significance (p. 22).

Lévesque (2008), Epstein (1998) and Wineburg, Mosborg, Porat & Duncan (2007) spoke to the need to recognize adolescents’ historical understandings based on their cultural and linguistic heritages, race-related differences and numerous other lived experiences in developing students’ expanded view of humanity.

In his review of Research on Students’ Ideas About History, Barton (2010) reviewed over 200 empirical studies published since the late 1970s. Although none of the studies focused directly on the relationship between history education and democratic citizenry there is research that is instructive for moving towards the democratic citizenry goal. Barton cited the following literature confirming that presenting students with topics that involve judgment, emotions and
morality heightens their interest: Gabella, 1995; Levstik, 1986, 1989; Saye and Brush, 1999; Schweber, 2003, 2004; and Wills, 1996, 2005. Similar to the benefits of sourcing discussed above, Barton (2010) cited the following studies that strengthen the claim that students’ critical thinking is fostered when they are asked how authors’ perspectives may have influenced what they wrote, or when they are asked to support a position on a controversial topic: Britt, Rouet, Georgi, and Perfetti, 1994; Perfetti, Britt, Rouet, Georgi, and Mason, 1994; Rouet, Britt, Mason, and Perfetti 1996; and VanSledright and Kelly, 1998.

Teaching civics for democratic citizenry. Belief in the fundamental importance of civic education for democracy has been long-standing (Westheimer & Kahne, 2003). Indeed, the largest section of the most recent edition of the Handbook of Research in Social Studies Education (Levstik & Tyson, 2010) was devoted to civic competence, and more articles in the primary research journal of the field, Theory and Research in Social Education, and in general education journals such as The American Educational Research Journal, and Teachers College Record, focused on aspects of civic education over any of the other social studies. In examining civics education Levstik & Tyson (2010) placed contemporary research in five broad categories. The category most in line with this study’s interest in the role of values discussions for promoting democratic citizenry focused on teaching controversial issues in the classroom and teaching the skills of dialogue and discussion. Hahn (1996) suggested that controversial issues are a key to economic education if students are to be genuinely prepared to make the economic policy choices called for in democratic citizenship.

Hess (2008) relayed that “the teaching of ‘controversial public issues’ has come to describe a social studies lesson, unit, course, or curriculum that engages students in learning about issues, analyzing them, deliberating alternative solutions, and often taking and supporting
a position on which solutions may be based” (p. 125). Rationales for including controversial issues in the curriculum included developing the skill to publicly discuss common problems (Mansbridge, 1991), preparing students for democratic participation outside the world of school (Newmann & Wehlage, 1995), improving critical thinking, and developing a commitment to democratic values (Hess, 2008). Andolina, Jenkins, Keeter and Zukin (2002) found that young people who report participating in open discussions are more likely to engage in a variety of civic and political behaviors. Hess (2008) cited a 2001 study by Torney-Purta, Lehmann, Oswald, and Schultz where they measured the “‘extent to which students experience their classroom as places to investigate issues and explore their opinions and those of their peers’” (as cited by Hess, p. 127) and determined “that an open classroom climate for discussion is a significant predictor of civic knowledge, support for democratic values, participation in political discussion, and political engagement” (Hess, 2008, p. 127).

Hess (2008) cited the challenges of researching the measurable outcomes of teaching controversial issues such as the lack of school districts with systematic incorporation of these issues in the curriculum and the varied approaches embedded in courses that use additional teaching strategies (Hahn, 1996). Regardless, advocacy for this approach continues to gain momentum and one of the six recommendations from the Carnegie Civic Mission of the Schools Report (2002), is to incorporate discussion of current local, national, and international issues and events into the classroom” (pp. 26-27). Despite these endorsements, Hess found a contradiction within the literature. Teachers and students self-report widespread use of and exposure to controversial issue discussions while researchers rarely found “discussion of any sort and little attention to controversial issues” (p. 127) during their observations. Although not focused on the civics classroom, Reisman’s (2015) recent study substantiated the rarity of classroom discussion
claim, finding only “132 minutes of disciplinary whole-class discussion in over 7,000 minutes of video footage” (p. 35) collected in five, eleventh-grade U.S. History, American Studies and business classes. This contradiction between perceived and actual discussion may be because students and teachers tend to conflate classroom talk with issue discussion (Hess & Ganzler, 2006). Hess and Ganzler’s (2006) research suggested that the current scale researchers use doesn’t differentiate between classrooms with issues-rich discussions and those with non-authoritarian environments that allow more student talk. Hess (2008) wrote, “this raises the possibility that in classes that include more robust and frequent full-fledged issues discussions, the effects on students’ political engagement may be above and beyond what occurs when students are in classes they simply perceive as open” (p. 128). However, there is promise for capturing this distinction with the most recent Authentic Intellectual Work instrument developed by Saye and the SSRIC (2013) for the assessment of higher levels of authentic pedagogy.

Studies related to teachers’ beliefs revealed that they incorporate controversial issues in their courses in order to teach students to analyze and take positions on issues to prepare them to make policy decisions (Hess, 2002; Hess & Posselt, 2002; Oliver & Shaver, 1966; Rossi, 1995). Evidence suggested that many teachers, especially newcomers, are reluctant to include issues that they believe may be in conflict with the students’ or community’s views (Hess, 2002). When teachers did include issues, they “sought a way to engage students in talking about their own views within the bounds of community norms” (Hess, 2008, p. 130). In terms of teachers’ practice, no single teaching model emerged from these studies and the literature is thin on how teachers learn the skill of incorporating controversial issues discussions into their courses (Hess, 2008). However, one apparent theme was teachers’ interest in having their students examine and critique multiple points of view in a non-threatening atmosphere (Beck, 2003; Bickmore, 1993;
Brice, 2002; Hess, 2002; Hess & Posselt, 2002; Rossi, 1995). In terms of outcomes, Hess and Ganzler (2006) found evidence of students beginning to accept political conflict and differing viewpoints as a normal and necessary part of democracy. Hess (2008) summarized, “there is evidence that participating in controversial issues discussions can build pro-democratic values (such as tolerance), enhance content understanding, and cause students to engage more in the political world” (p. 133).

After a decade of research and writing about democratic education, Westheimer and Kahne (2003; 2004), and Kahne and Westheimer (2003) wrote of a lack of consensus around “the civic goals of schooling, and how that underscores the challenge and complexity of deciding what we want schools to accomplish and how to make this happen” (Westheimer & Kahn, 2003, p. 10). They contrasted programs that focus on patriotism and volunteerism as lessons in democracy with “visions of civic education that emphasize uniquely democratic forms of participation, debate, and action” (Westheimer & Kahne, 2003, p.10). They emphasized teaching students the skills to analyze public policies, laws and social norms and the ability to consider different perspectives through dialogue. Their curricular strategies included helping students identify aspects of society that need improving.

In Kahne and Westheimer, (2003) and Westheimer and Kahne (2004) they reported findings from a study of 10 programs engaged in the Surdna Foundation’s Democratic Values Initiative, as part of a multi-year study of school-based programs aimed to teach democratic citizenship. To capture the programs’ diverse perspectives on democratic citizenship they constructed a framework of three different visions of citizenship, the personally responsible citizen, the participatory citizen and the justice-oriented citizen. Qualitative and quantitative data found each program to be effective in achieving its goals. However, there were important
differences in each program’s impact. For example, programs that championed participation did not develop students’ abilities to analyze and critique root causes of social problems, and programs that focused on developing personally responsible citizens may not have been effective at increasing participation in local and national civic issues and “c[ould] undermine efforts to prepare participatory and justice-oriented citizens” (Westheimer & Kahne, 2004, p. 6). Westheimer and Kahne (2003) contended that democratic societies are strengthened by providing space for debate of various policies and they wrote, “indeed, it is the basic conflicts of values in society that make democracy essential” (Westheimer & Kahne, 2003, p. 12).

**Teaching economics for democratic citizenry.** In reviewing economics education’s support of the democratic citizenry goal it is worth noting that economics education research has positioned itself outside of the social studies (Levstik & Tyson, 2010). The most recent version of the *Handbook of Research in Social Studies Education* notes only one article reporting research on economics education in *Theory and Research in Social Education*. Social Education, and Social Studies, practitioner journals geared towards classroom teachers offer a wide array of articles suggesting teaching strategies and resources for economics education (variously defined), state and national funding and a variety of private interest groups support professional development efforts, and the *National Assessment of Educational Progress* (NAEP, 2007, 2013) now test for economic literacy, yet surprisingly few reports of research appear in social studies journals. While economics may not attract much interest among social studies researchers, it remains a high-profile field for researchers outside the social studies, for curriculum developers, policy makers, and test developers. Once again, social studies education could benefit from increased research attention to this high-profile discipline (Levstik & Tyson, 2010 p. 5).
An additional challenge is that the promotion of democratic citizenship is but one of several purposes of economics education and a review of the literature suggested that it is relegated to the periphery, if not outside, of the K-12 economics education paradigm as shaped by the standards, research and the K-12 economic education organizations in the U.S. One piece of literature that specifically examined the role of economics education for democracy is VanFossen’s (2006) *Economic Concepts at the Core of Civic Education*. The distinction between the focus of VanFossen’s work and this study is that VanFossen’s research examined the role of economic thinking in a civics course and this study examined the role of democratic thinking in an economics course. VanFossen began with a review of the literature that links free markets and capitalism to democracy--claiming a theoretical intersection between markets and democracy--and then reviewed the literature at the intersection of the fields of economics and political science. He used that platform to determine the essential economic concepts for civics education and then analyzed Indiana’s U.S. Government standards to see which of those concepts were addressed. VanFossen clarifies the distinction between positive economics (the branch that uses empirical evidence and focuses on cause and effect behavior) and normative economics (the branch that expresses value judgments about the outcomes of economic policies) and concluded that “because civic education, and political and civil life in general, is often more concerned with the normative side of public policy issues, it is very important to recognize the importance of developing the analytical tools of positive economics in future and current citizens” (2006, pp. 38-39). From that lens, he recommended integrating the following economic concepts into civic education:

1) Understand property rights and their role in establishing and promoting a market system; 2) define competitive markets and distinguish them from non-competitive
markets; 3) understand that economics uses marginal analysis to compare trade-offs among alternatives; 4) define the economic role of government in a market system relative to market failures and public goods, to regulation, and to economic stabilization; and 5) recognize that voluntary trade leads to gains due to the theory of comparative advantage and that barriers that inhibit free international trade have costs (p. 43).

VanFossen’s recommendations were in line with the CEE’s Standards (2010) and were built on the orthodox neoclassical approach discussed below in the conceptual framework. He advocated for the inclusion of more positive economics into the civics curricula as opposed to positioning economics curricula for democracy citizenry. In a similar vein the Council for Economic Education has developed the curricular resource *Understanding Economics in Civics and Government* (CEE, 2016b) with 20 lesson plans that focus on topics such as examining the relationship between economic freedom and political freedom, the role of government in the economy, and structuring a fair tax system.

In summary, the literature revealed history educators researching how the discipline can teach students to understand competing visions of historical knowledge in order to grasp how history is constructed (Lévesque, 2008), and encouraging students to ask where history comes from, to foster critical thinking and problem solving skills. The literature also considered how students’ lived experiences shape their historical understandings (Lévesque 2008; Epstein, 1998; Wineburg, et. al., 2007). Civics research was concerned with preparing students for democratic participation in the real world using controversial issues to teach students to analyze and take positions on issues to prepare them to make policy decisions (Hess, 2008). Where is the research that considers how to teach students to question the assumptions of the economic theories they are taught? Where is the research that considers how students lived experiences impact their
understanding of economics? And where is the research that seeks to understand students’ comprehension of the role of economic decision-making in a democracy? There is literature within the critical pedagogy tradition that begins to address these questions and is reviewed after an exploration of the full body of K-12 economics education literature in search of answers to these questions.

**Economics Education Research**

**The Goals of Economics Education**

Economics education stakeholders hold various and differing views on the goals of economics education. When asked about the goals of economics education, 54% of students in a study by Vredeveld and Joeng (1990) ranked the learning of practical skills as the most important goal, over the choices of a better understanding of the economy or a better understanding of current economic problems. Professional economists focused on the importance of teaching economic concepts to improve students’ personal and societal decision-making (Vredeveld & Joeng, 1990). Four studies found a variety of responses from teachers in regard to the purposes of economics education. In one study 86% of teachers ranked “to better understand the American economy” over “teaching practical skills” (Vredeveld & Joeng, 1990). Highsmith (1989) found that 90.2% of the teachers ranked “to prepare students to make intelligent decisions as workers, consumers, and voters” as very important and only 44.7% of the teachers ranked “to teach students practical skills that they need in their daily lives, such as balancing a checkbook, filing out tax forms, using credit cards, how to shop wisely, etc.” as very important. These findings differ from Schug, Dieterle, and Clark’s (2009) analysis of more recent data, collected via a telephone survey of over 1,201 high school social studies teachers, who ranked the teaching of personal finance skills as more important than economic skills. They
also found a split between whether instruction should be based on economic concepts or on learning how to apply the skills of economic reasoning. “Forming critically-minded, reflective citizens” was ranked the most important reason for teaching economics by 28%--the largest percentage--of teachers in the study and 20% of teachers ranked it the second most important reason (p. 72). VanFossen’s (2000) earlier findings concluded that teachers were split between the two goals of economics and personal finance skills. Teachers justified economics education as preparation for democratic citizenship grounded in economic understanding, as well as more practical life skills, grounded in personal finance.

Economic educators echoed teachers’ dual purpose for economics education, noting that students should be taught how economics relates to their everyday lives and to the societal issues that surround them (Armento, 1987; Morton, 1987; Rosales & Journell, 2012). However, a substantial body of economic educators’ scholarship focused on their long-standing debate over whether economics should be taught from a concept-based approach or an economic reasoning based approach (Miller & VanFossen, 2008; Schug & Walstad, 1991). Economic reasoning, often known in the field as the economic way of thinking (EWT) (CEE, 2000) has prevailed in this debate and has numerous supporters (Schug & Western, 1990; Siegfried et al., 1991; Wentworth, 1987; Wentworth & Schug, 1993.) The EWT was built on basic assumptions about human behavior based on scientific assumptions (Wentworth, 1987), or essentially the neoclassical idea of economic man. Heap (2008) defined economic man as follows: “In its ideal type case the agent has complete, fully ordered preferences (defined over the consequences of his or her feasible actions), perfect information and all the necessary computing power. After deliberation, he or she chooses the action that satisfies their preferences better (or at least no worse) than any other” (p. 700). Buckles (1987) claimed teaching students economic reasoning
provided them with the skills to make rational and productive decisions for themselves and society at large, in order to successfully fulfill their roles as democratic citizens (Buckles, 1987). Watts (2005) concluded that economics is a domain-specific subject and that teaching economic reasoning to students does not automatically evolve as students learn economic concepts and principles. He advocated that teachers employ inquiry-based activities, focused on real-world economic problems, and then teach students to use economic principles to find potential solutions to the problem. Wentworth and Western (1990) explained that the EWT was designed to help students make sense of everyday, personal experiences and complex societal issues using the following set of basic assumptions, commonly recognized by the economic education community: 1) people choose, 2) all choices involve costs, 3) people respond to incentives in predictable ways, 4) economic systems influence individual choices and incentives 5) voluntary trade creates wealth, and 6) the consequences of choices lie in the future (CEE, 2000; Wentworth & Schug, 1993; Wentworth, 1987).

**Instructional Practices and Teacher Preparation**

Although there is a great deal of literature around the goals of economics education and what should be taught, few studies have been conducted to determine the best instructional practices for producing the biggest gains in student achievement (Miller & VanFossen, 2008; Schug & Walstad, 1991). In terms of measuring instructional practices that improve students’ economic understanding no instructional practice has been identified (Becker, Greene, and Rosen, 1990; Watts & Walstad, 2011)

There were several studies documenting the correlation between teachers’ content knowledge and their students’ higher scores on standardized tests (Allgood & Walstad, 1999; Bosshardt & Watts, 1990, 2005; Miller & VanFossen, 2008; Walstad, 1992; Watts & Walstad,
2005). For example, Allgood and Walstad (1999) and Walstad (1992) showed a correlation between teachers’ completion of more economics coursework and students’ higher scores on standardized tests. Lynch (1990) and Allgood and Walstad (1999) concluded respectively, that teachers need four to six, economic courses to significantly impact student achievement. Schug, Harrison, and Clark (2012) noted the need to increase the economic requirements in social studies teacher preparation programs. In Virginia where this study was conducted, social studies teachers are typically required to take one to two economic courses.

**Assessing the Impact of Economics Education**

With a few exceptions, the literature measuring the impact of economics education consisted primarily of student and teacher self-reports and the analysis of students’ standardized tests scores. A noted exception that attempted to grasp students’ economic knowledge without the use of standardized tests was conducted in the area of novice-expert reasoning, building on a base of cognitive psychology research. In 1992 VanSickle used a study of novices—first year college students, and experts—with earned doctoral degrees, to note that the experts had greater content knowledge than the novices and were also able to apply that knowledge more effectively. He claimed these gaps in content and ability accounted for the difference between expert and novice economic reasoning and made recommendations for incorporating different types of domain-specific and metacognitive knowledge into economics instruction. Additional expert-novice studies by Miller and VanFossen (1994) and VanFossen (1995), used “think aloud” processes to expose the way experts—practicing economists—solved economic problems in comparison to novices—high school students, and concluded that the economists applied greater procedural knowledge than the high school students. These studies were consistent in method and findings with Wineburg’s (1991) research in historical thinking.
Studies collecting data on student attitudes about economics primarily used data from the nationally normed *Survey of Economic Attitudes* (Soper & Walstad, 1983, 1988) instrument, on which students self-reported their opinions about the enjoyment, usefulness, and difficulty of learning economics (Phillips and Clark, 1993). Students often viewed economics as lacking practical application (Armento, 1987), which corresponded to the findings by Vredeveld and Joeng (1990) and Clark and Davis (1992) that students reported liking economics more when it focuses on practical skills.

Economic educators have a strong tradition of assessing students’ economic content knowledge using pre and post-test results of the various editions of the *Test of Economic Literacy* (TEL) (CEE, 2013), (Soper & Walstad, 1987; Walstad & Soper, 1988, Walstad & Rebeck, 2001a, 2013; Walstad & Buckles, 2008). The most commonly administered standardized test in secondary economics (Harris Interactive, 2005; Walstad & Rebeck, 2000, 2001a, 2001b) consisted of 45 multiple-choice questions keyed to the CEE’s (2010) *Voluntary National Content Standards in Economics* (Grimes, 2012). Becker, Greene and Rosen (1990) formally critiqued the TEL for the guessing nature of the instrument, for the use of a norm-referenced test to evaluate understanding on criterion-referenced standards, and they took other issues with the reliability of the instrument, noting that “research confirms that the higher a student’s aptitude or intelligence, the greater the learning in economics” (p. 233). Nelson and Sheffrin (1991) labeled the test biased for its “pronounced ideological slant” and “microeconomics of laissez-faire” (p. 158). Asarta and Rebeck (2012) noted the responses to these critiques by Walstad & Rebeck, (2001) where they acknowledged that measuring economic knowledge with a single instrument fails to capture all the economic understanding students possess, but they defended the use of standardized and reliable tests of economic literacy for
providing reasonably good estimates of economic knowledge and for gaining widespread acceptance with instructors and evaluators. Saunders (2012) wrote of the unmet challenge of developing assessments that go “beyond the multiple choice and questionnaire format” (p. 22). The unasked or answered question is how knowledge gains on the TEL and other multiple-choice tests resulting from professional development provide insight on teachers or students’ understandings of economic ideology. At a minimum, the argument that such test scores can be validly interpreted as growth in economic understanding rests on weak empirical evidence. The findings of research on economics learning should be considered in light of the fact that results from multiple-choice tests are difficult to accurately interpret (Reich, 2009, 2013).

Of particular relevance to this study was a recent formative evaluation conducted in Virginia where this study is being conducted. The authors used student performance data, electronic teacher surveys and open-ended teacher surveys to determine the relationship between professional development provided by the Virginia Council on Economic Education and student performance in the areas of economics and personal finance. One of their conclusions and recommendations was that there would be a continued decline in use of the TEL, across Virginia as more teachers move to a standardized personal finance course and use the related W!SE exam for student assessment. Given that the W!SE industry certification is awarded to successful test takers (most Virginia high school students) and that Virginia’s high school graduates are now obliged to complete a course in personal finance/ economics, a further decline in usage and issues regarding relevancy are certain to continue for the TEL exam. Thus, we believe that consideration should be given to changing the content of the VCEE Economics Institute with a view toward
matching it more closely to that associated with the personal finance institute and the related W!SE assessment preparation (McLaren, Roberts & Stone, 2015, pp. 78-79).

Another consideration is the centrality of ideology in the construction of social studies achievement exams (Reich, 2011). Some scholars have pointed to the danger of legitimizing an economic ideology through knowledge gains’ claims and they criticized these claims for essentially measuring whether students who took an economics course “liked” economics more and “shared the free market, free enterprise ethic associated with American academic economists more than students who have not had a course in economics” (Duchin, 1988, p. 313). An example of these measurements includes, O’Brien and Ingels (1987) Economic Values Inventory where junior high students expressed “strong support for the economic system; slight agreement with statements expressing trust in business; [and] mild support for a strong government role in maintaining social welfare” (as cited by Schug & Walstad, 1991).

Also in alignment with the CEE’s (2010) *Voluntary National Content Standards in Economics*, is the National Assessment of Educational Progress economics exam (NAEP, 2007, 2013), administered for the first time in 2006 and again in 2012 and mandated under the No Child Left Behind legislation to be tested at regular intervals (Grimes, 2012; Watts & Walstad, 2011). Buckles and Walstad (2008) highlighted the 2006 results, when 11,500 eleventh and twelfth graders took the test, noting that 79% scored in the “at or above basic category” of economic understanding, with 42% at or above proficient. The results revealed significant gender, racial and socioeconomic gaps in economic understanding. For example, “5% of the students coming from homes headed by a college graduate scored in the ‘Advanced’ category, while only 1 percent of those from homes headed by a high school graduate did so” (Grimes, 2012, p. 270).
Other studies have measured the amount of economic instruction being taught (Walstad & Rebeck, 2000; Walstad & Rebeck, 2012). However, beyond quantitative reports of test score data, a review of the research base for economic education reveals a scarcity of literature (Miller & VanFossen, 2008; Schug & Walstad, 1991) relative to other social-studies subjects such as history and civics.

In their seminal literature reviews Schug and Walstad (1991), and Miller and VanFossen (2008), called for studies to compare the effectiveness and efficiency of instructional practices focused on economic concepts versus economic reasoning/EWT. They have called for studies that determine if the primary learning objective of economic instruction should be for students to learn economic concepts and principles, to learn economic reasoning skills, or a combination of both. They reiterated the need for more research examining students’ macroeconomic reasoning. They noted and add to, repeated calls for more qualitative research studies, independent of teachers’ self-reports or a reliance on state departments of education, that include formal and direct observations of classroom teachers in order to more meaningfully understand current economic instructional practices. Calls were made by Becker, Greene, and Rosen (1990) and Brenneke, et al. (1988) for alternative methods of assessing the value of economic education. Becker, Greene, and Rosen called for a better conceptual basis to integrate the why, how and what, teachers teach, with what motivates students to learn. Specifically, Brenneke, et al. (1988) recommended the use of case study methodology to capture context-dependent approaches to economics education.

One recent study is worth noting, for its relevancy to the questions posed in this study, although it does not differ in method from the above-discussed studies. Niederjohn, Nygard and Wood (2009) reported on the results of assessing the effects of CEE’s *Teaching the Ethical*
Foundations of Economics curriculum that reintroduce an ethical dimension to economics in the tradition of Adam Smith. The curriculum consists of 10 lessons that Niederjohn, Nygard and Wood suggest are suitable for a range of social studies classrooms. In the first lesson “Does Science Need Ethics? students examine how preconceptions affect observation and how ethical judgments affect economic analysis. “In the second lesson, ‘What Is the Difference between Self-Interest and Greed?’ students make, accept, and reject ultimatum offers with candy pieces to distinguish healthy self-interest from greed” (Niederjohn, Nygard & Wood, 2009, p 76). The authors describe three subsequent lessons that zero in on the whether the markets need ethical standards, where, for example, “students play the roles of doctors and patients to see how enlightened self-interest, duty, and virtue improve economic efficiency. Paired lessons then show the usefulness of markets in rewarding virtuous character traits and the moral limitations of markets for solving resource allocation problems” (p. 76). They write, “by the eighth lesson in the series, students are learning about efficiency as an ethical concept” (p. 76) and the final lesson “‘What is Economic Justice?’ has students play a Veil of Ignorance game to reveal how altering people’s self-interest transforms their vision of economic justice and their positions on government policy issues” (pp. 76-77).

The learning assessment of the lessons used a pre- and post-test design, with a final sample of 789 students exposed to the Ethical Foundations materials and 86 students in control groups, all of various grade levels and enrolled in various social studies courses. The sample was drawn from teachers who attended a CEE Ethical Foundations workshop and subsequently volunteered for the study. The assessment used an instrument developed from questions embedded in the lessons and other CEE prior assessments, covering “a range of subjects, including, for example, the differences between normative and positive economic statements, the
distinction between rational self-interest and greed, frequently cited causes of sweatshop conditions, and the differing opinions of the chairman of Whole Foods and economist Milton Friedman on the social obligations of businesses” (Niederjohn, Nygard & Wood, 2009, p. 77).

Statistical t-tests revealed that students exposed to the curriculum had a 6% increase in their knowledge of ethics in economics over those who were not exposed to the content. The results of a survey administered with the test inquiring about students' attitudes towards ethical issues showed students’ basic ethical attitudes to be unchanged after exposure to the curriculum. Niederjohn, Nygard and Wood (2009) concluded, “This suggests that though we can teach students how to identify and discuss ethical issues as part of the social studies curriculum in general and the economics curriculum in particular, the personal values that drive their attitudes to ethical issues may be more resistant to change” (p. 78).

In summary K-12 economics education research was primarily approached from a pedagogical-technical stance, in a search for the best instructional approaches to help the most students comprehend and retain neoclassical economics with no mention of a concern over of the role of democratic deliberation in the economics discourse.

**Critical Economics**

A Google Scholar search of the terms: “secondary economics education” and “democratic citizenship” yielded a body of critical economic scholarship that merits consideration. Critical pedagogy, developed in the early 1980s by scholars such as Giroux and McLaren promotes a more just form of education (Heilman, 2003). Much of the literature drew on Banks (1995) and Freire (1970) and discussed neoclassical economic education’s failure to adequately address issues of race, gender and class, and the implications of these omissions for democracy (Agnello & Lucey, 2008, 2008a; Feiner & Roberts, 1990; Ferber & Nelson, 2003).
That research was primarily authored by economists, sociologists, women’s studies scholars, and other academics not directly engaged in teaching K-12 economics or pre-service economics teachers.

Although their critiques were not limited to K-12 economics, others addressed the limits of the neoclassical theoretical approach to economics education and argued for a pluralist approach (Emami & Davis, 2009; Nelson, 2011; Peterson & McGoldrick, 2009; Reardon, 2012). For example, Nelson (2011) suggested that neoclassical economics curricula tend to feed into students’ expectations that they are going to learn how the economy works. “By pretending that the economy can be viewed in only a very limited range of ways, taking a thoroughly authoritative tone, and exploiting students' general naïveté about how the world works, it tends to satisfy students' desire for (what they are led to believe is) directly applicable, clear-cut knowledge” (p. 10). She suggested an inclusive approach drawing on a variety of perspectives helps students apply critical thinking and reasoning to real world problems. Scholars such as Reardon (2012) advocated a radical restructuring of economics education that acknowledges the failure of the neoclassical model’s ability to solve today’s enduring problems such as climate change, or the disparity of income and wealth.

The encroachment of personal finance into the K-12 economics curriculum was a target of critical pedagogues such as Arthur (2011), Maier, Figart and Nelson (2014), and Warner and Agnello (2012). Davies (2006), who does not hail from a traditional critical field, took a different approach and critiqued the limitations of citizenship literature as follows “the place of economic understanding in educating citizens is neither widely recognized nor substantially articulated in the literature” (p. 15). He offered a *Framework for Financial Literacy in the Context of Democracy* (2014) juxtaposed to the prevailing individualistic approach of financial
literacy measurement and financial education. He critiqued various countries’ approaches to financial literacy and their justification of a renewed commitment to financial literacy as a rational response to the 2008 financial crisis. Davies (2014) built on his previous work where he drew attention to the irony of the personal responsibility approach: “the definition of financial literacy and the assessments designed to measure levels of financial literacy have uniformly placed all of the responsibilities on the individual. This contrasts with the various accounts of the financial difficulties which have been experienced in recent years” (Davies, 2006, p. 306). He noted financial literacy curricula’s failure to address banks or governments’ role in the financial system’s conduct and he claims that students are not being, and should be, prepared to take an active democratic role to develop a broader understanding of the financial world. He offered that important dimensions of financial literacy are addressed by teaching individual responsibility as well as the responsibility of both the financial industry and the government. This shift from economic literacy to financial literacy is addressed in the next section of this literature review that provides an overview and history of the K-12 economics and personal finance standards.

History and Overview of the Economics and Personal Finance Standards

Tracing the Origin of the Standards: The Council for Economic Education

Much of K-12 economic education as a whole can be traced to the influence of the Council for Economic Education (CEE). “The first major push to create a space for economics in the K-12 curriculum began with the formation of the non-profit Joint Council on Economic Education,” (Grimes, 2012, p. 259), now renamed the Council for Economic Education (CEE). The CEE was founded over 65 years ago by business and education leaders with a goal of
creating an “informed citizenry capable of making better decisions as savers, investors, borrowers, voters, and participants in the global economy” (CEE, 2016a). The CEE has an internet campus, university-based centers in all 50 states, and 240 affiliates that provide professional development and curricula for teachers related to general economics, personal finance and entrepreneurship. The CEE and its network of affiliates promote the passage of legislation mandating K-12 economic and financial-literacy requirements and they assist in implementing those requirements. They conduct biennial surveys outlining the growth and development of economic, financial and entrepreneurship education in US schools, convene national summits and coalesce with other organizations in the public and private sector who are focused on advancing economic similar interests (Sasser & Meyers, 2012). The extent of the CEE’s influence is apparent in their direct contact with classroom teachers as they annually “train approximately 55,000 teachers in person, and those teachers, in turn, reach approximately 5 million students throughout the country” (CEE, 2016a). A significant influence is in their production of the aforementioned Standards, a brief history of which follows.

In 1961 the American Economic Association’s first report on K-12 economic education sparked discussion about what constitutes the fundamental economic concepts (Bach et al., 1961). In 1977, the Framework for Teaching Basic Economic Concepts (hereinafter the Framework) distilled the report’s 45 economic concepts to 21 basic economic concepts that fell into 4 general areas: fundamental, microeconomics, macroeconomic, and international (Saunders & Gilliard, 1995). The Joint Council on Economic Education (now CEE) invited a critique of these standards from economists and economic educators from across the ideological and political spectrum. Their critiques presented a rich discussion of the standards’ ideology and their underlying assumptions of economic theory (Becker, 1987; Bergmann, 1987; Buckles,
1987; Culbertson, 1987; Fels, 1987; Galbraith, 1987; Hansen, 1987; Heilbroner, 1987; Salemi, 1987; Samuelson, 1987; Saunders, 1987; Schur, 1987; Soper, 1987; Strober, 1987; Thurow, 1987; Vredeveld, 1987; Walstad, 1987). The response to these critiques was a call for alternatives to the approach of teaching students economic concepts, facts and generalizations. The proposed alternative was to develop students’ economic reasoning skills by teaching them an economic way of thinking, which culminated in the EWT model previously discussed.

The discussion over an economic concept versus an economic reasoning approach continues to be mentioned throughout the literature, replacing the deeper ideological discussion. Some scholars questioned whether the discussion would prove to be a false dualism as many economic educators “believe that one [approach] is impossible without the other” (Miller & VanFossen, 2008, p. 300). A review of the literature since the1980s indicated that economic educators set aside ideological discussions and instead zeroed in on measuring student achievement per the methods discussed above in the Assessing the Impact of Economic Education section of this review.

The Framework’s 21 basic economic concepts became the basis for the first set of Standards published in 1997 and the current 20 Standards, published in 2010 and developed by a panel of economists and economics educators in partnership with the National Association of Economic Educators and the Foundation for Teaching Economics. The Standards “are widely used today by state departments of education as the basis for local curriculum guidelines” (Grimes, 2012, p. 259) and they are often the basis of state standards, textbooks, and other curricular resources (Leet & Lopus, 2003; Miller & VanFossen, 2008). Each of the 20 content standards includes a rationale for its inclusion; benchmarks indicating attainment levels for students in grades 4, 8, and 12; samples of what students can do to enhance or demonstrate their
understanding of economics and correlations to the CEE’s EconomicsAmerica publications. Grimes (2012) wrote, the Standards “and accompanying benchmarks are remarkably similar to what would be found on most principles of economics course syllabi at the college level” (p. 263). The standards are primarily conceptual with an emphasis on teaching students to apply economic reasoning skills (CEE, 2010).

The Standards explicitly state that they were written from the perspective of neoclassical economic theory, “the final standards reflect the view of a large majority of economists today in favor of a ‘neoclassical model’ of economic behavior” (CEE, 2010, p. vi). The preface contains the following rationale for this approach,

The Writing Committee’s use of this paradigm does not connote a repudiation of alternatives. Rather, it reflects the assignment to produce a single, coherent set of standards to guide the teaching of economics in America’s schools. Including strongly held minority views of economic processes and concepts would have confused and frustrated teachers and students who would then be left with the responsibility of sorting the qualifications and alternatives without a sufficient foundation to do so (CEE, 2010, p. vi).

Saunders (2012) noted that through several revisions the economic standards have stated their commitment to teaching economics through the use of objective rational analysis, core tenets of neoclassical economics. They explained the difficulty in balancing the trade-offs between “accuracy and parsimony” (CEE, 2010, p. vi), noting that almost all economics principles are based on assumptions and that reporting all of those assumptions each time detracts from the effectiveness of the standards, leaving readers with the responsibility of distinguishing the principle from the assumptions. Therefore “without specifying all the required assumptions,
standards and benchmarks imply as always true principles that are widely agreed to be true most, but not all, of the time” (CEE, 2010, p. vi).

Finally, the writing committee’s litmus test for including a given standard was to inquire why it was essential for a high school graduate to understand it. They wrote: “Understanding each standard should be necessary for *citizenship* [emphasis added], employment, and life-long learning of economics and help a typical high school graduate grapple with the ordinary business of life” (CEE, 2010, p. vi). The inclusion of citizenship is noteworthy for this study’s concern with the role of economic decision-making in a democracy, and how phronetic questions and values discussions are expressed in the economics discourse.

**Economic Literacy’s Shift Towards Financial Literacy**

In 2013 the CEE introduced the *National Standards for Financial Literacy (NSFL)*. Their introduction read:

The six standards presented in this report are the scaffolding for a body of knowledge and skills that should be contained in a personal finance curriculum. Each standard is an overarching statement of content, to which we have attached multiple age-appropriate benchmarks as a means of evaluating students’ mastery. To make the standards as accessible as possible, they have been designed to apply to all socioeconomic student groups. The standards do not assume prior economic or financial knowledge and are written in deliberately nontechnical language so that they can be taught by teachers who are not trained in personal finance and economics (p. v).

The CEE credits the origin of the *NSFL* to a 2011 conference held at the Federal Reserve Bank of St. Louis focused on assessing and evaluating 21st century K-12 personal finance and economic education. CEE convened a writing committee made up of academics and two
members of the Federal Reserve Bank. They reviewed numerous documents, including, the U.S.
Department of Treasury’s (2010) “Financial Education Core Competencies;” “Money as You
Grow,” developed by the President’s Advisory Council on Financial Capability (n.d.); PISA’s
“Financial Literacy Framework” (OECD, 2013); a wide variety of state standards, and the
Jump$tart Coalition for Personal Financial Literacy’s (2007) National Standards in K–12
Personal Financial Education. A draft of the NSFL was reviewed by three committees: one
consisting of economic educators who teach K-12 teachers; one of economics teachers; and one
of academics, and members of the Federal Reserve Bank and private business. The following six
standards are supported by benchmarks for the 4th, 8th and 12th grades, (1) earning an income, (2)
buying goods and services, (3) saving, (4) using credit, (5) financial investing, and (6) protecting
and insuring (CEE, 2013a). The standards are almost identical to the Jump$tart Coalition for
and Bosshardt & Walstad (2014) noted one rationale for choosing these standards was the
probability of increasing their general acceptance because of their similarity to standards used in
other published guidelines for financial education.

As the project director for the creation of the NSFL, Bosshardt, in his 2014 article co-
authored with Walstadt, provided a content overview of the standards and cited the 2008
financial crisis as a rationale for more financial literacy. Financial literacy has increasingly
received political attention since the 2008 financial crisis and its aftermath (Pinto, 2012; Schug,
2012; Willis, 2009) and Pinto (2013) and Davies (2014) cited an international trend of using the
2008 crisis as a rationale for including financial literacy in the school curriculum. Davies (2014)
offered, “It is surprising that definitions of financial literacy make no reference to citizens’
understanding of the roles of banks or governments in the conduct of financial systems. The
rationale for including financial literacy in the school curriculum...is more or less universally, cast in terms of the personal responsibility of the consumer” (p. 301). A similar line of reasoning was offered in The PISA 2012 Financial Literacy Framework (OECD, 2013) and in the NSFL’s (2013) introductory remarks where each group rationalized the need to improve citizens’ financial savvy due to an increasingly complex economic arena, combined with the demise of the social safety net,

College tuition is now so costly—due in part to cutbacks in support from state governments....Health care insurance offerings have multiplied, forcing would-be subscribers to select among a confusing mix of prices and fees. Retirees’ pensions have been largely replaced with defined contribution plans, shifting the responsibility for saving and investing from the employer to the employee (CEE, 2013a, p. iv).

Maier, Figart & Nelson (2014) offered a critique of the NSFL. They pointed out the NSFL’s focus on individual choices and omission of macroeconomic and structural solutions and offer a detailed critique of the underlying assumptions in the six standards with recommendations for teaching about the wider context within which financial decisions are made, including a discussion of: the role of government, labor, non-profits, income distribution and corporate power. For example, they considered the following language in Standard I of the NSFL (CEE, 2013a), “Earning Income,” reads, “Income for most people is determined by the market value of their labor, paid as wages and salaries. People can increase their income and job opportunities by choosing to acquire more education, work experience, and job skills” (p. 1). Maier, Figart & Nelson (2014) critiqued the omission of content on how institutions shape incomes through variations in school quality, discriminatory practices, or through the power—or lack thereof—held by employers or employee groups. They claimed failure to include this
content disavows students of the role that citizens have to shore up individual choices through collective advocacy for equitable public-education opportunities, employee protections, minimum wage, and social-welfare policies. They critiqued Standard V, “Financial Investing,” for providing content on evaluating risks and returns to make informed financial choices but omitting the role of citizen oversight and input on government regulation of financial markets, legitimate economic policy questions that may be as relevant to students’ lives as sound investment strategies. Maier, Figart and Nelson (2014) suggested that the implications of this limited approach to financial literacy should be considered in the context of the NSFL’s likely potential to shape the economics and personal finance content of the Common Core Standards Initiative.

Some scholars suggested that financial literacy may supersede economic literacy. In 2008 Miller and VanFossen wrote of an increased focus on personal finance, “in spite of the historical distinction between personal finance (or consumer) education and economic education, it appears possible (even likely) that financial literacy will become an increasingly important part of economic literacy and thus economic education” (p. 300). Grimes (2012) wrote, “in recent years economics instruction in some locales has come to focus primarily on applications of personal finance” (p. 260). He noted that economic educators have long supported a wide selection of personal finance topics under the economics education umbrella, but that they are beginning to resist, “as financial lessons crowd out more traditional and broader-based economics lessons” (Grimes, 2012, p. 261). Scholars such as Morton (2005) argued that both personal finance and economics are about choices and the consequences of choices, with economics providing the logic for personal finance education. Davies (2006, 2014) and Arthur (2012) claimed that if economics education is reduced to teaching students how to be good
consumers educators disregard the need to educate citizens on the democratic choices to be made about the economy, and specifically about financial regulatory structures. Critiquing proposed California legislation requiring that half a semester of a mandatory high school economics course be devoted to personal finance, Harvard economics professor Greg Mankiw (2009) wrote, “the legislation is akin to requiring high school biology teachers to spend half their class time on issues of personal health and nutrition” and “the goal of high school economics should be to produce not just smarter decision makers at a personal level but better informed voters on election day” (n.p.).

Another harbinger of the push for financial literacy education is recent widespread political support within state legislatures. The National Conference of State Legislatures claims that in the 2014 legislative session, 28 states addressed financial education through various legislative initiatives requiring states to, for example, raise public awareness of financial literacy, mandate public schools to include financial literacy instruction, or develop financial literacy programs for the education of the public (Morton, 2015). Alpert and MacDowell (2012) wrote of sweeping changes in the current funding climate for economic education, “economics has been broadened to include financial economics, which has become a prerequisite for support. A similar statement could be made for entrepreneurship education” (p. 791). This shift towards personal finance, is interesting in light of long-standing calls from prominent economic educators for more research into students’ macroeconomic reasoning (Miller & VanFossen, 2008; Schug & Walstad, 1991).

In terms of empirical research assessing financial literacy, Soroko (2015), claimed there are no studies of U.S. financial-literacy education focusing explicitly on state curricula. Schlesinger (2009) wrote “neutral, non-industry research on financial literacy is limited (p. 9)
and Pinto (2012) cited studies of federal government, non-profit, and corporate sponsored curriculum and materials but a lack of data on how these resources are used. A Google Scholar search on the NSFL located no empirical studies. The specific number of U.S. states with financial literacy graduation mandates is addressed in the following summary of the CEE’s biennial survey.

The CEE recently released their biennial Survey of the States: Economics and Personal Financial Education in our Nation’s Schools, 2016 and interestingly one of their highlighted key findings was “there has been notable progress since the first survey was published in 1998, yet the pace of change has slowed. The 2016 Survey of the States shows that there has been no improvement in economic education in recent years and slow growth in personal finance education” (CEE, 2016, p.1). The Survey of the States by the numbers revealed, 20 states require an economics course for high school graduation, 2 fewer than in 2014; 17 states require a personal finance course for high school graduation, the same number as in 2014; 12 states combine personal finance with economics, and 5 require a stand-alone course in personal finance. Grimes and Millea (2003) claimed that high school graduation mandates are in states with strong CEE affiliates. The Survey of the States noted, “Virginia leads the charge in preparing students for lifelong financial success” (p. 3) and as this study was conducted in a Virginia high school a review of Virginia’s standards was in order.

Virginia’s Standards of Learning for Economics and Personal Finance

In 2010 Virginia passed legislation mandating one credit in economics and personal finance as a high school graduation requirement for the Standard and Advanced Diplomas, effective with the graduating class of 2015, (Virginia Board of Education, 2013) and specified that the course may be taught by agriculture, math, business and information technology, family and consumer sciences, marketing, or social studies teachers, and through the venue of a
traditional classroom or online (Virginia Department of Education, 2014). Virginia is one of three states that require a full year of economic and financial literacy for graduation (CEE, 2016).

The Standards of Learning for Economics and Personal Finance (EPFSOL) (2009) begin with the following sentence, “Students need a strong foundation in economics and personal finance to function effectively as consumers, workers, savers, investors, entrepreneurs, and active citizens” (n.p.) and the introduction explains they are designed to help students interpret the news, understand the interdependency of the world’s economies, anticipate how events will impact their lives, and use economic reasoning to analyze real-world situations to solve problems. The standards I intended to observe and that were scheduled to be taught in the fall of 2016 were EPFSOL 4, 5, 7 and 8 (See Appendix H). However, due to the school district’s decision to require that Personal Finance be taught the first semester and Economics taught the second semester after administration of the W!SE Financial Literacy Certification Test (Working in Support of Education, 2015, hereinafter the W!SE Test) I observed EPFSOL 1 a, b; 2 a, b, d, e; 6 b; 8 a, d, e, 11 f; 12 a, b, c, e, f, g, h; 15 b, c, d, e; 16 a, b, d, e; and 17 d (see Appendix H). More discussion of the implications of this change is included in Chapters Three and Four.

In summary, this section of the literature review provided a history and overview of the economics and personal finance standards, including background on the Council for Economic Education, the extent of their influence over the K-12 economics education curricula, and K-12 economic literacy’s commitment to neoclassical economics. A review of the critiques of economic literacy’s shift towards financial literacy was provided and Virginia’s Standards for Learning Economics and Personal Finance (Virginia Department of Education, 2009), were introduced.
The next section introduces and explains the conceptual framework that was used to capture the economics discourse.

**Conceptual Framework**

“The practice of democracy, on the other hand, depends fundamentally on the ability of individuals to subject society’s and their own values, priorities and actions to what Nobel Prize economist, Sen (2002, p.4), refers to as ‘reasoned scrutiny’” (Emami & Davis, 2009).

In order to capture the economics discourse and understand how phronetic questions and values discussions were expressed in the discourse and in relation to economic decision-making in a democracy I used the conceptual framework presented in Figure 1, on the following page, which addressed both the orthodox and non-orthodox approaches to economics and their respective ontological, epistemological and axiological assumptions.

I chose to rely on Chang (2014) in developing this conceptual framework because of his explicitly stated intent to write an introduction to economics that is accessible to the general public with the goal of demystifying the discipline. Although Chang himself is an economist, he recognized the value of—and applied—a multidisciplinary social science approach to economics, in line with this study’s premise that economics is a social science falling within the social studies umbrella in the K-12 arena.

A deep examination of the economics discourse required a tool to capture the economic assumptions that are built into the economic theories employed in the classroom, as Chang (2014) held that various economic theories have distinctive ways of conceptualizing and explaining the economy. Chang (2014) and Nelson (2011) argued that different economic
theories possess particular strengths, weaknesses and blind spots, depending upon what they highlight and ignore and how they conceptualize and analyze relationships. The current schools of economic thought may be broadly categorized as *orthodox, heterodox* or *pluralist*. For practical purposes this framework categorized economic schools of thought as *orthodox* and *non-orthodox*. The latter encompasses both heterodox and pluralist economic theories, while noting that theoretically pluralists embrace all economic theories, including neoclassical economics. These categories are then be defined by their ontological, epistemological and axiological assumptions (Kuhn, 2008).

**Orthodox and Non-Orthodox Schools of Economic Thought**

**Orthodox.** According to Chang (2014) the orthodox school is neoclassical. The
neoclassical, orthodox model holds the *ontological assumptions* that the economy is made up of individuals who are selfish and rational and that the world is certain with calculable risk. The orthodox *epistemological assumptions* are positivist and stem from historical links to Alfred Marshall’s *Principles of Economics* (1890) where economics is described as having a unifying core of methodological individualism (Aspromourgos, 1986). Chang explained that orthodox economics holds “the view that a scientific explanation of any collective entity, such as the economy, should be based on its decomposition to the smallest possible unit— that is, the individual” (Chang, 2014, p. 339). This ontology and epistemology are combined with the *axiological assumption* that when individuals act in their own self-interest it results in the best outcomes for the whole of the economy and of society. Employing these three assumptions orthodox approaches to teaching economics convey that the most important domain of the economy is exchange and consumption through the market and that policy recommendations should concentrate on freeing the market from regulation. Orthodox approaches teach that economies change in a value-free way, through individual choices, and students are taught technical approaches to make these choices. This may ultimately lead to an increased focus on microeconomics over macroeconomics in the classroom.

**Non-Orthodox.** Heterodox and pluralist economists are outside the generally accepted mainstream and therefore by nature, non-orthodox. Heterodox economists take a specific approach informed by a variety of social theories, such as feminist, institutional, Marxist, ecological, post-Keynesian or evolutionary economics (Reardon, 2009). Heterodox economists tend to advocate the superiority of one of these approaches over others, while critiquing the mainstream or orthodox approach (Holcombe, 2008). In contrast, foundationally pluralist economists hold that “there is no single methodology that is always the correct one for
discovering scientific truths” (Holcombe, 2008, p. 51), and they encourage the inclusion of orthodox and heterodox economic theories, moving beyond established paradigms (Kuhn, 1962) in recognition of the value of diverse and opposing views (Reardon, 2009). Pluralists apply a constructivist lens, “on the grounds that knowledge of the economy is situated and the economy itself is a social construction” (Dow, 2008, p. 447).

Non-orthodox economic approaches do not adhere to an ontological assumption of certainty or hold that individuals always act in selfish and rational ways and they embrace both positive and normative epistemological assumptions. Their axiological assumption is that what is good for the individual may not always be good for the whole of the economy or the whole of society. Employing these approaches to the teaching of economics might convey that the most important part of the economy is, for example, production (e.g., Marxist), or it might be open to what is deemed the most important part of the economy (e.g., Keynesian). Therefore, policy recommendations vary and may, for example, include strategies such as central planning (e.g., Marxist) or active fiscal policies of income redistribution towards the poor (e.g., Keynesian).

Non-orthodox approaches teach that depending upon the values employed, economies change in numerous ways, for example through interactions between individuals and institutions (e.g., Institutionalist), or class struggles (e.g., Marxist). Non-orthodox approaches teach students to address real-world issues with a broad set of economic approaches that are presented as “useful but also inherently limited…constructions that humans have created to try to understand these real-world phenomena” (Nelson, 2011, p. 11). Non-orthodox economics addresses both the microeconomic and macroeconomic branches of economics.
More on Positive and Normative Economics

Positive. In response to charges that economics was not a science, economists distinguished between positive and normative economics. According to Gordon & Adams (1989) a common approach employed by authors of economics textbooks is to explain, in the introductory chapter, their reasoning that economic policy cannot be resolved by economic analysis alone and then declare their intent to set aside normative discussions, focus on positive economics, and employ scientific and technical approaches, as Samuelson and Nordhaus (2010) did in their widely used textbook.

Lipsey, (1963) explained how Friedman (1953) extended positive economics to claim that theories should be judged by their ability to predict events rather than by the realism of their assumptions. Caldwell (2008) noted “though today’s economists rarely invoke positivist philosophy of science in defending their preferred practices, there is plentiful evidence of its continued influence, mostly in terms of what is considered to be ‘appropriate’ or ‘legitimate’ practice, with ‘positivist’ often being equated with ‘truly scientific’” (p. 531). Lipsey (2008) assessed today’s positive economics as follows, “modern theory textbooks, at all levels from basic to advanced, present current economic theories as if they were revealed truth, paying little attention to controversies and alternative theories” (p. 528).

Normative. VanFossen (2006) wrote, “normative economics seeks to make policy recommendations relative to certain goals and thus considers the desirability of certain economic policies relative to others” (p. 38). Keynes summed up the distinction between positive and normative economics as follows, positive economics deals with “what is” and normative economics deals with “what ought to be” (as quoted by Friedman, 1953, p. 146). As a positivist, Friedman (1953) claimed normative economics is dependent on positive economics and any
policy conclusions “rest on a prediction about the consequences of doing one thing rather than another” and that prediction is based on positive economics. VanFossen (2006) echoed this view claiming that positive and normative economics are related in that positive analysis may affect normative views of policies to be enacted. VanFossen (2006) provided a useful example of the application of positive and normative economics:

A positive economic analysis, for example, might attempt to determine and report the relationship between education and training and wages paid in a particular labor market…A normative analysis might seek to build a case that all wages paid in a particular labor market ought not to fall below a certain floor (p. 38).

Theoretical debate over whether positive economic analysis must precede normative economic analysis continues and at the theoretical level economists do not accept a strict division between positive and normative economics, noting the necessity of their interdependence in making economic policy decisions (Lipsey, 2008). Recognizing the utility of including normative analysis for economics is similar to the phronetic approach Flyvbjerg (2001) advocated for the social sciences and his argument that natural and social science are and should be different ventures. In his reference to Aristotle’s three intellectual virtues, episteme, techne, and phronesis, Flyvbjerg noted

It is indicative of the degree to which thinking in the social sciences has allowed itself to be colonized by natural and technical science that we today do not even have a word for the one intellectual virtue, *phronesis*, which Aristotle saw not only as the necessary basis for social and political inquiry, but as the most important of the intellectual virtues.

*Phronesis* is most important because it is that activity by which instrumental rationality is
balanced by value rationality, and because such balancing is crucial to the sustained happiness of the citizens in any society, according to Aristotle (pp. 3-4).

Flyvbjerg’s (2001) goal in resurrecting phronesis “is to help restore social science to its classical position as a practical, intellectual activity aimed at clarifying the problems, risks, and possibilities we face as humans and societies, and at contributing to social and political praxis” (p. 4).

**Microeconomic and Macroeconomic Branches of Economics**

**Microeconomics.** Microeconomics is defined as, “the branch of economics which today is concerned with the behavior of individual entities such as markets, firms, and households” (Samuelson & Nordhaus, 2010, p. 5). It is concerned with how consumers and businesses make decisions and spend money. Microeconomics begins with the assumption that businesses are trying to maximize profits and individuals are trying to maximize their incomes (Gordon & Adams, 1989). The fundamental principles of microeconomics are supply and demand, and the market. Students might be taught about supply and demand analysis with an example such as: If the price of an iPad goes up the demand for the product will go down. Microeconomics begins with the assumptions of pure competition,

The participants in the economic process (the consumers, producers, resource owners) are 1) all-knowing “economic” women and women, with perfect knowledge of the relevant economic data, 2) rationally pursuing the maximization of gain, 3) existing in such large numbers that no one of them can perceptibly influence price or quantity of production, 4) each economic actor can move freely, 5) all items in an industry are exactly alike, and 6) there is always full employment (Gordon & Adams, 1989, p. 144).
Macroeconomics. Macroeconomics is defined as the branch of economics that deals with the big picture (Samuelson, 1976), and it is “concerned with the overall performance of the economy” (Samuelson & Nordhaus, 2010, p. 5). In more technical terms Samuelson (1976) defines it as “the study of the aggregate performance of the whole Gross National Product and of the general price level” (p. 205). John Maynard Keynes is recognized as the father of macroeconomics, as the field responded to his *General Theory of Employment, Interest and Money* (1936, 1971-89, vol. 7). Macroeconomics takes a holistic approach and analyzes the whole economy as an entity that is different from the sum total of its parts, and in doing so it recognizes the inherent uncertainty of the market. Chang (2014) explained that in early capitalism most people invested out of their own savings and most workers were unable to save, given their low wages, and thus neoclassical economics’ assumption of certainty was more applicable for the times. Keynesian, macroeconomic economic thought holds that in our modern economy investors’ returns are dependent on their expectations about an uncertain future, and their expectations are driven by psychological factors rather than rational calculation. It is with these assumptions that macroeconomics focuses on understanding the causes of short term fluctuations in national income and the structural determinants of long term economic growth to develop economic policy.

Applying the Conceptual Framework

Economic discussions in the academy have focused on how the above assumptions and approaches, and their various points of entry or preferred methods, shape analyses, outcomes and viewpoints. However, it was unclear if these assumptions were discussed in the secondary classroom, or how they were presented. As documented above, the *Standards* consistently presented a neoclassical, positivist, and heavily microeconomic representation of the field of
economics and yet I believed the human agency of the classroom teacher and the students may have disrupted the neoclassical/orthodox approach to economics. I wondered, for example, if there would be instances when a student would share a personal example challenging the orthodox axiological assumption of the positive outcomes of self-interested actions, such as a parent foregoing additional income to volunteer her time for a cause, leading to a class discussion of (non-orthodox) exceptions to the orthodox model. An examination of the economics discourse entailed capturing how instances such as that would be addressed and documenting which of the different assumptions of economics were enacted or legitimized over others. The specific tools derived from the framework and developed for that purpose are discussed in Chapter Three.

The final section of this literature review considers the similarities of the competing purposes for public education and economics education and the resulting challenges presented by this competition.

**Competing Purposes for Public Education and Economics Education**

There is a long history of support for the democratic citizenry goal of public education. A wealth of literature supports this goal (Addams & Siegfried, 2002; Apple & Beane, 1995; Barber, 1996; Counts, 1932; Cremin, 1957; Dewey, 1966; Gutmann, 1988, 1993, 1995; hooks, 1994; Parker, 1996, 1996a, 2008; Rose & Gallup, 2000). Barton and Levstik (2004) wrote:

We assume that the overarching goal of public education in the United States is to prepare students for participation in democratic life….Public schools in the United States share an origin in the common school movement of the 19th century, and the ideology of that movement revolved around the need to prepare citizens for a democratic, republican form of government (p. 28).
State and local curriculum guides still recognize the relationship between education and democracy as a fundamental purpose of schooling (Barton & Levstik, 2004).

Yet there are rival perspectives for the purpose of education (Barton & Levstik, 2004). Labaree (1997) wrote of three competing goals for public education: democratic equality, in preparation for citizenship; social efficiency, in preparation for employment; and social mobility in preparation for advancement in social position. He wrote,

> Historical conflict over these competing visions of education has resulted in a contradictory structure for the educational system that has sharply impaired its effectiveness. More important still has been the growing domination of the social mobility goal, which has reshaped education into a commodity for the purposes of social attainment and has elevated the pursuit of credentials over the acquisition of knowledge (p. 39).

A closer look at these competing goals of public education revealed that the democratic equality purpose rests on the belief that in order for democracy to flourish and to create capable citizens an equal and rich education must be offered to all. The social efficiency purpose rests on the practical idea that everyone benefits from having a skilled and employable workforce. The social mobility purpose is built on the idea that education is provided for individual consumers as part of the meritocratic process, essentially providing them with the opportunity to move up or to maintain their socioeconomic position. Labaree (1997) described the quandary public schools face,

> Schools, it seems, occupy an awkward position at the intersection between what we hope society will become and what we think it really is, between political ideals and economic realities. This in turn leads to some crucial questions: Should schools present themselves
as a model of our best hopes for our society and a mechanism for remaking that society in the image of those hopes? Should schools focus on adapting students to the needs of society as currently constructed? Or should they focus primarily on serving the individual hopes and ambitions of their students? The way you choose to answer this question determines the kind of goals you seek to impose on schools (p. 41).

Public education simultaneously promotes equality while adapting to inequality all the while forces external to the school system maintain the status quo, where anyone has the possibility of rising to the top of the socioeconomic ladder, but with a low probability of doing so. Labaree (1997) argued that public education is caught in a battle between serving democratic politics or the capitalist market. The capitalist market is supported by the efficiency goal and the social mobility goal. The social mobility goal can be most neatly configured as part of the current neoliberal era where education becomes a privatized commodity that is subject to the credential market. This creates the conditions for limiting access to the credentials in order to retain their value. Among Labaree’s conclusions were that students are brought under the same roof, but their experiences and their outcomes greatly differ. Public education has ultimately failed to effectively carry out any of the three goals, “if schools do not seem to work very well, one key reason is that we continue to ask them to achieve ends that are mutually exclusive” (Labaree, 1997, p. 71).

Economics education faces similar challenges. Recall the Standards’ (CEE, 2010) stated purpose for K-12 economics “[students] will be better-informed workers, consumers and producers, savers and investors, and most important, citizens” (p. ix) and Virginia’s EPFSOL (Virginia Department of Education, 2009) rationale, “Students need a strong foundation in economics and personal finance to function effectively as consumers, workers, savers, investors,
entrepreneurs, and active citizens” (n.p.). These purpose statements revealed the tensions that exist between the various goals for economics education. Do we teach students economics that prepares them to create the kind of economy in which they desire to live, or that prepares them to adapt to the economic realities of today’s economy, or both? For example, do we teach students about capitalist markets--how to be consumers, workers, savers, investors and entrepreneurs—while teaching them the responsibilities of democratic citizenship--to evaluate and create economic policies for a regulatory environment most beneficial for all, where they can exercise their individual liberties to build wealth? Do we simultaneously teach students the economic agency that democracy requires while teaching them the skills to function, adapt, and even prosper in an economy of growing income and wealth inequality? Do we teach students economics that implicitly or explicitly implies that anyone has the possibility of social mobility, but also discuss the low probability of that advancement in our current economy? Are the various goals of economics education experienced different by students of diverse ethnicities or socioeconomic status? Does economics education as it is currently taught benefit some students more than others? Are the goals for economics education operating at cross-purposes?

These competing goals for economics education operate within a neoliberal political landscape (Giroux, 2017) or what Parker (2008) claimed is a macroeconomic transition in Europe and North America from Keynesianism to neoliberalism (Harvey, 2005) where “society becomes subordinated, not to government, but to free enterprise, and the nation-state gives way to, and exists largely to support, the market-state” (p. 67). In Parker’s (2008) review of the democratic citizenship education literature he suggested that the implications for curriculum are that a new kind of citizen is being called for, “the enterprising, self-reliant citizen….We are
morphing, from a ‘we the people’ who celebrate our diversity to ‘we the entrepreneurs’” (Parker, 2008, p. 67).

The K-12 economics education literature is silent on how the competing goals for economic education, in this changing context, impact the economics discourse in relation to the role of economic decision-making in a democracy, and the space to ask phronetic questions and hold values discussions. However the following introduction to the economics content of the NCSS (2013) Framework suggests a place for these discussions in the curricula,

Effective economic decision-making requires that students have a keen understanding of the ways in which individuals, businesses, governments, and societies make decisions to allocate human capital, physical capital, and natural resources among alternative uses. This economic reasoning process involves the consideration of costs and benefits with the ultimate goal of making decisions that will enable individuals and societies to be as well off as possible (p. 35).

Conclusion

Economic literacy is a key component for democratic citizenry and yet unlike the social studies disciplines of history and civics, economic education has failed to address the civic purposes that are included in the Standards. K-12 economics education, as represented by the Standards and by most of the empirical literature in the field, is committed to neoclassical economic thought and empirical economics education literature has focused on measuring students grasp of the content knowledge and economic reasoning that stems from that economic theory. Separate bodies of literature critique the limitations of this approach and cite concerns over the encroachment of financial literacy upon economic literacy. Competing purposes for
economics education compete within a political landscape increasingly informed and influenced by a neoliberal ideology. Economic disparity threatens democracy and more. This is the context in which the high school economics and personal finance course is situated and yet it is unknown how the current economics discourse equips students with the skills to make reasoned value judgments about economic policies. This study seeks to break economic education’s silence in this regard and make the unknown known, with empirical data gathered through a case study of the economics discourse employed by a teacher and her students to explore the role of economic decision-making in a democracy and specifically how phronetic questions and values discussions are expressed in the discourse.
CHAPTER 3 METHODS

Introduction

“Regardless of the lack of a term for *phronesis* in our modern vocabulary, the principal objective for social science with a phronetic approach is to carry out analyses and interpretations of the status of values and interests in society aimed at social commentary and social action, i.e. praxis” (Flyvbjerg, 2001 p. 60).

In this chapter I describe the research methods I used to answer the research questions that guide this study:

1. How is the role of economic decision-making in a democracy addressed in a high school economics and personal finance course?

2. What space is created for the role of economic values?

3. What are teachers and students’ understandings of how wealth is accumulated?

I chose to use a qualitative method of inquiry to answer these questions, 1) because of its ability to provide understanding (Merriam, 2002), 2) because of its premise that meaning is socially constructed by individuals interacting in their world (Merriam, 2002), 3) because of its recognition of the importance of context (Maxwell, 2013) and 4) because of its relationship with social science research that is concerned with discussions of values and interests (Flyvbjerg, 2001; 2006; Flyvbjerg, Landman & Schram, 2012). In this chapter I explain how each of these qualities was integral to answering my questions. As I was the primary research instrument (Merriam, 2002) I discuss my background as it relates to my research interests and how it has
informed my methodology and the rationale behind my methodological decisions. I provide a detailed description of participant selection, data collection techniques, my data analysis process, and the steps I took to demonstrate the validity and rigor of the research process.

**Seeking Understanding in a Socially Constructed Context**

My questions seek to provide understanding of the economics discourse in the particular context of an Economics and Personal Finance (EPF) classroom--to which my study will be delimited--where the official curriculum, the teacher and the students come together to create the enacted curriculum (Pinar, 1995). More specifically, seeking to understand how individuals experience and interact within their social world is a form of interpretive, qualitative research (Merriam, 2002).

The curriculum reconceptualization movement of the 1970s and 1980s was one of the first sustained movements in education to describe curriculum as a form of co-constructed experience that is negotiated in the classroom. Pinar (1989) writes, “During the 1970s curriculum as a field became absorbed with the complex of ways that culture and individuals reproduce and transform themselves via public institutions, particularly the school and specifically school knowledge or curriculum” (p. 9). Pinar (1989) writes that reconceptualization had dual emphases: the schools as a microcosm of society and the school as experienced by the individual (Pinar, 1975). It is the latter that this study sought to zero in on. Pinar (1995) claims there has been a shift in curriculum theory from viewing schools as sites of reproduction to “‘analyzing schools as part of a complex and often contradictory set of ideological and material processes through which the transformation of experience takes place’” (Giroux & Simon, as quoted by Pinar, pp. 283-284). I was curious about the interaction that would occur in the classroom space in light of the convergence of these differing ideological perspectives. The
space is complex, as teachers and students bring various philosophies, beliefs and ideologies to bear on their interpretations and negotiations of the curriculum and students and teachers enter with varying perspectives and lived experiences that shape their understanding and interpretation of the subject. Gee and Green (1998) write,

By studying discursive activity within classrooms…researchers have provided new insights into the complex and dynamic relationships among discourse, social practices, and learning. Specifically, this body of work has provided understandings of the ways in which opportunities for learning are constructed across time, groups, and events; how knowledge constructed in classrooms…shapes and is shaped by, the discursive activity and social practices of members; patterns of practice simultaneously support and constrain access to the academic content of the ‘official’ curriculum; and how opportunities for learning are influenced by the actions of actors beyond classroom settings (p. 119).

It is this complex and continuing nature of classroom life, as described by Gee and Green (1998) that I explored. Qualitative research was best suited for this type of inquiry because as Merriam (2002) explains, it holds that “the world, or reality, is not the fixed, single, agreed upon, or measurable phenomenon that it is assumed to be in positivist quantitative research” (p. 3). For example, critics may claim that the neoclassical model of the official curriculum shuts down opportunities for students to hold values discussions about economic inequality, when in reality a teacher possessing a personal awareness of the hardships economic inequality presents may find ways to incorporate the issue into her instruction. Capturing these nuances is much more likely through classroom observations, open-ended interviews and the review of student and teacher created documents.
Seeking Understanding of the Expression of Social Science Values

My questions are concerned with how values discussions are expressed in the economics discourse. An additional reason for choosing qualitative methods is because it lends itself to these discussions (Flyvbjerg, 2001; 2006). I examined the economics discourse, economics is a social science (Frey, 1999; Solow, 1985; VanFossen, 2006), and the social sciences differ from the natural sciences in that they do not excel in explanatory and predictive theory but rather in analysis and discussion of values and interests (Flyvbjerg, 2001; 2006). In Solow’s (1985) discussion of economics as a social science he states, “all narrowly economic activity is embedded in a web of social institutions, customs, beliefs, and attitudes. Concrete outcomes are indubitably affected by these background factors, some of which change slowly and gradually, others erratically” (p. 328). Solow’s (1985) point is that the choices economists make on the input side determine the output side and that if these choices are changed the output will change. In this sense he explains that numbers can be manipulated to achieve a desired end and therefore economics cannot be considered a hard science. As Flyvbjerg states in the quote that opens this chapter, a phronetic approach to social science research is designed to analyze and interpret the status of values and interests in society aimed at praxis. By applying a phronetic lens to the high school economics and personal finance discourse I began with Flyvbjerg’s value-rational questions in an aim to uncover where the praxis of the high school economics and personal finance course is going, so that the reader can determine “whether this is desirable, what should be done, who gains and loses, and by which mechanism of power” (2001, p. 60).
Case Study

The Value of Case Study for Capturing the Economics Discourse

Apple and King (1977) write, “The curriculum field, more particularly than other educational areas, has been dominated by a perspective that might best be called ‘technological’ in that the major interest guiding its work has involved finding the one best set of means to reach pre-chosen educational ends” (p. 342). Apple says this is not simply the result of intellectual interest, but rather it represents social and ideological commitments (Apple, 1975). As discussed in Chapter Two, the research on economic education has relied on state and national surveys, teacher self-reports, and pre and post results of the Test of Economic Literacy (CEE, 2013). This is problematic because as Flyvbjerg (2006) asserts “great distance to the object of study and lack of feedback easily lead to a stultified learning process, which in research can lead to ritual academic blind alleys, where the effect and usefulness of research becomes unclear and untested” (p. 223). What appears to be objective, non-biased assessments of economic thinking, on closer examination may reveal something different. What was chosen to be taught and assessed in and of itself may be biased and present a narrow viewpoint, because the very nature of the end goal of generalization requires arbitrary or practical constructions of situations.

Case study design is the method that can address what is too often ignored—the concrete, the material, and the empirical study of context. Case study was particularly suited to answer my questions because it provides the reader with a concrete-empirical example that can inform theory and, perhaps more importantly, provide the richness of detail needed for readers to exercise their own phronetic judgment about the role of economic policy discussions in the economics classroom. Flyvbjerg’s Five Misunderstandings About Case-study Research (2006), explains that because “predictive theories and universals cannot be found in the study of human
affairs” (p. 224), concrete, context-dependent knowledge is more valuable. Furthermore, case studies produce the type of context-dependent knowledge that research on learning shows is necessary for people to move from novice to expert (Flyvbjerg, 2006). A commonality of expertise is their reliance on thousands of “concrete cases in their areas of expertise” (Flyvbjerg, 2006, p. 222).

A case study of a real situation is an alternative means for discovery. Flyvbjerg (2006) writes, “I saw the case itself…what Nietzsche called a discreet and apparently insignificant truth, which, when closely examined, would reveal itself to be pregnant with paradigms, metaphors, and general significance” (p. 238). This approach allows readers with diverse perspective to draw their own conclusions and make meaning of what the case “is a case of” (Flyvbjerg, 2006, p. 238).

In seeking guidance for the implementation of case study design I chose to rely on Yin (2014) because of his definition of the case study as the “investigation of a contemporary phenomenon (the ‘case’) in its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (p. 2). The contemporary phenomenon, or case that I studied is the economics discourse employed by a teacher and her students to explore the role of economic decision-making in a democracy, and the real-world context is the classroom. Yin (2014) points out that “a case study will have more variables of interest than data points” (p. 2) which was a good fit for my goal of understanding and documenting the case of the economic discourse where the real-life situation of classroom interactions produced a wealth of details.
Researcher as the Primary Instrument

As Guba and Lincoln (1989) have noted, the use of qualitative methods calls for a discussion of researcher positionality. This is particularly important because I was the primary instrument used for data collection in this study. Below I address four distinct experiences that have fostered my research interest. The first is my experience growing up in a small, southern, working class town, where the majority of the citizens were, and still are, employed in shift work at one of three industrial factories. I witnessed very little economic mobility as most high school graduates followed in their parents’ footsteps to work in the factories. It may be this very lack of economic mobility that fostered my early naiveté about American class stratifications. Although I was often attuned to my family’s financial limitations, we always had our needs met, and it wasn’t until I left my small town that I began to truly understand the significance of class differences and the power that accompanies class privilege (Bourdieu, 1984; Brantlinger, 2003; Lareau, 2003; Swalwell, 2013).

The second influential experience was my interest and passion for economic justice that developed during college. As a first-generation college student, I began to question the rhetoric versus the reality of American meritocracy (Huber & Form, 1973; Kluegel & Smith, 1986; McNamee, 2009). My early experiences of coming in and out of two worlds provided a new lens. When I graduated from a large state university with an undergraduate degree in political science, my interest combined with a need for economic security, influenced my career path to pursue a masters’ degree in education, with hopes that a teaching certification would lead to the opportunity to make a difference in students’ lives and to reliable employment with a dependable income.
Upon graduating with a master of science in social-science education I accepted a teaching position at an affluent suburban school, with similar demographics to the school where this study will be conducted. I was assigned to teach Virginia and United States Government to 11th and 12th graders. At the time approximately one-third of the course standards focused on the economy and the relationship between political and economic systems and yet the school division only provided students and teachers with government textbooks, leaving teachers to find their own economics resources and curriculum. My search for economic education resources became the third experience to shape my research interest. Resources explaining the theory of competitive markets were readily available and accessible, but I found a dearth of materials that took a critical and constructive view of economic policies. Meanwhile I often found that students entering the course were unable to differentiate between democracy and capitalism. I reasoned that exclusively teaching positive economics would fail to equip students for 21st Century Democracy and may foster apathy and cynicism, especially in light of my students’ expressions of their awareness of the monetary influence on our political system. Therefore, I set out to incorporate normative economics to give students the opportunity to wrestle with questions surrounding the human construction of monetary influence and more broadly of economic policies. I co-authored Teaching Economics As If People Mattered: A Curriculum Guide to Today’s Economy (Sober Giecek, 2007) with United for a Fair Economy and used the curriculum as a resource for teaching the economic standards of the course. Through this experience students came to understand the importance of debating economic policies in sustaining a healthy democracy. I’ve recently authored Teaching about Economics and Moneyed Interests in 21st Century Democracy (Sober, 2016) where I draw on my experiences implementing these lessons in the classroom.
I left teaching to work as an advocate for the state teacher’s union. My thirteen years lobbying the state legislature was the fourth experience to shape my research interest. Time and time again I witnessed first-hand the relationship between money, politics and power. The debates on and fates of the legislature’s bills almost always rested on their fiscal impacts. In essence the legislators, advocates and citizens were debating the economic decisions that would shape the kind of society in which we would live. Should we provide tax breaks as incentives for businesses to relocate to Virginia? Should we increase funding for public education? Should we tax citizens at various income levels at different rates? They were essentially making economic policies that prioritized values. This was normative economics in action and it reinforced my belief that a democracy is dependent on citizens making informed economic choices for both individual and societal benefits.

It is these rich set of life experiences that provided additional support for my choice to employ Yin’s (2014) qualitative, case study method of inquiry. From a researcher standpoint, focusing on the discourse that occurred in the classroom--the nexus where the official curriculum, the teachers and the students meet—was an advantage, as I built on my economics education experience in both the classroom and in curriculum development, and brought an eye to the school context that other researchers may not have, and therefore enhanced the quality of my analysis.

However, I am aware of the perspective I bring to this research and therefore throughout my data collection and analysis I monitored the potential draw of that perspective. I believe in the utility of including both a normative and positive approach to the economics discourse of the classroom and specifically the importance of having students explore the role of economic decision-making in a democracy. I could have easily adopted critical theory as a theoretical
framework, but I was conscientious about where that path might have taken me, and I wanted to avoid choices that may have caused me to seek the results I wished to find. The pragmatist in me desired and is satisfied that I have provided empirical, concrete, contextual data to bring a fresh approach to the separate paradigms of those who accept and measure the teaching of neoclassical economics and those who bring a critical lens to the dominant neoclassical paradigm. Other methods that attempt to find causal relationships, or to uncover specific end results, would not have provided the transparency and detail required by case study methodology and could have possibly made my study more susceptible to researcher bias. In an attempt to understand how the economics discourse explores the role of economic decision-making in a democracy, a detailed case study required that I face the field and hear the people talk. I continually played both the believing and the doubting game (Elbow, as referenced by Maxwell, 2013, p. vii.) with any position I encountered in order to exploit the tension that occurs at that intersection. Case study methodology provided an ideal platform for that approach.

**Case Selection**

The strategic choice of a single, critical case design was useful because of what Yin and Flyvbjerg (2006) suggest is its potential to represent a critical test of a theory. Flyvbjerg (2006) writes that “[i]n social science, the strategic choice of case may greatly add to the generalizability of a case study” (p. 226). Yin (2014) writes, “the theory should have specified a clear set of circumstances within which its propositions are believed to be true. The single case then can be used to determine whether the propositions are correct or whether some alternative set of explanations might be more relevant” (p. 51). The clear set of circumstances I believed to be true (Yin, 2014) in this study are the official curriculum’s commitment to neoclassical
economics with its accompanying orthodox ontological, epistemological and axiological assumptions, and a focus on microeconomics over macroeconomics.

This single, critical case design calls for purposeful selection. Noting Maxwell’s (2013) attention to purposeful sampling and his reminder that a case study not only samples people, but also “settings, events and processes” (quoting Miles and Huberman, p. 96), I considered all the possible influences on the phenomena I studied. Maxwell (2013) explains the strategy as follows, “particular settings, persons, or activities are selected deliberately to provide information that is particularly relevant to your questions and goals, and that can’t be gotten as well from other choices” (p. 97).

The single critical case I chose created the most favorable conditions to test the official curriculum’s commitment to neoclassical economics and to answer my questions. Flyvbjerg (2001) defines critical case selection as having strategic importance in relation to the general problem. My case was the economics discourse bounded as follows. My case was initially bound by purposefully selected content, specifically standards *EPFSOL 4, 5, 7, and 8* (See Appendix H), because of their strong relationship to economics values with which my research questions are concerned, and their consideration of the role of government in a market economy. For example, *EPFSOL 4* requires students to demonstrate knowledge of the many factors that affect income and *EPFSOL Benchmark 8d* calls for “The student [to] demonstrate knowledge of the role of government in a market economy by explaining that governments redistribute wealth” (Virginia Department of Education, 2009, n.p.). However, the school district’s decision to require that Personal Finance be taught the first semester and Economics taught the second semester after administration of the W!SE Test, altered that plan and instead I observed *EPFSOL 1 a, b; 2 a, b, d, e; 6 b; 8 a, d, e, 11 f; 12 a, b, c, e, f, g, h; 15 b, c, d, e; 16 a, b, d, e; and 17 d* (see
Appendix H). Only one of the standards I originally chose to observe was taught during the time of the study. Fortunately that was Standard 8d (explanation of governments redistribution of wealth). Although it was desirable to observe the original chosen standards, the school division’s decision to require Personal Finance to be taught first is relevant to the findings, as discussed by teacher participants, and analyzed in Chapter Four. Furthermore, the standards I observed being taught provided ample space for economic values discussions.

Second, my study was bound by space and was confined to two high school economics and personal finance classrooms in the same high school, both with enrollments of students at the same instructional level, thus limiting possible alternative or confounding explanations for variations in students’ economic thinking.

Third, although the EPF can be taught by agriculture, math, business and information technology, family and consumer sciences, marketing, or social studies teachers, I purposefully selected a social studies teacher. This choice is in alignment with the study’s premise that economics is a social science and falls under the social studies umbrella.

Finally, I purposefully selected a teacher who was critical of the official curriculum and its emphasis on microeconomics, on the premise that if I discovered that there was little room for values discussions in her classroom, it is likely that there is little room in the classroom of teachers who are less critical or even supportive of the curriculum (Flyvbjerg, 2001; Yin, 2014). This choice was strengthened by research on the agency of teachers as street-level bureaucrats (Lipsky, 2010; Weatherley & Lipsky, 1977) and teachers as curriculum gatekeepers (Thornton, 1989). In addition, my findings in Chapter Four support the strength of this approach to shed light on the complexities and contradictions of real life, in terms of how a curriculum is enacted in the classroom.
In August of 2015 I reached out to a social-studies colleague I formerly taught with to inquire about high school social studies EPF teachers who might be interested in participating in this study. I was given the name of Hannah Morgan5 at Creighton High School and I contacted her by email explaining my potential interest in conducting research in an EPF classroom. In the fall of 2015 I informally met with Ms. Morgan to inquire about the specific courses she taught, to gain perspective on her disposition towards the curriculum and to provide both of us the opportunity to gauge whether working together would be a good fit. I left the meeting with the sense that if I were fortunate enough to work with Ms. Morgan, that selecting her would meet one of Maxwell’s (2013) goals of purposeful sampling, to select a participant “with whom you can establish the most productive relationships, [and] that will best enable you to answer your research questions” (p. 99). Ms. Morgan and I exchanged emails and she stated that if the school district and the university approved the application to conduct research that she would be interested in participating in the study.

After I received approval from the school district and university Institutional Review Boards, I reached out to Ms. Morgan and provided her with a teacher consent form, (Appendix C), that explained, the level of research engagement, the processes in place to ensure privacy and confidentiality, the nature of risks involved in participation, and information about the procedure for withdrawal from the study. Ms. Morgan agreed to participate, and upon obtaining her signed consent I visited her classroom and conducted three informal observations (Miles & Huberman, 1994), where I became familiar with the setting and piloted the use of selective scripting based on the conceptual framework, as a data collection tool. During my observation of a W!SE Test Review session Ms. Morgan co-taught with Creighton’s W!SE Test Coordinator and fellow EPF

5 Throughout this study pseudonyms will be used for the participants, the school, and the school division.
teacher Mr. Daniel Walker, Mr. Walker agreed to be interviewed for the study. Mr. Walker took a lead role in coordinating and assembling the materials in the EPF student notebook distributed across the school division to all students enrolled in the EPF course and referenced throughout Chapter Four. Mr. Walker signed a consent form and his interview was conducted halfway through the school year. See Table 1. Teacher Participants, for details.

**Table 1. Teacher Participants**

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Years Teaching</th>
<th>Years Teaching Economics &amp; Personal Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Morgan</td>
<td>Female</td>
<td>Caucasian</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Daniel Walker</td>
<td>Male</td>
<td>Caucasian</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

My fourth and final purposeful selection was the choice of eight student participants with varied and diverse socioeconomic, gender and racial backgrounds, based on responses to the Student Demographic Data Form (Appendix F). This was “to ensure that the conclusions adequately represent the entire range of variation, rather than only the typical members or some ‘average’ subset of this range” (Maxwell, 2013 p. 98). The range of variation was important as these variables have bearing on students’ economic thinking. I visited Ms. Morgan’s two classes that I would be observing and used the Student Participant Recruitment Script (Appendix B) to explain the study and recruit participants. I provided students who wished to be considered for the study with the following materials,

- A one-page recruitment flyer and informational letter (Appendix A) explaining, the purpose of the study; the desired socioeconomic, gender and racial diversity being sought; the requirements of participation, which included two student interviews

---

6 Both teachers teach the non-leveled EPF course and the Honors level EPF course. This case study only involved observations of non-leveled EPF classes.
approximately 20 to 30 minutes in length, to be conducted after school; and the opt-in process; and

- A parent/guardian consent form (Appendix D) explaining, the level of research engagement, the processes in place to ensure privacy and confidentiality, the nature of risks involved in participation, and information about the procedure for withdrawing from the study;
- A student assent form (Appendix E) explaining, the level of research engagement, the processes in place to ensure privacy and confidentiality, the nature of risks involved in participation, and information about the procedure for withdrawing from the study; and
- A student demographic data form (Appendix F).

Students who expressed an interest in participating in the study were given one week to return the parent/guardian consent form, student assent form, and student demographic form, when I returned to collect them from an envelope placed in the main office. Upon collecting the forms and reviewing the student demographic forms all eight of the students who opted in were chosen as participants due to the desired variation in socioeconomic, gender and racial backgrounds. Two students dropped out of the study prior to the interviews, as one left Creighton High and the other dropped the EPF course. See Table 2. Student Participants, on the next page for details.

While collecting demographic data on the student participants I compiled additional information about both the school and the school district. Creighton High enrolls approximately 2,000 students and is a relatively affluent school in the large, suburban Jackson school district, with a student enrollment of approximately 60,000. The school has exceeded all state accreditation benchmarks by 20 points, has a 99% graduation rate, and has the following
### Table 2. Student Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Highest level of education attained by parents and/or parents’ occupation</th>
<th>Student’s estimate of family’s annual income</th>
<th>Average Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brent</td>
<td>M</td>
<td>Caucasian</td>
<td>Mother: Four-year college degree. Father: Four-year college degree.</td>
<td>Between $90,001 and $120,000</td>
<td>A-B</td>
</tr>
<tr>
<td>Anna</td>
<td>F</td>
<td>African-American</td>
<td>Mother: Four-year college degree. Formerly a dean at a small liberal arts college. Currently unemployed. Father: High School Diploma.</td>
<td>Between $60,001 and $90,000</td>
<td>A-B</td>
</tr>
<tr>
<td>Cara</td>
<td>F</td>
<td>African-American</td>
<td>Mother: Doctorate degree. Pharmacist.</td>
<td>Between $30,000 and $60,000</td>
<td>A-B</td>
</tr>
<tr>
<td>John</td>
<td>M</td>
<td>Caucasian</td>
<td>Mother: High School Diploma. Father: Recently took college courses online and received his degree.</td>
<td>Between $60,000 and $90,000</td>
<td>B-C</td>
</tr>
</tbody>
</table>

---

7 All student participants were high school juniors or seniors in the non-leveled EPF classes. Passing the EPF course is a Virginia graduation requirement.
racial/ethnic makeup: 5% Hispanic, 5% Asian, 14% African-American, and 76% Caucasian.\(^8\) Approximately 6.6% of the student population is eligible for free and reduced lunch.\(^9\) The school context is particularly important because of its relationship to the findings. Chapter Four contains data where participants acknowledge Creighton’s affluence, even while explaining that not all students are privileged. However, while the student participants themselves have varied socioeconomic backgrounds, as socioeconomic status influences students’ economic thinking, their reference point--their norm--is a highly affluent community.

**Data Collection**

I followed three of Yin’s (2014) four principles of data collection, using 1) multiple sources of evidence; 2) creating a case study database, including all notes and memos from collected documents, interviews and classroom observations; and 3) maintaining a chain of evidence.

**Multiple Sources of Evidence**

**Documents.** The following documents were collected:

- Virginia’s *EPFSOL* (Appendix H)
- Official curriculum materials issued by the school division by way of the Student EPF Notebook (Appendix M and N)
- Samples of student-participants’ work completed during the study (Appendices J and K)
- Teacher created materials (Appendix K)
- EPF Resources offered or provided by the school district including sample W!SE Test

---

\(^9\) 2016-2017, Virginia National School Lunch Program, Free and Reduced Price Eligibility Reports.
review questions (Appendix I)

**Interviews.** Interviews are another form of evidence. I drew on Holstein and Gubrium’s (1995) technique in developing two sets of interviews (Appendix G) that I used with teachers and students. Their active interview technique holds that participants “construct [their] experiential history as the interview unfolds, in collaboration with the active interviewer” (p. 32). In this way, participants may not have planned to provide specific answers and may not have provided those answers if the question were posed at a different time and in a different way. Through the process of the interview the participants were constructing meaning.

The first interview with Ms. Morgan took place the week prior to the start of the school year and students’ first interviews were conducted approximately two weeks into the school year. The first round of interviews explored who the participants are in order to provide insight into the influences on their economic thinking, such as their beliefs and ideology, and family and pop culture influences. I did not ask specific questions that pertain to the research questions, in order to avoid influencing the classroom discourse.

The second round of interviews were conducted approximately halfway through the school year. During the post-classroom observation interviews I asked participants specific questions related to my research questions. Questions such as, ‘what is the role of economic decision-making in a democracy?’ and ‘why are there rich and poor people in the U.S.?’ were posed and participants were asked to reflect on their responses in relation to the EPF content.

These interviews drew on the process that Maxwell (2013) explains as he quotes Weiss (1994), “‘Interviewing gives us access to the observational events that took place in the past’” (p. 103). He maintains that, “interviews can also provide additional information that was missed in observation, and can be used to check the accuracy of the observations” (p. 103). Essentially all
of the participants in the study—the teacher and each of the students—are observing the classroom and the follow up interviews provided insight into their observations, which I used in the triangulation process in my examination of possible evidence convergence.

**Classroom observations.** During my approximately two and half months of classroom observations, I observed Ms. Morgan’s two non-leveled, 90-minute, EPF courses several days a week. On the morning of an observation I would review the conceptual framework to get in the mindset for observing the ontological, epistemological and axiological assumptions of the discourse. I had initially prepared to selectively script on a given day, for a particular category chosen from the conceptual framework. However, during the pilot I realized that due to the overlapping nature of these categories, selective scripting was not a conducive format for capturing the discourse and instead I took more detailed field notes on my laptop. During each observation I sat on the side of the classroom during teacher lectures or when students engaged in group activities I walked around the classroom and sat in on group conversations for closer listening and observation. My initial field notes included detailed descriptions of the physical classroom; the student demographics of each class; accounts of student interactions; and the format, style and content of the lesson. As the school year progressed my observations became more focused on clearly describing the lesson and capturing the essence, including specific student and teacher utterances, of the classroom dialogue. Each day Ms. Morgan provided me with materials to follow along, such as a copy of the EPF notebook and any other student handouts. She also shared google drive folders with me that contained her Powerpoints and lesson notes. In addition, prior to the final participant interviews I reviewed the students’ individual EPF notebooks, including assignments they completed during my classroom observations.
**Reflective memos.** After each observation, I set aside time to reflect, review my field notes and the conceptual framework, and write memos. I returned to these memos and built on them during data analysis and used them as a chain of evidence as discussed below.

All of the multiple sources of evidence—the documents, classroom observations, interviews and reflective memos—were entered into the case study database.

**Data Analysis**

Merriam (2002) explains that qualitative research is often taken up in the absence of an existing theory to explain a phenomenon and therefore the researcher must use an inductive process to capture the phenomenon. There is not an existing theory built to characterize the economics discourse as it explores economic decision-making in a democracy, or to capture values discussions or students’ and teachers’ narratives about how wealth is built. For this purpose, I developed the conceptual framework discussed in Chapter Two and used it throughout the data analysis process described below. This conceptual framework was a key tool in my data analysis. I would return to it time and again when I was stumped and needed direction for deeper analysis. For example, when analyzing a document from a lesson I observed, I would read through the conceptual framework section of Chapter Two and interrogate the document with the questions posed in the framework, such as: Where are the blind spots in the way this document represents an economic phenomenon? What are the underlying epistemological assumptions of this lesson? Is it an orthodox representation of the economy, decomposed to its smallest possible unit, the individual? Or is there space for non-orthodox epistemological assumptions, exposing students to the normative decisions that may have contributed to this economic phenomenon?
These processes eventually resulted in a template “analysis memo” that I used for analyzing classroom observations, student documents, lesson plans and interview transcripts.

Through this process my goal of data analysis was to identify patterns that emerged from the data in order to develop claims that would answer my research questions. My data analysis was continuous and reflective, and consisted of an array of endeavors centered on categorizing and coding data from the interviews and my field notes, and writing reflective memos. Interview transcripts and field notes were entered into Atlas.ti, (version 1.5.3) a computer-assisted qualitative data analysis program. I began coding with a preliminary set of codes drawn from my research and interview questions, and I continued to add additional codes, as suggested by the data, as well as smaller, sub-categories, and sub-sub-categories to these codes. This was an iterative process where I would move from coding interview transcripts, to reviewing my field notes and memos, to creating new memos. As I began to make connections within and across the data my new memos became more summative in nature, but they would also lead me back to the data to add new codes.

When I reached a point of saturation in this deductive process I began to organize the codes into the broader categories of the conceptual framework, and themes that answered my questions began to emerge. These themes were placed in analytic memos that would serve as a tool for organizing and drafting my Chapter Four Findings. Concurrently while coding and writing analytic memos I developed participant profiles for each of the teacher and student participants, selecting key quotes from their interviews to support the emerging themes. These participant profiles and key quotes are embedded in Chapter Four. I created an “orphan” category for the potential outlying data that did not fit within the preliminary or emerging themes, and that fell outside the conceptual framework. I used an abductive process to analyze
this data and remained open to additional ideas related to the possibilities the data presented. However, the data was so consistent that these outliers were eventually accounted for in my analysis and understanding of multiple or competing epistemologies employed by individuals.

**Reliability and Rigor**

To address the reliability and rigor of the study I maintained a chain of evidence that links the case study questions to the specific evidence in the case study database, and to the case study findings (Yin, 2014, p. 128), and data citations are included in Chapter Four to verify the legitimacy of the claims.

I followed a protocol for creating reflective memos throughout the data collection phase to reflect on classroom observations and interviews, and applied alternative perspectives to the analysis of evidence. Considering alternative perspectives “increase[s] the chances that a case study will be exemplary” (Yin, 2014, p. 203). This process was carried out through regularly scheduled meetings with my Chair, who served as a critical friend, particularly throughout the data collection and data analysis phases, and added to the iterative nature of the data analysis process. For example, during data collection, after reviewing and discussing the results of the first round of interviews, the second set of interview questions were revised in order to gather more precise data for answering my questions. This is in line with the grounds that in qualitative research analysis occurs simultaneous with collection and may inform and generate new questions or ideas (Merriam, 1998; Yin, 2003). During data analysis, we individually and collectively reviewed data and discussed examples of coded data in order to explore emerging ideas, check perspective and gauge whether the emerging themes and results were consistent with the data collected (Merriam, 1998). For example, it was during these discussions that the finding related to a teacher’s epistemic switching, began to emerge. Teacher epistemic switching
is an additional set of circumstances that may contribute to how the role of economic-decision making in a democracy is addressed in a high school EPF course, outside the clear set of circumstances imposed by the limits of the official curriculum as described in Chapter Two.

An additional step that was taken to ensure rigor and trustworthiness was the process of triangulation, achieved by drawing on data from the teacher, the students and the curriculum. My findings are supported with “more than a single source of evidence” (Yin, 2014 p. 121). Yin explains that in a single case study, there should be a convergence of evidence from: documents (e.g., samples of student work and curricular materials), archival records (e.g., the EPFSOL standards, the W!SE Financial Literacy Certification Test), observations (direct classroom observations) and open-ended or loosely structured interviews (e.g., with the teacher and with students). To further strengthen the rigor of the research transcribed interviews were sent to participants for their review to ensure that their ideas were accurately represented.

Finally, it is worth noting the rigor of the case study method itself. Flyvbjerg (2006) writes,

the case study is ideal for generalizing using the type of test that Karl Popper (1959) called ‘falsification,’ … and that falsification is one of the most rigorous tests to which a scientific proposition can be subjected: If just one observation does not fit with the proposition, it is considered not valid generally and must therefore be either revised or rejected (p. 227-228).

In furtherance of this point Flyvbjerg (2006) relays his experience with an in-depth case study of urban politics and planning in Aalborg, Denmark. He had been trained at the university in the neoclassical model of economic man, competition and free markets and yet he found that economic man did not exist in Aalborg, as local business members negotiated “illicit deals with
politicians and administrators on how to block competition and the free market and create special privileges for themselves” (p. 228). He concludes, “the neoclassical model was effectively falsified by what I saw in Aalborg” (p. 228). The detail and rigor of case study research should avert any questioning of its contribution. The successful case study will have supplied the answer (Flyvbjerg, 2006).

**Methodological Limitations**

There are two notable methodological limitations to this study. First, ideally in order to best answer my questions related to the role of economic decision-making in a democracy and economic values, I would have been able to conduct interviews and classroom observations during the Economics portion of the EPF Course. There was at least one reference by a teacher participant alluding to the fact that content relevant to the nature of my questions would be addressed when he began teaching economics. However, this prioritizing of the Personal Finance content will be discussed in depth in Chapter Four and is ultimately a key data point of the Findings.

The second methodological limitation is that due to time constraints on my part as well as on the part of the teacher participants, who were generous with their time, I was not able to have them thoroughly participate in the data analysis process. Knowing the depth of experience Ms. Morgan brings, the knowledge and relationship she has with the student participants and the passion both teachers have for the content, I would have welcomed their analysis, and their perspective and lens on the emerging themes and findings. It is important to note that all participants were given the opportunity but declined to review the data. This topic will be addressed further in Chapter Five.

Ultimately none of the analyses or conclusions in this study are intended to claim any
direct causal relationships, as frequently lauded desirable in assessing research findings. In line with Flyvbjerg’s (2001) reference to phronetic social science research’s objective to answer four value-rational questions, 1) Where are we going? 2) Is this desirable? 3) What should be done? and 4) Who gains and who loses, and by what mechanism of power, it is my hope that my research accomplishes what he so aptly poses,

It should be stressed that no one is experienced enough and wise enough to give complete answers to the four [value-rational] questions, whatever such answers would be….What should be expected, however, is attempts from phronetic social scientists to develop their partial answers to the questions; such answers would be input to the ongoing social dialogue about the problems and risks we face and how things may be done differently (p. 61).

**Conclusion**

In this chapter I have described the qualitative method of inquiry I used to answer the research questions that guided this study, and justified the use of a single, critical case study design. I’ve explained that I sought understanding in the socially constructed context of the Economics and Personal Finance classroom, where teachers, students and the official curriculum come together to create the enacted curriculum. I’ve explained the compatibility between my search for the understanding of how values discussions are expressed in the economics discourse with qualitative and case study methodology and specifically how this case study research can fill a void in economics education research of concrete, contextualized empirical research, allowing the reader to use their own phrasonic judgment about the role of economic decision-making in the economics discourse. Details about methodology were provided including the
case selection and my role as the primary instrument for data collection. I explained my processes of data collection and data analysis, and concluded with details regarding the reliability, rigor and limitations of the study.
CHAPTER 4 FINDINGS

Introduction

Welcome to the Millionaire Game - Classroom Observation Vignette 1

It is my first classroom observation in the Economics and Personal Finance (EPF) Classroom and the third day of the school year at Creighton High. The PowerPoint slide reads: “Financial Literacy: Sound financial decisions can increase wealth and a person’s standard of living. Q & A on the ‘Welcome to the Millionaire Game.’” Ms. Morgan distributes the Millionaire handout (Appendix J), and the mood is upbeat, as the song “For the Love of Money,” by the O’Jays, plays in the background. She provides approximately 10 minutes for students to silently answer the 15 questions and then instructs students to count off and move into groups of six. They are told to star the five questions that their group is the most confident in their responses. Ms. Morgan shares the results from a national survey about teens’ savings habits and then states:

HM: “When we start scoring... if you “star” a question you subtract 10 if you get it wrong, or add 10 if you get it right. This is your chance to take a risk and gamble.”

Ms. Morgan uses the PowerPoint slides to present the questions and answers. She keeps students engaged by asking them to hold up a T or F for their response, and the “Millionaire” sign if the...

---

10 Throughout Chapter Four, within classroom vignettes teacher participants’ quotes will be noted with their pseudonym initials and student comments will be noted as S. All participants’ interview quotes will be identified with their pseudonym initials and questions I pose will be noted as TS.
question is one of their starred responses. As Ms. Morgan works through the questions, she and the collaborative teacher interject comments.

**Question #1**, Most millionaires are college graduates. True.

*HM:* “*Education is an investment in yourself. There is a big idea in economics called human capital. We are not going to tell you to go to college or medical school, but in general your high school diploma is not going to be your last educational attainment...even if the next step is just a certificate or advanced training.*”

**Question #2**, Most millionaires work fewer than 40 hours a week. False.

*HM:* “*Do you know anyone who owns their own business and do they work a little or a lot? We get lulled into this idea that once you have money you don’t have to work anymore. All the people I know that do well financially got there because they were the first person to get to work in the morning and they were the last person to leave at night. Often the person who does average work, it shows in their financial standing.*”

**Question #4**, More millionaires have American Express Gold cards than a Sears store credit card.

*HM:* “*In general, people that are able to achieve financial success don’t carry a lot of credit card debt. They are not going to get the credit card with the highest limit because they always plan to have enough money to buy whatever it is they would be buying with a credit card. Most of the time when you pay with credit it’s because you don’t have enough money to pay for it.*”

**Question #14**, If you save $2000 a year from age 22 to age 65 at 8% annual interest, your savings will be $700,000 at age 65. True.

*HM:* “*Do you know the expression work smarter not harder?*”
Debt and Financial Crisis - Classroom Observation Vignette 2

It’s mid-November and Ms. Morgan begins the lesson by asking students to produce their homework assignment. The assignment instructed students to choose among several credit cards Ms. Morgan posted in a google drive document, and respond to the questions based on their chosen card’s annual percentage rate. For example, Question #5, If you have $163.00 balance remaining on your credit card at the end of the month, how much interest will be added to your next credit card statement? Most of the questions require students to perform math calculations. The last two questions read: “Would you apply for this credit card? Why or Why not? Answer in at least 2 complete sentences.”

After checking students’ homework, Ms. Morgan introduces a PBS Video titled, Frontline: Inside the Meltdown\textsuperscript{11}.

HM: “For 30 years Americans have played a game with the banks…With the banks holding all the cards. You might wonder, why haven’t there been laws or bills on this? The response is: money and power.”

Ms. Morgan provides a few more details and then starts the film. She pauses at different times to provide information, such as:

HM: “The universal default practice is now illegal. Universal default meant that if you were late with one payment to any business you were doing business with, your interest rate could be raised on all your other accounts.”

\textsuperscript{11} Frontline: Inside the Meltdown. “Public Broadcasting Service’s Frontline investigates the causes of the worst economic crisis in 70 years and how the government responded. The film chronicles the inside stories of the Bear Stearns deal, Lehman Brothers’ collapse, the propping up of insurance giant AIG, and the $700 billion bailout. Inside the Meltdown examines what Treasury Secretary Henry Paulson and Federal Reserve Chairman Ben Bernanke didn’t see, couldn’t stop and haven’t been able to fix.” Retrieved from http://www.pbs.org/wgbh/pages/frontline/meltdown/ on March 29, 2017.
The American Bankers Association spokesperson is interviewed in the film and comments:

“There was a segment of the population that was confused and that’s what Congress reacted to… so now credit card companies have to raise rates.” Ms. Morgan pauses and asks students:

\textit{HM: “Do you believe her... that it’s the people’s fault that credit card companies had to raise rates?”}

Ms. Morgan quickly starts the film again and students are not given the opportunity to respond. When the bell rings and as students exit class, they are handed a homework assignment to complete, \textit{“Frontline: Inside the Meltdown”} (Appendix K) with nine questions related to the video. Question #9, reads: “Should there be laws to restrict the value of houses people buy and the amount of leverage used to buy the house? What is the problem with having such laws in a free market?”

Based on the perspective I gained from my review of the literature, I entered the classroom with a conceptual framework designed to capture how economics and personal finance would be taught. I was curious about the emphasis that might be placed on teaching economics as science, with natural, observable laws or how that view might be challenged. I was interested in how economic and social phenomena, (e.g., why the rich are rich and the poor are poor) would be taught and understood. I wanted to know what was being valued in the EPF classroom, an understanding of wise financial consumerism, individual productivity and entrepreneurship; the role of both personal and structural influences on economic and financial outcomes; some combination of these approaches; or something wholly different.

Noting the potential for students and teachers to bring their own values and lived experiences (Gee & Green, 1998; Pinar, 1989) into the classroom--and that potential to create space for phronetic questions and values discussions--I chose to employ open-ended research
questions. Grounding my work in the social sciences’ strength of applied phronesis (Flyvbjerg, Landman, & Schram, 2012), acknowledging the value I place on teaching students the role of economic decision making in a democracy, and recognizing the capacity of an inquiry designed around that role to capture the discourse of the EPF course, I developed the following research questions:

- How is the role of economic decision-making in a democracy addressed in a high school economics and personal finance course?
- What space is created for the role of economic values?

To get a closer lens on how specific content suited for values-discussion is addressed I added the following question:

- What are teachers and students’ understandings of how wealth is accumulated?

To answer these questions I chose a single, critical case study, defined by Flyvbjerg (2001) as having strategic importance in relation to the general problem. For example, I purposefully selected a teacher who was openly critical of the encroachment of personal finance on the economics curriculum, on the premise that if I discovered that there was little room in her classroom for economic values discussions, it is likely that there is little room in the classroom of teachers who are less critical or even supportive of the curriculum (Flyvbjerg, 2001; Yin, 2014).

What I found in a classroom setting reinforced my textual analysis of the EPF curriculum. Like the written curriculum, the classroom I observed had a focus on neoclassical economics, in particular on individual decision-making and content was presented with an assumption that economics is a science with laws that objectively determine economic outcomes. However more significantly, and beyond what would have emerged from a simple analysis and critique of the official curriculum’s standards, is the magnitude of the difficulty in challenging
that paradigm, even for a teacher inclined to do so, and the influence this has on teaching about the role of economic decision-making and on economic values discussions. There were moments when the teacher disrupted the hegemony of neoclassical economics, however most often these moments were short-lived, as in the above Classroom Vignette 2. The complex relationship between the EPF curriculum and the observed teaching practice is exemplified by the contrasts in the above two vignettes that demonstrate competing economic assumptions one teacher brings to the classroom. In Vignette 1 both the Millionaire Game and Ms. Morgan’s comments present an ontology that assumes an economic reality of certainty, with calculable risks. Students must be taught the rules of this economic reality in order to better navigate the economy for personal gain,

“Question #14, If you save $2000 a year from age 22 to age 65 at 8% annual interest, your savings will be $700,000 at age 65. True. HM: “Do you know the expression work smarter not harder?”

The epistemological assumption put forward by the orthodox economics of the EPF curriculum is that their models are scientifically true and the technical application of that knowledge will consistently yield good results. The axiology or underlying value transmitted in the course is that in their journey towards becoming a productive and successful member of society, it is desirable for students to master this technical application, (i.e. base their financial decisions on the models) that will result in increasing both their individual and society’s economic prosperity. In summary, the curriculum puts forth the idea that people’s lot in life is the sum total of their decisions, and that this is a fair and moral way to sort out winners and losers for the greater social good.
Vignette 2 provides a different set of economic assumptions. Ms. Morgan chose a documentary that critiques the predatory lending practices of the banking industry. In her introduction of the video, she explained that

HM: “For 30 years Americans have played a game with the banks...With the banks holding all the cards. You might wonder, why haven’t there been laws or bills on this? The response is: money and power.”

Her choice of the word “power,” reveals a personal skepticism suggesting an alternative reality to the certainty presented in the curriculum, a reality in which those with power play by a different set of rules than those without it. This non-orthodox view suggests that what may be good for the Chief Executive Officer of a bank, may not be good for many members of society. If, due to the power they wield, banks have been able to subvert (or avoid) certain laws that society may have deemed worthy, and if they can bend the rules in ways that increase their profits at great social risk to the rest of society, then are they essentially escaping the rules of the free market? And if so, doesn’t that disrupt the validity of the scientific models that they support and fund through a curriculum that cultivates students’ allegiance to these models? Question #9 on Ms. Morgan’s homework assignment employs the word “should” further creating space for a values discussion. The competing economic assumptions in the vignettes played out throughout the data and will be discussed in detail throughout this chapter. The difficulty of disrupting the hegemony of neoclassical economics was evident on numerous occasions when Ms. Morgan reinforced the dominant narrative she professes to distrust, revealing the complicated reality of the enacted curriculum.

The following sections draw on curriculum, classroom observation data, and teacher and student interviews in support of the three claims that answer my research questions:
• The role of economic decision-making was given very little space in the EPF Course. The discourse was heavily focused on the acceptance of the science and mastery of technical knowledge about personal finance for the dual purposes of preparing students to succeed on the W!SE Test and preparing students to navigate and succeed in a fixed economic reality firmly committed to neoclassical economics. The role of economic decision-making was diminished by the foregrounding of financial literacy over economics, which served as a mechanism of power to send the *silent* (Apple, 2014) message that economic circumstances change through individual choices and that economic and social phenomena can be understood and addressed through the application of technical approaches. This epistemology was solidified by the competing narratives held by teachers and students, as those in alignment with neoclassical economics were reinforced while contradictory narratives were not addressed, suggesting they hold no value in the real-world of economics.

• All economic decision-making consists of values; some are explicit and some are implicit. Evaluating the impacts of economic policies, (e.g., the Affordable Care Act), is an example of explicit values application. An example of implicit values application is the structuring of three-quarters of an EPF course around a personal finance curriculum funded and developed by the finance industry, culminating in an end of course test that serves as a high stakes graduation requirement for many students, while leaving one-quarter of the last semester for economics. This approach, combined with the cordonning off of personal finance and economics into separate camps, marginalized the role of explicitly applying value judgments to economic and social phenomena. The course simultaneously underscored the implicit value that solutions to economic and social
problems are addressed through the mastery of a technical approach to personal financial literacy. The discourse was so tightly focused that students questioned whether value judgments about economic and social phenomena belonged in the EPF course or concluded they were outside the scope of the content.

- Based on their life experiences, students brought an understanding to the EPF course of the impact of structural factors (e.g., the relationship between zip codes and the quality of education), yet they consistently reported the EPF courses’ explanation of wealth accumulation as built solely on wise money management.

**The Power of Curriculum in Practice**

As I reviewed the EPF Standards (Appendix H) and the resources Ms. Morgan was provided by the school district (Appendix I), they were consistent with my review of the literature documenting K-12 economics education’s commitment to neoclassical economic thought, with little, if any, counter-point to this set of ideas. Ultimately the W!SE Test is a mechanism of power (Flyvbjerg, 2001) that both drives and reinforces the neoclassical, orthodox approach of the EPF course. Below I describe examples of how the Test drives what is taught, when it is taught, and what and how EPF content is measured.

The W!SE Test drives the school districts’ EPF pacing as follows, (as Ms. Morgan shared with me via email on 08/11/16):

**W!SE Pre-Testing Dates**

September 26-29

**W!SE Post-Testing Dates**

1st Attempts: March 20-24
Remediations: March 27-31
Retakes (2nd Attempts): April 3-7
Remediations: April 17-21 (after spring break)
Second Re-Takes (3rd Attempts): April 24-28
Pacing - use W!SE Personal Finance Curriculum Guideline
Budgeting by September 30
Money (w/o Taxation) by October 21
Cost of Money and Banking by December 2
Credit by by January 20
Insurance by February 10
Taxes by February 24
Investing & Money Management/Financial Planning by March 10

For Midterm Exams
Create test for midterm

Economics Content

Begin at conclusion of Personal Finance; have done by June 9

For Final Exam
Use either W!SE test score or Semester 2 student average, whichever grade is greater.

--------

Against EPF teachers’ recommendations the school district flipped the semesters requiring personal finance be taught prior to economics, in order to provide more time to teach the W!SE Test content before administering the Test. The W!SE pre-test is given the first month of school and the W!SE post-test is not administered until late March, with remediation and re-
takes through the end of April. Teachers spent approximately seven months teaching personal finance and approximately two and a half months teaching economics.

As directed in the above communication from the school district, Ms. Morgan’s instruction and her units were aligned with the content in the W!SE Personal Finance Curriculum Outline. For example, Ms. Morgan began the school year with a unit on money and budgeting, in alignment with that curriculum outline. On 09/30/16 she used a PowerPoint presentation with students titled: W!SE.1.Money.pptx inclusive of her own teaching activities designed to teach the W!SE money and budgeting vocabulary and as provided to students in the handout titled “Budgeting and Money Management Vocabulary List” (Appendix N). The Kahoot link Ms. Morgan provided students to use at home to review for the unit test was titled: W!SE Budgeting/Money Review and the unit test administered to students was titled W!SE Money Test.docx with 60 questions directly correlated with the W!SE Personal Finance Curriculum Outline. Ms. Morgan frequently invoked the W!SE Test to place legitimacy on her instruction, as in the following quote:

“HM: When is it a good time to begin financial planning? We would say, and your W!SE test would say, when someone is dependent on you…” (09/15/16 Classroom Observation).

During an observation of a W!SE Test review session co-taught by Ms. Morgan and her colleague Daniel Walker, I learned that Mr. Walker was the school district’s designated W!SE Test Coordinator for Creighton High. A graduate of Creighton High, in his 3rd year of teaching, Mr. Walker teaches four honors level classes of EPF and was responsible for coordinating and assembling the content in the Student EPF notebook distributed district-wide to each student
enrolled in the EPF course. See Figure 2 for more of Mr. Walker’s background. He agreed to participate in an interview and provide insight on the EPF course.

**Figure 2. Mr. Daniel Walker, EPF Teacher**

A first-generation college student, Mr. Walker attended a large state university, where he earned his teaching license and a Bachelor’s degree in political science. Daniel relays that he is “obsessed with public policy, I cannot get enough political news. That’s something that I’ve had since my first year of college, even reading the international section in the New York Times to get a break from American policy” (7:36). When asked about influences on his thinking and beliefs he responds with stories of politically left parents, a memorable high school government and economics teacher, and college professors who “hammered down on how to teach others how to think and use the thinking process” (7:37). He recalls, “it was always tight financially growing up. I remember talking about the things that we just could or could not do because of finances or how we would fund our own college education” (7:38).

DW: “The school district standardized the finance part by purchasing the W!SE Test, which is sponsored all by banks, and infusing it into EPF curriculum. They required all non-advanced diploma-seeking students to pass it as their graduation certification credential. The result--and this is not just my opinion, but also the other W!SE coordinators in different buildings across the school district, and it’s the belief of every EPF teacher in this building--there is now a perverse over-reaction to where we're doing finance basically 70% of the year and we're really pushing back some of the economic content that we can cover... and not giving these kids a basic understanding of how the economy works prior to teaching them how they can apply that knowledge in their personal finances. The way it’s working now is: teach them personal finance first, regardless if they know about how supply and demand can impact employment, regardless if they have any prior understanding of how the Federal Reserve or monetary policy works....We’ve shifted very hard core into proficiency and it has undercut the mission of what the curriculum is supposed to be, and that’s going to hurt the kids” (7:13).
Mr. Walker’s assertion that the focus on W!SE test proficiency undercuts the EPF curriculum’s mission and hurts the students is borne out in the data presented in the following two sections. The EPF curriculum has broad and comprehensive goals to: provide students with a strong foundation in both economics and personal finance; to present economic concepts that help students interpret the daily news; and to “anticipate how events will impact their lives” (Virginia Department of Education, 2009, n.p.) and yet students repeatedly identify the curriculum as solely focused on only one part of these broad goals: personal financial management. When asked what they were learning about their role, as a democratic citizen, to shape the economy some students offered the need to focus on the W!SE Test as an explanation for why they were unable to spend time on that role (see Kathy’s comment below, on page 135). The school district’s pacing guide (shown above) and my classroom observations of Ms. Morgan’s lessons, including the partitioning off of economics discussions into the latter few months of the school year, also bore out Mr. Walker’s claim that the EPF mission to “help students develop thinking skills that include analyzing real-world situations, economic reasoning, decision making, and problem solving” (Virginia Department of Education, 2009, n.p.), was undercut.

The following example from a classroom observation demonstrates how this reoccurring theme of the privileging of personal finance over economics hampered students ability to see the relationship between economics and personal finance and their ability to see the human choices behind economic outcomes. During a lesson on the cost of money and inflation, I observed Ms. Morgan’s departure from the prescribed curriculum to include a mini-lesson on the role of the Federal Reserve. She saw (and verbally expressed to me after class) the limitation of teaching personal finance before economics in this lesson that used a technical approach that focused on
the impact of saving early and on the role of compound interest. Students’ comments indicated they had no concept of monetary policy and clearly needed this information to fully grasp inflation (10/11/16 Classroom Observation). Students’ classwork (e.g., Appendix M) and comments about their work (note Anna’s comments below), demonstrated their inability to analyze real-world situations such as the underlying causes of increased economic insecurity faced by American retirees.

An additional influence of the W!SE Test is how the content itself served to cloak economic values decisions in technical, applied approaches that suggest economic change occurs in a value-free way. Although not specific to economics, McLaren (2015) has written about curricula where the “basis of social authority and the unequal relations of power and privilege remain hidden” and where curricula functions to supply the “terms of reference…against which all individuals are expected to live their lives” (pp. 140-141). The W!SE Test served this purpose as illustrated by the following question I observed during a W!SE Test review that is representative of the content,

A Neon Oil Corporation tanker spilled oil in the ocean around Australia. As a result of this accident, the share price of this stock is likely to:

A. Increase
B. Decrease
C. Not be effected and remain about the same
D. Fluctuate

The answer key stated that B is the correct answer and the following rationale was provided: “The share price of Neon Oil stock is likely to decrease because of the negative publicity and the additional costs and penalties the company will likely incur. If the company handles the spill
responsibly, the incident may have only a temporary negative impact on its share price” (11/15/16 Classroom Observation). This question had the potential for a values discussion regarding the relationship between stock prices and how the public can make economic choices to punish or reward companies for their behavior, but no discussion transpired. After answering the question Ms. Morgan commented that HM: “All the questions that talk about money and saving will somehow be addition or subtraction problems” (11/15/16 Classroom Observation). This perspective of economics as arithmetic was present throughout the data as students related their apprehensions about taking the EPF content to their math aptitude, and as Ms. Morgan relayed that she steered clear of economics courses as an undergraduate, “I was not confident in my math skills, I didn't enjoy math, I didn't enjoy science, and so I said, I'm just not going to take it” (8:50). Moreover the teachers’ technical approaches mirrored the technical nature of the content, as much of the one-hour review session was spent providing students with details such as passwords and links to access online modules (for example, EverFi, see Appendix I) designed to help students prepare for and pass the W!SE Test. Teachers apologized to students for their form of delivery, flashing questions one after another on a PowerPoint slide, prompting students to choose from the multiple-choice options, and encouraging rote memorization.

During their interviews both teachers talked extensively about the W!SE Test and when asked about what they would change about the course, both expressed a desire to get rid of the W!SE Test.

TS: Does the curriculum, as it stands, live up to your expectations of what you think students need to learn?

HM: “The school district did a good job trying to be true to the State’s standards and the standards are fine, but now we have the W!SE test which has completely different focal
points in some content areas that are too focused on different types of retirement accounts and life insurance. ... There's a bigger focus through the W!SE on retirement and more concrete financial planning. ... With W!SE they have little phrases they test the kids on, like 'a penny saved is a penny earned.'” (8:6).

It is worth noting that I intentionally chose not to ask Mr. Walker or Ms. Morgan about the W!SE Test, yet they both continued to reference it throughout their interviews.

**TS: Noting your role of taking the official curriculum, as defined by the EPF SOLs, and putting together materials that can be taught in the classroom across the school district, what would you say is the point of the EPFSOLs?**

**DW:** “Coming out of the recession, the State’s plan was good... The original idea of the curriculum was to just get basic economics and personal finance tips to these kids so that they make better decisions both in their finances and in understanding how the economy works so that they are not victims to some of the things that happened to borrowers back in 2007, 2008 and 2009. [The course] was never supposed to be lopsided in terms of finance over economics... At worst it would be an even split, one semester of economics and one semester of finance” (7:15, 7:12). “If we want to make sure that kids understand basic economics and finance stuff then we've failed, because we have students that have failed the W!SE Test 8, 9, 10 times in a span of about 18 months” (7:39). “It's not measuring what students are supposed to be learning, it's just measuring students’ ability to memorize stuff and regurgitate it” (7:32).

**TS: Is there anything else you’d like to add?**

**DW:** “Our EPF students are going to be less equipped to be adults in this country. It’s horrifying that a class that is supposed to build on what a productive citizen looks like,
instead, because of shoving the W!SE test into this, you're getting students coming out with less understanding about what it means to be a citizen and a more selfish outlook on life because all they're thinking about is personal finances and making themselves money and how bad it is to take a loan. And that's not good….That's economically and morally troubling that we're raising this generation to just focus on themselves and not focus on how they can do better for everybody” (7:33).

The W!SE Test’s function as a mechanism of power operating on many levels to reinforce the neoclassical, orthodox approach of the EPF course, effectively leaves it up to the teacher or students to introduce any counterpoints to this perspective. Although I did not directly observe Mr. Walker teach, as he shared his goals for the course and examples of how he attempts to reach those goals, he illustrates a teacher’s ability to create space for values discussions.

DW: “Students can learn how personal investment, and monetary and fiscal policies all work together for the overall good or detriment of the national economy….I want to help students see those relationships….marry the finance and economics and government stuff into this kind of conversation (7:4, 7:5, 7:6). “I want students to graduate confident in their ability to effect change. Most Social Studies teachers, we’re trying to get students to see behaviors and see how people can intervene, and all of that comes together with government, economics and finance” (7:7). Teaching them how to clean the opinions off of actual facts is the healthiest thing for a democracy. It’s what keeps people informed and aware and that’s ‘economic thinking’”(7:9).

Mr. Walker’s reference to his attempts to teach students the relationship between EPF and government speaks directly to the goal of helping students understand the role of economic decision-making in a democracy. He points to this as a perspective social studies teachers bring
to the classroom, noteworthy in light of the state’s decision to allow the EPF Course to be taught by agriculture, math, business and information technology, family and consumer sciences, or marketing teachers.

The following excerpt from Mr. Walker is an example of how teachers introduce values discussions and the role of economic decision making to their students.

*DW*: “Last year during the Republican primaries, I used two articles about the tax proposals, both of which had suggested more or less eliminating the income tax and replacing it with a flat sales tax. The articles got students into economic thinking, about who pays sales tax, everybody does, right? They considered how millionaires paying for an item with a particular percentage sales tax would be affected differently than someone making $30,000 a year buying that same item with that same sales tax. The students saw the regressive feature of the flat tax, that it’s not good for anybody who is not a millionaire. Allowing them to get that information, think about it, and come to conclusions, is the best thing we can keep doing, for more than just keeping our economic success going, but also to keep democracy vibrant and responsive” (7:11).

In contrast, Mr. Walker’s comment below provides an explanation for how foregrounding the personal finance has limited the role of economic decision making in his EPF course.

*DW*: “When we teach personal finance first we’re skipping over the whole idea that the economy exists because of the people who form it. When we taught economics first, we began a discussion of wants, needs, factors of production, and how decisions can make for better or worse situations, including unintended consequences” (7:18, 7:20).
Again Mr. Walker offers his observations on the impact of the requirement to teach personal finance before economics, as I elaborated on above and will continue to address as this theme surfaces throughout the data below.

**TS: Describe an example of how you inserted ‘unintended consequences’ into the reconfigured personal finance curriculum, and how that played out.**

**DW:** "I always try to sneak some in... For example, when teaching about insurance, I use a simulation of buying health insurance before and after the full implementation of the Affordable Care Act (ACA)... it helps them understand the importance of the ACA in terms of the economy and in terms of moral decency. I start the lesson by asking students if they think health care is a right or a privilege and they respond that it's a privilege. When they get done with the exercise they understand that the national conversation has changed... it's no longer ‘well if you can’t afford it, too bad,’ now the conversation is about how people get access to a fundamental right. We put compassion into that conversation and the economics enters in terms of how much money individuals can save each year if they're not paying thousands of dollars in health care bills. That conversation didn’t go very well this year because students didn’t understand the fiscal aspect of how decisions made by Congress impact people. The discussion is less political if students can reach back and draw on how policies that seem political are really economically related” (7:29).

It’s noteworthy that Mr. Walker feels as though he is sneaking this content in, as if the inclusion of content that asks students to make a value judgment about the intended and unintended consequences of economic policies is subversive and outside the scope of what he believes he is
supposed to teach. This is hegemony in action, limiting the space for values discussions that equip students with the skills to critically examine economic and social phenomena.

I presented Mr. Walker with an example of a document from the student EPF Notebook, “Financial Literacy in America: Individual Choices, National Consequences” (Appendix M) and asked him to comment on Question #7, which reads: ‘Over the years what has the nation become increasingly focused on instead of saving?’ with the correct answer: ‘consuming.’ I asked him to comment on where there may or may not be space to interject values discussions in this lesson.

*DW:* “If you start the year with this lesson, which we did because we were guided to, it could shut that conversation down, because students don’t have the context or know anything about the economy yet, they’re just thinking about it in terms of the individual. You could put questions in here, we didn’t, but you could do a follow up to this one…What is the larger scale impact if every consumer started spending and charging rather than saving? What could that mean, for businesses, or on a Gross National Product level versus for individuals” (7:21). “One of the problems we face [teaching Personal Finance first]…we have these questions that basically beg to be tied into a larger economic conversation about choices, and students have no context, no clue” (7:22). “When you give students a lesson like this without a semester of economics behind it, and ask them why people are consuming more, you get an unproductive conversation…how people are spending more because they’re lazy and entitled or the flip side, liberals saying it’s the Republicans‘ fault. If you teach economics first, you talk about the bi-partisan deregulation policies in the late 70’s into mid 80’s, that led to a false economic boom because of all the consumerism, followed up in the mid-2000s by a lot of bankruptcies” (7:23). “If you look at a debt crisis, it’s not just because people
consume too much, it’s because policies have been designed to encourage a particular type of behavior which may be good for short-term profit but in the long-run are poisonous, and students are unable to see that when they see this lesson in isolation” (7:24). “It reinforces, ‘I was responsible’ or ‘screw that person, they didn't do what they were supposed to do’ even though that person may have been behind the eight ball their entire life” (7:25).

Mr. Walker explained how teaching personal finance prior to teaching economics left students without the background and context to examine economic phenomena (e.g., the debt crisis) from a holistic perspective. This limited students’ ability to think critically about all of the potential factors that contribute to economic outcomes, and replaced it with the narrow lens that attributes economic outcomes to individual choices. The next section considers how teachers and students enact this curriculum.

Connecting with the Real World: Participants’ Perspectives

People’s life stories embody and contradict the implicit and explicit EPF messages, creating inconsistencies in and between how they view the world, how they approach knowledge and recognize when they know and understand something, and what they value; influencing how they enact and live through curriculum. Figure 3 provides an introduction to Hannah Morgan, the EPF Teacher selected for this case study. Evidence will then be provided of the consistencies and inconsistencies of Ms. Morgan’s economic assumptions, and by which mechanisms of power her assumptions are reinforced.
Hannah Morgan, EPF Teacher

Figure 3. Ms. Hannah Morgan, EPF Teacher

Ms. Morgan, the youngest of nine children, grew up in a conservative Catholic household, on the outskirts of a prestigious research university town. Ms. Morgan’s father lived the American dream. He started with a company as a driver, at age 18, after the Korean War the company put him through corporate training, he worked his way up to a Human Resources position and eventually left Brooklyn to relocate with the company to the Virginia suburbs. Ms. Morgan’s father retired when the company was bought out and the headquarters moved to Mexico. Ms. Morgan offered, “up until the last few years, people would still come by the house to get my dad to explain their retirement to them” (8:60). Ms. Morgan’s Mom stayed at home when the children were young and eventually took a job at the university dining hall, “My mom was this larger than life personality, never met a stranger…she had tickets to all of the sporting events because all the athletes called her mom, hugged and kissed her, she was like the Dining Hall Matron” (8:59). When I inquired about influences on her economic thinking, she explained, “We did not have a lot of money. I remember mom going through the checkbook to make sure all the checks cleared the bank, and always having that fine line of having just a few dollars in her purse for special things” (8:17). “They did an excellent job of living within their means and not having debt, but they were not able to save for college so all of that was on us… which is fine” (8:61).

Ms. Morgan attended a small, private, all-girls, liberal-arts college where she majored in political science and then earned her Masters’ degree in Secondary Social Studies Education from a large state university, noting that she is still paying off her college loans. She taught two years prior to coming to Creighton High where she is now in her 11th year of teaching. Ms. Morgan “became a teacher to make a difference in students’ lives for whom school doesn’t come easy” (8:24). The mother of two young children, family values are extremely important to her (8:14).

Ms. Morgan teaches four non-levelled classes of the Economics and Personal Finance (EPF) course and one honors-level government course. This is her fifth year teaching the EPF course. The first year there was no textbook or resource other than a Council for Economics Education (CEE) produced jump drive provided by the school district. She recalls cobbling together resources and attempting to hit as many standards as possible (8:3). Eventually a group of EPF teachers in the school district put together an EPF student notebook, now distributed to all students in the course. Referencing the contents of the current course she states, “it’s been a huge revolutionary process” (8:4). “At first I was hesitant to get involved with that effort…didn’t feel like I really needed it since I have culled my materials down to my audience of collaborative students over the past five years, and they have been successful on the W!SE test, with a 96% pass rate…. I don’t know what that rate says about the Test, about what we’re doing in the class, or how that matches up, but that’s what we want” (8:5).

The first formal interview with Ms. Morgan was conducted two days prior to the first day of the school-year. Questions were designed to gain insight about the influences on her economic thinking, perspective on what role she believes she plays in the economy, and to discuss the EPF curriculum and any of her personal goals for teaching the course (see Appendix G, Teacher Interview Protocol). Conducted half-way through the year, the second interview was designed to gain perspective on Ms. Morgan’s understanding of the role of economic-decision making in a
democracy and what role—if any—she believes values discussions should play in the Economics and Personal Finance course, including a focus on her understanding of wealth accumulation.

**The complicated nature of the enactment of an official curriculum.** Ms. Morgan represents the complicated nature of the enactment of an official curriculum, as her multiple and sometimes contradictory beliefs, play out in her EPF classroom. Life experiences have taught her to doubt the reliability of orthodox economics’ underlying values that playing by all the rules leads to economic prosperity. Initially her father’s hard work and success up the corporate ladder seemed to support the meritocratic theme of the American Dream: work hard and get ahead (McNamee, 2009). Other experiences contradicted this narrative, as ultimately her father’s job was moved out of the country, and despite advanced college degrees she and her husband live paycheck to paycheck, *HM: “Personal finance for me right now is just trying to make sure I have money to pay my daycare bill the last week of the month. It’s like basic, a little bit of coupon clipping” (8:20).* Ms. Morgan’s statements during the interviews and in classroom observations, as well as some of her content choices indicated that she challenges the orthodox value of economics, that the world is certain with calculable risks,

*HM: “I thought I was a conservative in college and then I became a public-school teacher and I didn’t agree with any of that anymore because that’s not the way the world actually is. If you have a more sheltered view from your youth that’s the beauty of higher education... getting out of your house... so life experiences have shaped some of that” (8:15).*

However, these same life experiences influenced the value she placed on equipping students for wise consumerism, a skill most commonly associated with microeconomics. In
essence, her belief that it’s a rough road to economic success, especially for lower socioeconomic students, drove her desire to prepare students to navigate that road.

HM: “So just having them understand that once they turn 18 it’s really their own problem and for some of them before that, because they have some bills to pay. That was the biggest thing for me, I was completely unaware of most of that stuff. My parents weren’t negligent, we just didn't talk about it. Every parent that comes to back to school night, 100% of the time they say, we are so glad they have this class. Sometimes I think the kids are telling their parents stuff that they didn't necessarily know” (8:40).

Ms. Morgan’s desire to prepare students for financial circumstances for which she was unprepared, manifested in a mostly orthodox approach to economics that focused on students’ application and mastery of technical expertise in individual financial planning (e.g., such as via wise consumerism, see above Classroom Observation Vignette 2 regarding credit card choices). This approach results in foregrounding a positive epistemology that overshadows her beliefs in the value of a normative approach to economics. For example, when I asked her to discuss the most important reasons for students to learn about economics and personal finance, she responded:

HM: “So that they don’t fall into traps that are set for them, either through laws that were intentionally designed to trap consumers if they’re not paying attention, or things that have become pitfalls maybe not by design. There is a student loan crisis in the U.S. and very few of my students--I imagine less than 10%--are in a situation where they can afford to go to college and graduate with no debt” (8:38)....“For some it’s as basic as learning about a debit versus a credit card, your responsibilities within the tax law as an earner, what is a retirement fund… some kids come in with zero knowledge of anything
money related. Other kids have seen their parents invest, they've been on vacation, they may start to think about how that was paid for. There's an exercise we do in government class where they look up the assessed value of their house to figure out their property tax and you can see which kids look excited and which don’t. Decisions other people have made may or may not impact you. I have kids whose parents have gone through bankruptcies, divorces, court ordered child support and all those different things and we really talk about all that stuff. I’ve had kids in the last few years that have been through foreclosures, because they were happening everywhere” (8:40).

Ms. Morgan continually emphasized how the content connects to students’ lived experiences. Her statement that there are laws that exist to intentionally trap consumers recognizes that marketplaces are full of risks, and that some people have the power to manipulate the legal system in ways that may negatively impact those with less financial means. This suggested that she questions the underlying tenets of the official curriculum. It is also a clear example of how a teacher’s life story creates tension with the curriculum they are charged with teaching. An example of how competing experiences and beliefs resulted in epistemic switching was documented by Gottlieb & Wineburg (2012), in their research on how eight religiously committed historians differed from those of their non-religious peers as they navigated between their competing faith and academic commitments. Gottlieb & Wineburg’s findings and both my teacher and student data reflect what appears to the academic researcher as a contradiction, but is actually the real phenomenon of epistemological code switching. As there is no monopoly on truth, student and teachers will read the world (Freire, 1970) and tensions will arise when curriculum is fixed and does not reflect or account for these contradictions. My findings reveal a pattern of teachers and students competing ontological, epistemological and axiological
economic assumptions, intersecting with an *official curriculum* not fit to accommodate these real world, complex perspectives.

Ms. Morgan’s response to my question regarding whether the curriculum as it stands lives up to her expectations of what she believes students need to learn is another example of her competing epistemologies. She begins by stating:

*HM*: “*I think the curriculum should be focused on the individual economy of a person and what you can do to be on firm footing*” (8:43)

clearly an orthodox economic epistemology, as she decomposed the economy to its smallest possible unit, the individual, (Chang, 2014) and explanatory for her pedagogical strategies that focused on a mastery of the application of technical approaches for understanding economic and social phenomena, such as in the handout “Budget and Money Management: Notes” (Appendix L). When introducing this handout Ms. Morgan stated “*budgeting is a reality of life for everyone if they want to end up with money at the end of the year*” (09/12/16 Classroom Observation). This statement omits the fact that certain segments of the population have enormous amounts of expendable wealth and live without budgeting. Coupled with the fill in the blank statement on this same document, “Your goal should be a: ______  ______ (correct response “balanced budget”) Ms. Morgan and the curriculum made claims of certainty—where there is room for debate, with value-laden messages about behavior (budgeting and living within that budget). The point is not to dispute the value of teaching students to budget, the question is why the curriculum and Ms. Morgan foreground some values and ignore others, thereby continuing to reinforce that economic outcomes are purely the result of individual choices.

To gain more insight on Ms. Morgan’s perspective I posed the following questions:

*TS*: *Moving away from the personal finance piece, do you believe you play a role in the*
economy and if so what is that role?

HM: “I have always been an earner, contributing to the economy and I will continue to do so. I notice when gas prices are going up; we bought our house when it was at the lowest point for the interest rates. But as an average person you don’t have a lot of control over the majority of things that are going to impact you…you can’t control what your tax rate is going to be unless you become a legislator and then you’re like one drop in the bucket. Obviously, you have no control over interest rates…this is the government teacher side of me, it bothers me when people get hyped up politically about these issues because they don’t understand, that’s not how it works” (8:21).

Individuals hold multiple roles within the economy. Recall that the EPF SOL’s justify their existence with this opening statement: “Students need a strong foundation in economics and personal finance to function effectively as consumers, workers, savers, investors, entrepreneurs, and active citizens” (Virginia Department of Education, 2009, n.p.). From these various roles, Ms. Morgan identified with the role of worker and relegated economic decisions to elected leaders and their designees, a perspective strongly echoed by her students during their interviews.

TS: In reference to your statement “that’s not how it works,” talk about how you think it does work...

HM: “As far as it goes with any sort of monetary policy that the Federal Reserve is in charge of, you need to watch it, and I just trust that they know more about economics than me--international economics--and hopefully they're going to make the correct decisions. Those moments of downfall or whatever, that are going to come in the future, like the bust in 2008 in the housing bubble I don't feel like I have any control over any of
that...it is what it is” (8:22). “As far as it goes with taxes and spending, I tell the kids that however many cents of the dollar-- 83, 87, 90 cents--depending on what you pay in taxes, that’s your money so you better vote, and you better care how the government is deciding to spend it because it’s your money. I do care about that and I do watch politics...My role is more of an observer, maybe I should be more of an activist, maybe when my kids are in school” (8:23).

Ms. Morgan’s comment that she “trusts that they know more about economics” indicated she accepts the epistemological warrants of the EPF curriculum requiring the use of technical expertise for optimal decision making. Teaching students to trust professional economists without providing them examples of economists with divergent views fails to convey to students their responsibility as economic citizens to weigh various experts’ knowledge in order to make informed decisions about economic outcomes. This perspective surfaced in students’ interviews as they acknowledged little to no citizenry role in economics.

Ms. Morgan applied an orthodox lens in declaring the inevitability of economic crises, such as the 2008 housing bubble. These quotes are additional examples of her competing ideas regarding what constitutes economic reality, (e.g., certain vs. uncertain?) what constitutes economic knowledge, and what students should be taught. Her lament that maybe she should be more of an activist fails to recognize the link between activism and creating opportunities for values-based discussions in the EPF classroom, a role she certainly adopts from time to time, such as her use of the Frontline documentary and the accompanying worksheet Frontline: Inside the Meltdown” (Appendix K), referenced above and in student responses below. Her activism at that level is not to be downplayed, particularly in an environment so heavily tied to the prescribed W!SE curriculum.
**TS:** What do you believe is the role of economic decision-making in a democracy?

**HM:** “I guess it comes down to what you think the role of government is in the economy... some people have the position that economic decision-making of the individual is paramount, completely free market capitalism where people that get left behind, get left behind and people that don’t, don’t. And whatever happens in the middle, maybe your church will step up with a meal or somebody will put up a tent city or whatever it is. The other extreme is when you move into different types of economic systems that we don’t have or have never had in America. Economic decision-making has to be part of all the decisions that are made to a certain extent, because everything cost money to implement....Look at the repeal and replace drama right now [over the Affordable Care Act] where people might be opposed to the law but they have no idea of the trickle down economic impact of the repeal which sometimes nobody can predict....It’s an unknown and it’s probably going to remain an unknown. What happens when you manipulate those variables? I don't think we know. I feel that way about a lot of things with government in terms of spending money on X does not always get you to Y, the road is very winding. So, the role of economic decision-making...people making bad decisions or good decisions is part of it, but it’s not all of it. You can have a person that has followed the rules and they've put away this percentage of money for their retirement and they've done all these things and then they could still end up in a bad situation that’s outside their control” (8:30, 8:31).

In contrast to the previous paragraph where Ms. Morgan espoused orthodox views, her reflections on the unpredictability of the impact of a repeal of the Affordable Care Act signaled a distrust in the scientific model; that economics may not be a predictable science. The line of
reasoning she applied to government “spending money on X does not always get you to Y” is inconsistent with the logic she applies when teaching personal finance. Her final comment regarding a person that plays by all the rules but still ends up in a bad situation, suggested the complicated reality that teachers face in teaching students how to play the game, despite believing the game is rigged.

**TS:** What role do you believe values discussions, such as ‘whether the economy is working, who it is working for, who it’s not working for,’ should play in an economics and personal finance course?

**HM:** “That’s my favorite part because I like the sociological and political aspect of it. But that’s not the class that we’re teaching. Although in my class I always do a minimum wage debate. I always show them a documentary called ‘Waging a Living’ which follows four people living on minimum wage and the struggles that they go through. The video brings in public assistance. So we talk about values and I explain that I’m never going to judge their personal values and some people feel this way about government programs, aid, welfare, and other people feel another way. Either way is fine as long as you’re coming at it from a position of facts not feelings or opinions. Teachers should not impose their values on kids....But it’s hard to separate it without having some sort of

---

12 *Waging a Living* is a production of Public Policy Productions in association with Thirteen/WNET New York, with funding provided by the Annie E. Casey Foundation, Ford Foundation, David and Lucile Packard Foundation, and the Corporation for Public Broadcasting (CPB). The film’s official website provides this description: If you work hard, you get ahead. That’s the American Dream in a nutshell — no matter what your race, color, creed or economic starting point, hard work will improve your life and increase your children’s opportunities. Yet, this widely held dream is out of reach for an increasing number of working Americans. Roger Weisberg’s alarming and heart-wrenching new documentary, *Waging a Living*, puts a human face on the growing economic squeeze that is forcing millions of workers into the ranks of the poor. The film profiles four very different Americans who work full-time but still can’t make ends meet. Despite their hard work and determination, these four find themselves, as one of them observes, “hustling backwards.” Retrieved from [http://www.pbs.org/pov/wagingaliving/film-description/](http://www.pbs.org/pov/wagingaliving/film-description/) on April 30, 2017.
values added to the discussion at certain points of the curriculum. When we’re talking about some things like insurance that are not necessarily a values-heavy topic or saving money or what kind of bank to choose, values aren’t necessary. We get a little more to the values when we get to the economic side and we start talking about how the government runs the economy. We get into it a little bit about tax incentives and disincentives” (8:46). “Another time I bring in values is when we study Enron. We look at that as a key study of how the employees that had taken stock options for years felt their retirement was set and it went away….One of the questions I pose to the students is ‘what is the impact when a company misrepresents its assets and what do you think should happen?’ Sometimes the kids want to throw the hammer, and other times they say ‘well, those people should have known better, and if the company can get away with it, it’s capitalism.’ I ask them this same question about student loans and the Affordable Care Act, ‘what do you think should happen?’ I don't know if that is adding to their economic way of thinking or just stirring the pot….And I don't know if you get that if a Math teacher teaches the course” (8:47, 8:49).

The introduction to this section of my findings opened with the acknowledgment that people’s life stories create inconsistencies in how they view the world, how they approach knowledge and what they value. The above quote is an exemplar of that acknowledgement with several noteworthy points. Ms. Morgan pointed out the social and political aspects of the EPF content, insight into her epistemological assumptions about economics. She followed up with the disclaimer, “that’s not the class that we are teaching” clarifying that the sociological and political aspects are not included in the knowledge that is being taught or assessed in the EPF course. She then proceeded to describe some of the ways she introduces content that she values,
that directly challenges the core tenets of the EPF curriculum. This challenge is captured by the remarks of the producer/director of the documentary Ms. Morgan chooses to use. The director states that his purpose of creating the film was for “viewers to understand what it’s like to work hard, play by the rules and still not be able to support a family” (Waging a Living, 2017). This curricular choice reflected her belief that the current economic system isn’t working for everyone, a belief that also surfaced in her response to a question about the factors that affect income, when she discussed structural inequities,

*HM: “For the average person, it’s going to be a combination of how you were raised, in terms of what you see around you, did you see people going to college, did you see people that were employed all the time, did you have huge obstacles to overcome before you could even get to that level of high school graduation, or anything beyond high school. Then not only how far you’ve gone in school, but what you study, and also where you live….Some of it is not within your control”* (8:63, 8:33, 8:34).

Her recognition that there are economic and social phenomena outside our control contradicts the EPF materials used in the course (as pointed out in Classroom Vignettes 1 and 2 above) as well as the EPF curriculum’s underlying value that people’s lot in life is attributed to their wise or unwise personal choices.

Ms. Morgan’s noted opposition to teachers’ imposition of their values on students, combined with her perspective that values are less relevant to the personal finance content, provides context for the contradictions she brings to the economic discourse. Although she points to the difficulty in separating economic values from the personal finance portion of the curriculum, her comments, the materials used in class, my classroom observations, and students’ reflections suggest she divides the economics and personal finance content into two distinct
camps, making room for economic values when teaching economics at the end of the year. Her remarks and Mr. Walker’s reference to “sneaking” values discussions into the personal finance curriculum paint a picture that both teachers, despite personal reservations, recognize the official charge to teach personal finance from the epistemological standpoint of a scientific truth claim.

In the following quote, Ms. Morgan picks up on her above remarks, elaborating on her apprehensions about discussing structural inequities with students,

*HM:* “*Some of the kids that understand that…maybe it makes them upset, and so, from a teaching perspective, you don’t want to harp on it. And other kids who are fortunate may not have thought of it that way and may not want to accept that as a reason that they have done well or are going to do well….I don’t want to make anybody feel bad. You can’t help it if you were born into a great family where you had all the support and you don’t have to work a job in order to make extra money, so your school work should always be perfect and on time*” (8:63, 8:33, 8:34).

Ms. Morgan’s concern that teaching about the economic realities of our current economy—such as how where you live influences economic and life outcomes—may make some students (both privileged and non-privileged) feel bad, combined with her perspective that some of these conditions are “*not within your control,*” contribute to her curricular decisions to avoid delving into structural inequities while teaching the personal finance content of the EPF course. This choice serves to reinforce the official curriculum’s trajectory towards a personal finance eclipse of economics.

I followed up on Ms. Morgan’s comment about how a math teacher might not incorporate values discussions,
**TS:** Do you believe economics and personal finance should be taught as a science or a social science or both?

**HM:** “Social science. The marketing and math teachers could probably do a great job with it... What we add to it in social studies is the values piece because that’s how we're trained to look at things. I want kids to know that there are two, three, or four sides-- maybe more than that-- to every issue and you don’t have to accept it” (8:56).

**Ms. Morgan’s lesson on how wealth is determined - classroom observation vignette**

3. The PowerPoint slide portrays a magazine cover picture of the rapper known as 50cent with the word BROKE spelled out in money. Early into the school year Ms. Morgan begins her lesson on wealth by explaining that in 2007, 50cent was the second wealthiest rapper in the industry, with an estimated wealth of over $100 million. Then he went bankrupt.

**HM:** “How does that happen?”

**S1:** “He doesn’t know how to spend it.”

**HM:** “Today we are going to talk about how wealth is determined. If we’ve talked about your income and expenses, what would you have to have in order to gain wealth?”

**S2:** “surplus”

**HM:** “Your wealth is not solely dependent on your income. It’s dependent on your income and how much you_____? Fill in the blank for me.”

**S3:** “spend”

**HM:** “Tons of people are broke because they have mismanaged their income.”

Ms. Morgan changes the slide to reveal the following words,

*The formula for net worth is simple: assets-liabilities*
HM: “Assets are what you own minus what debt you have outstanding (liabilities). So, if you earn $400,000 a year but have a $300,000 mortgage, $50,000 in student loan debt and $20,000 in credit cards, you are not really ‘Wealthy’ because what do you have left?

S1: “$30K”

S4: “If you did all that wouldn’t you still be making the same amount each month?”

HM: “Yes, but if you lost your job, could you make it?”

The lesson continued with Ms. Morgan discussing the role debt plays in preventing wealth accumulation and she then presented students with the following list,

What thinking goes into managing your money?

- personal income
- personal debt
- types of expenses fixed, variable, etc.
- stages of your life
- external economic factors (recession, health crises, emergencies)

HM: “Which of these is the hardest for you to control? External factors are the hardest to control.”

She moves to introduce the importance of budgeting for cash flow management.

--------

Contradictory beliefs about wealth accumulation. Ms. Morgan’s understanding of wealth accumulation demonstrates the ability to hold contradictory beliefs without recognizing or without explicitly teaching how they trouble each other. Her lesson on how wealth is determined was a straightforward example of orthodox economics, linking wealth accumulation to wise money management. Although her list included “external economic factors (recession,
in line with some of the beliefs expressed in her interview and ripe for a discussion of the limits of orthodox economics’ scientific truth claims, the topic was not discussed beyond providing students with a formal definition of recession. Approximately two months later Ms. Morgan showed students the Frontline: Inside the Meltdown documentary and included a homework assignment (Appendix K) with questions related to the 2008 Great Recession. These materials are another example of Ms. Morgan’s introduction of a values discussion into the economic discourse, as the final question on the handout asks: “Should there be laws to restrict the value of houses people buy and the amount of leverage used to buy the house? What is the problem with having such laws in a free market?” Student data confirming the space the Frontline lesson opens up for the role of economic values in the economics discourse is included below.

The point here is that Ms. Morgan’s lesson on how wealth is determined made no connections to the broader macroeconomic concepts that shape and constrain personal finance choices as they are addressed in the film. Despite Ms. Morgan’s attempt to expose the economic policy decisions that contributed to the 2008 crisis that were beyond individual financial choices, the EPF curriculum’s premise that people’s lot in life is the sum total of their poor or wise financial decisions would remain unchallenged until 8 months later, at the end of the year during the economics portion of the course when Ms. Morgan taught her lesson on the struggles faced by minimum-wage workers. This data bears out Mr. Walker’s account of the effects of requiring personal finance to be taught prior to economics, leaving students without the necessary context for making these connections. It is also a clear example of the W!SE Test functioning as a mechanism of power impacting both the quality and quantity of instruction focused on personal finance while crowding out the role of economic decision-making in a democracy. If economics
had been taught prior to personal finance, as it had been in previous years, Ms. Morgan may have taught the lesson in a way that provided a greater focus on the underlying macroeconomic decisions behind the 2008 crisis.

Beyond the role played by the official curriculum, Ms. Morgan reiterates her belief in the role individuals’ financial literacy plays in determining their wealth,

*HM*: “Building wealth by and large is due to personal decision making and being very disciplined... put yourself on some sort of savings plan. But in my life I don't imagine that I'll ever be able to build wealth because I have so many bills... maybe I need to put myself on a stricter spending diet. There are instances where it’s easier for somebody to build wealth compared to someone who has student debt or who has been through a divorce, that affects their wealth, but a lot of it has to go back to the personal decision making” (8:36).

During my initial conversation with Ms. Morgan, prior to selecting her for the case study, she expressed concerns about the EPF curriculum’s shifting emphasis towards microeconomics, and she was particularly critical of the role the W!SE Test holds in shaping the curriculum. She professed a desire to teach for change, noting her preference for the lower-leveled EPF courses due to their primary enrollment of lower socioeconomic students. Based on this informal conversation I identified her as ideal for my critical case study, on the premise that if I discovered that there was little room for values discussions in her classroom, it would be less likely they would exist in the classroom of teachers who are less critical or even supportive of the curriculum (Flyvbjerg, 2001; Yin, 2014). Her data reveals what is referenced as the ideological contradictions that occur in the classroom, and as patterns of practice that simultaneously support and constrain the official curriculum (Gee & Green, 1998; Pinar, 1995).
I considered competing explanations for the finding of Ms. Morgan’s competing economic assumptions, such as a fear of reprisal, the perception that challenging the official curriculum would be considered too political, or the time and effort needed to incorporate more values discussions into the curriculum, but the data did not fully bear out any of those explanations. The story told by Ms. Morgan’s data is that despite moments when she challenged the official curriculum, it was her competing economic assumptions combined with the very powerful mechanisms of power that support the orthodox economics of the official curriculum that limited space for the role of economic decision-making and values discussions in the EPF classroom.

**Student Participants**

The data that have been presented thus far from the curriculum and the teacher are part of the production of the economics discourse, while student data will speak to both the production and the consumption of the economics discourse. Although the teacher has the potential for great influence on the economic discourse of the classroom, students enter with their own life stories which may or may not reflect the official curriculum and can influence the economics discourse. Figure 4 on pages 129 and 130, provides an introduction to the six student participants, who bring diverse perspectives to the economics discourse in terms of race, gender, and socioeconomic status, but also in terms of their unique lens on the world. For example, four of the six students held steady, part-time jobs. Initial interviews designed to gain perspective on their economic thinking revealed an awareness of economic and social phenomena, such as the relationship between the economic prosperity of a community and the level of government services devoted to the community,

*Anna: “The economy will affect my community and you'll start seeing it because they'll stop cutting the grass or they won't put up Christmas lights. When the economy of a*
community isn’t doing well, it’ll hit me in ways I can see, like they’ll stop paving the roads, or stop building houses” (3:6).

Several students noted Creighton High’s reputation for being a wealthy school, such as the following comment,

John: “I've heard BMW farm, and a whole lot of different names. And I've witnessed it, like a lot of people are kind of preppy, I guess that’s the best way to put it. But then I go other places, like not even that far from the other side of [the main highway], and it's not dramatically different but you can still see the difference, like there are smaller homes, the schools are less budgeted, things like that” (5:23).

And while students’ socioeconomic status varied, so did their families’ approaches to money matters. For example, Brent’s parents were intentional about providing him a budget and teaching him about spending, saving, and living within a budget, while John has learned to save after witnessing his parents’ financial mistakes. The sections below provide students’ data to reveal what they bring to the economic discourse, what they have consumed, and particularly how they understand the role of economic decision-making in a democracy, the role of values discussions in their EPF course, and their understandings of how wealth is accumulated.

**Money management expectations and a limited view of their role in the economy.**

Students enter the EPF course with money management expectations, and a limited view of their role in the economy. All six students entered the course with the idea that they were going to learn money management skills. The two quotes below are typical of what each student offered in response to a question about their expectations, during their first interview conducted a few days into the EPF course.
Kathy – Works 10 hours a week at a pizza take-out restaurant.

Kathy is a junior at Creighton High. The first student to sign up for the study, she offers the following explanation for volunteering, “when someone needs something, I like to help...just one less person you had to find” (1:1). She loves her job and she uses her money to pay for her participation in the school’s show choir and to buy extras, such as clothes she wants. She teaches Sunday School at her church and wants to teach elementary school after college. When asked about influences on her thinking she responds: “I think it’s mostly my upbringing, my parents teaching me what’s right and talking to me about things...I see good things about people and I’m like, oh, I wish I was like that, so I kind of like to work on myself and improve” (1:2). In terms of learning about economics and personal finance at home she relays: “My dad budgets...makes sure he gets all the receipts and puts them in his little checkbook” (1:4). When asked to describe the economics of the Creighton High School community she shares: “A lot of people think we’re very wealthy but I feel like a lot of us aren’t...that’s the stereotype. There are some that are really rich...but a lot of us aren’t, because I’m not rich” (1:5).

Brent

Brent is goal-oriented and is working to make his goals a reality. He offers that he likes to plan ahead and that he has a clear life path. As a self-described military enthusiast, he plans to follow in his father’s footsteps and pursue a military career. In furtherance of his plan Brent volunteers weekly with the Civil Air Patrol, United States Air-Force Auxiliary. He runs both track and cross-country and spends his free time on woodworking and electrical projects housed in his garage. Although Brent is a focused young man he describes himself as laid back, confirmed during my two interviews where I found him to be easy going and particularly humble. Brent’s parents have made a concerted effort to teach him about spending, saving and living within a budget, and they model that behavior: “My Dad has a really strict budget. He has taught me that having a budget and a fixed plan for the future is definitely a good thing. When we go out to restaurants or stores, we make sure to stay in our fixed spending limit so we don’t go over” (2:6). For three-plus years Brent’s allowance has been based on his grades: “I get five dollars for an A on a test, so I have a fluctuating income, kind of a spending limit and a small budget going on” (2:3). His family just relocated after living in the heart of New York City and when describing the economics of the Creighton High School community he comments that the suburbs where he now resides are very different from the “super fancy homes” of his former community (2:19).

Anna – Works 30 to 35 hours a week at a large, chain restaurant.

Upon meeting Anna she immediately emits a ‘full of life’ message. Her bubbly personality is infectious. She describes herself as “a very active person, into everything” offering that she has always attained the goals she sets for herself. She waits tables after school and on the weekends, and explains that she has a job because she likes to “spend and go shopping, so it was like I need money, and I need to start saving for college” (3:1). She plays softball and has managed the high school basketball team for the past four years. Anna wants to be a dentist and is enrolled in the dental applications program of the school division’s Technical Center, which provides her the opportunity to spend half her school day interning with a local orthodontist. Talking about her career choice she relays: “I love orthodontics. I like how a wire and a bracket can change your teeth; how the teeth come in is really cool” (3:18). She’ll begin her path to dentistry in a community college pre-dental hygiene program. When we spoke she was preparing for a winter-break, medical team mission trip to Honduras. As I inquired about significant influences on her thinking she shared: “My Dad taught me to keep my head up at all times, never look back at anything I mess up on...always learn from it. He played baseball, so he was kind of my softball buddy...from softball it was to never look back on the wrong play that you made, always correct it and do the best next time....My Dad died my freshman year, and I was a daddy’s girl so he’s my motivation to do better, get good grades, be successful, help my Mom and brother out. I set my goals to make him happy even though he’s not here” (3:19, 3:20). Discussing the economics of her community she says she is blessed to attend Creighton High and get such a good education, adding that she lives in a wealthy neighborhood and believes “most people would not expect a black girl to attend a predominantly white school...They expect me to be in the city somewhere” (3:7).
Cara – Works 10 hours a week at a chain retail store.

Cara is a tall, soft spoken young woman whose face seems permanently poised to smile at any given moment. She describes herself as “very religious and so I like to put God in every aspect of my life” (4:19). Spending time with family and friends is very important to her; she says friends will tell you that she is very honest. Cara is interested in becoming a veterinarian, offers that she likes art, that she’s very opinionated, and that she’s inspired by pop culture actresses who speak out for feminists and black rights. At her mother’s request, she started her first job last summer at a retail chain, a job she still holds, “because that’s my income and how I pay for things. I pay for everything for school, like my class ring and fees, so without my job I wouldn’t be able to do that” (4:3). When I inquire how economics and personal finance affects her family she responds: “Oh we like to set budgets for new goals ever year. We want to go to Disney World, so we have this little jar in the kitchen and when we find lost change we put it in the jar” (4:4). When she describes the economics of her community she uses the word “privileged” and explains that not all communities are able to have what they have in the Creighton High community (4:7).

John – Works 25 hours per week at a fast-food, chain restaurant.

John describes himself as “a caring person... very dedicated when it comes to the stuff I like” (5:20). He plans to pursue a career as an architect and says he likes engineering and anything that has to deal with structure or technology. In between work, school, and church activities, John takes every chance he can to socialize with friends. When asked about major influences on his thinking he shares the objective approach he takes prior to forming opinions, that he’s learned from watching his Dad “weigh out all his options... he’ll gather information from one source and then from another source that will counteract it, and then see what’s the best part in between it” (5:22). John has learned to budget on his own, “My parents never really showed me how to do money. They are the kind of parents that are like, ‘you figure out what’s best for you’....probably in part because they don’t exactly know how to do money sometimes....The paycheck that is closest to the beginning of the month, my mom will always say we can’t get all the expensive stuff because that paycheck goes to the rent... so rent takes out a big chunk of their money. The check that’s in the middle of the month we can get all the stuff we want....Shouldn’t you just spread it out, save the money from the middle check? But I’d rather not get into that with my parents because I’ve done it before and they haven’t applied that or I don’t know if they have a problem with applying it...I've learned over time if you have a bill, learn how to pay it over time....With insurance, every paycheck I split the total bill and pay half so I don’t have to pay it all at once. I've learned that works out the best so I get it paid on time, every time. Then sometimes I'll get paid on a Friday and all the extra money I'll blow it that weekend and for the next week I can’t do anything or I have to ask for money, and I don't feel comfortable doing that, because I know how hard it is to make it sometimes, so I'm still working out the kinks on budgeting” (5:4, 5:7).

Skylar – Works sometimes at one of her Dad’s restaurants.

Skylar is reserved and confident. When asked about her interests and how she spends her free time she responds: “I like hanging out with friends outside of school, I enjoy sleeping, I like going to school, I like learning because I want to be very successful when I grow up” (6:18). Following up on how she defines success: “To be able to provide for myself and also others, and enjoy what I’m doing while making a good income” (6:19). Her goal is to become a sports medicine physician and she plans to major in biochemistry. She offers that she comes from a very successful family, with siblings who graduated from Creighton and received college scholarships, “my surroundings make me want to be a better person especially when it comes to school, be better and challenge myself” (6:20). She volunteers with the Key Club as a high school helper at a local elementary school and shares: “I work with my Dad sometimes at one of his restaurants, so I guess you could call it a part-time job” (6:21). When asked about influences on her economic thinking, “I know about income and how it works and I also know about balancing a checkbook because my Mom taught me....My Dad, he’s an entrepreneur, so is my mother, so they kind of tell me about it and I experience it and see it” (6:2, 6:3). She describes the economics of the Creighton High community as a nice area, with good academics, “because I’ve seen other sides of the county and some of them, you can tell they’re low income and it’s just a big difference to me” (6:7).
Brent: “I thought I was going to learn how to do budgeting and learn how to manage money better and possibly get into stocks and credit card stuff, and that’s actually what is going on in the class, so I guess I was right” (2:2).

John: “How to manage my money better…A lot of stuff they teach I already kind of know from experience, but a lot of stuff I will have questions about further on in life so it will help me answer them now.” (5:1).

Students enter the course with ideas about the role they play in the economy that mirror Ms. Morgan’s perspective and the EPF curriculum’s epistemological assumption that economic decisions call for technical expertise, best executed by technical experts. They view their role as limited to their human capital contributions and they make no mention of the citizen’s role of economic decision-making in a democracy,

**TS: What role do you believe you play in the economy?**

Kathy: “When I'm older, like if I become a business owner or something like that… I might have stocks” (1:20).

Brent: “Nothing much. I don’t plan to be an economist one day. I don't think I'll have any big role any time soon, but if I get a job, maybe it could happen....Adults buy and sell things so if they have something of high value, that can boost the economy or it can hurt or help inflation” (2:7).

John: “I don’t see myself getting a job in the economy...like running it... I don't see myself doing that, but more of an average person like paying taxes, buying food, getting a paycheck, like money circulation through a regular person, more in a role like that when I grow older” (5:8).
Misunderstandings of who controls the economy persisted. Mid-way through the year students’ misunderstandings of who controls the economy persisted. The second interviews were designed to gather the meaning students were making of the EPF course content. The questions probed students’ understanding of the role of economic decision-making in a democracy.

**TS: What do you believe is the role of economic decision-making in a democracy?**

*Brent: “We’re quite a bit in debt, and so economic decisions will help us get out of debt a little faster or in any way that they see fit is better for us…”*

**TS: Who are ‘they’?**

*Brent: “I forgot their name…Federal Reserve, I think, they control the money supply so I mean, they do make choices about things, like they control inflation to an extent, so they can kind of control how the economy runs in some cases” (2:12).*

Brent’s response changed from the beginning of the year when he suggested he was not going to be an economist and therefore he had no role other than earning an income or buying and selling. However, he is now able to name the technical experts with whom he believes have the responsibility for making economic decisions on his behalf, echoing a perspective espoused by Ms. Morgan. I followed up with additional questions in attempt to understand if he believed he personally has any say in shaping the economy,

**TS: Do you, yourself, have a role in shaping the economy, or is the economy something that you respond to?**

*Brent: “As of right now, I have no say in the economy whatsoever” (2:12).*

**TS: Once you become an adult, how about then?**

*Brent: “Yeah, like once I have a very good job, then maybe I will have some say in the economy, but what was your second question” (2:12)?
TS: Do you have a role in determining what kind of economy we have, or do you believe your role is to function within the economy and learn how to navigate it?

Brent: “Well, I think choice two is probably the one I'm more likely in now and most people too, because we don’t have any say in anything, and most people don’t have a say in the economy unless you are a CEO of a business or someone on the Federal Reserve, most of us kind of go with the flow. Nothing really changes. If something really changes, we kind of have to cope with it” (2:13).

--------

TS: Do you think that you have a role as a citizen in shaping the economy?

Skylar: “I think everybody has a chance to make the economy a better place....like the unemployment rate, it’s high and so if people attend school all 12 years or go to college, or do some type of technical school or something to get a degree, that means the employment rates will be higher and there will not be as many people unemployed, which means our economy is better because when people are not employed, if it gets to a really bad point, they have to live off of food stamps which the government has to pay for project housing and pay for all their food and everything they have, so that might lower our economy” (6:13).

While some of the students’ comments, such as Brent’s “nothing ever changes” demonstrate issues of historical consciousness (Seixas, 2004) or a lack of economic history, others, such as Skylar’s above remarks, reflect the EPF curriculum’s underlying value that the economy is the sum total of individual decisions and therefore people who have made bad choices end up unemployed, ultimately a detriment to the common good.

--------
**TS:** Do you believe that you yourself have a role in shaping the economy?

*Cara:* “A democracy is basically like the people and the people’s voices being heard. So, I definitely think I have input on how my economy is run and who runs it and things like that” (4:13).

**TS:** Do you talk about that in the course? For example, have you learned about how you could shape the economy if you don’t like the way things are working?

*Cara:* “Ms. Morgan has said that we could send letters out and reach out to certain representatives and things like that but other than that, no” (4:14).

--------

**TS:** Do you believe that you as a citizen, have a role in shaping the economy when you turn 18?

*John:* “As of right now, just having a part-time job, I see myself not shaping it but just more putting into it, I think the shaping part comes in later.”

**TS:** Have you learned any about the shaping of it in the class?

*John:* “We've learned about regulations and like the rules set in place to kind of guide it.”

**TS:** Do you remember anything about those lessons, what stands out about the regulations piece or any of that?

*John:* “The one thing that has always stuck with me is like the prevention of monopolies. Like one company can't drive up the price so no one can afford to pay for it, which shapes the economy to a point where there's always competition. So, it tries to lower the price of things so the economy can keep moving and so there's always money in
circulation instead of the rich getting richer and the poor getting poorer. We're talking about monopolies now because we are learning about stocks” (5:16).

TS: When you talked about the 2008 financial crisis, was there any discussions that led you to understand anything about what might have contributed to that?

John: “What I took from it, is that a lot of it was greed. They were betting on things that weren’t certain, and when you bet too much, everything comes crumbling down at some point. It was a bunch of people trying to get as much money as they could at one time and it all came crashing down on them” (5:26).

The four quotes above demonstrate how students’ understandings differ regarding their role in shaping the economy. These four quotes fall on the epistemological continuum depicted in Figure 5.

<table>
<thead>
<tr>
<th>No role</th>
<th>Limited role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brent</td>
<td>Skylar</td>
</tr>
<tr>
<td>No role</td>
<td>Productive employee</td>
</tr>
</tbody>
</table>

Whereas Brent sees no opportunities for individuals to shape the economy, Skylar believes individuals shape the economy through their productive employment. Cara recognizes that in a Democracy people can voice their opinions on the economy to their elected officials. John’s understanding is interesting in that he begins with a response tied to his human capital
contribution, then he recalls a lesson on regulations and rules that guide the economy. However, instead of making a connection between the human influence responsible for those rules and regulations, John expresses a positive epistemological understanding of an economy that self-regulates for the purpose of creating competition and preventing “the rich [from] getting richer and the poor [from] getting poorer.” In contrast, he then applies a normative epistemological lens to explain the real-world situation of the 2008 financial crisis, offering greed as a factor contributing to the crisis rather than a regulatory structure that enabled and rewarded greed and risky lending. Although all six students viewed the Frontline video, John was the only one to mention greed. Based on some of his comments about volunteer work through his church to help the homeless population, the idea that greed played a role in the 2008 crisis may have been more aligned with his belief system, making him more receptive to that perspective. This space that opened up for John to recognize the role that human greed played in the Great Recession seems to have occurred when curriculum aligned with his life experience converged with Ms. Morgan’s choice to use content that introduced values into the economic discourse, challenging the official curriculum’s economics as science stance. Regardless, John still holds competing models of how the economy functions and how it actually functioned in a specific situation. One model is based on the assumption that the economy takes care of itself and human intervention is unnecessary. The other model assumes, for better or worse, that people have a role in shaping economic outcomes. This is a specific example of where the economic discourse fails to clearly make visible the human, political choices underlying the 2008 crisis (Stiglitz, 2010), and therefore it leaves John without the ability to examine how neoclassical economic theories are insufficient for explaining all economic outcomes. Additional student data regarding economic
values suggested students were not provided with the knowledge and skills to reconcile similar competing understandings and explanations.

TS: Do you recall any time in class where you discussed values, such as how the economy should work?
Kathy: “I think we do but, in a sense, I think that we don’t…I think that she shuts it down because a lot of people in my class are kind of fiery about different stuff and it will get out of hand so she has to focus us. I feel like we would if my classmates were more mature or if we had the time…we do on a level, but we don’t get really deep in it, like ‘this whole class period we’re going to talk about what the government should be doing’” (1:11).

TS: In this class you could learn how to respond to the economy, how to be a good consumer, investor, saver, you could also learn how to shape the economy, to consider what kind of economy we should have, who it should work for, who it is working for?
Kathy: “It should definitely be working for the people that need help, like my grandfather…and for people that need it, like I don’t have a house now, I need some help with that. It should be definitely making decisions to get people where they should be, not just for the rich Americans” (1:12).

TS: And my question is whether you learn about that. If you learn that you have the power as a citizen in a democracy to shape the economy or is the economy something that you have to learn to navigate?
Kathy: “It’s probably that we learn we have to navigate it. I don't think we’ve really gotten into the other. I think we go into like the ‘we have to get this done,’ the W!SE test and all that” (1:14).
TS: Have you discussed how the economy could or should work?

Brent: “Not necessarily how it should work, maybe that’s later on in the year but like the basics we learned are how it is actually working right now” (2:11).

TS: I’m trying to learn more about the values discussions in the EPF class and whether there are values discussions that you can recall?

John: “Not really per se, there’s been talk about the trickle-down system where if you help someone above, that will help people below you. I don’t really see how it would work because of just human nature.”

TS: Was there a discussion in class where people began to form opinions about trickle-down economics?

John: “No, she more or less skimmed over what it means and how it’s supposed to work...She’s never gone into detail, we never had a debate about it” (5:15).

To situate the economics values question in the context of a specific lesson, I presented students with samples of their work and posed questions about their written responses. The following two quotes reference “Frontline: Inside the Meltdown” (Appendix K), Ms. Morgan’s homework assignment following students’ viewing of a documentary by the same name.

Question number nine on the document reads: “Should there be laws to restrict the value of houses people buy and the amount of leverage used to buy the house? What is the problem with having such laws in a free market?” The two quotes below provide contrasting viewpoints on the same question.
TS: Let’s examine one of your homework assignments…Your written response to question number nine reads, “There should be laws so people can’t spend an amount on a home just for it to go downhill and depend on the government to fix it. The government needs to restore financial confidence or many people will continue to put down how much they want on a home.” When you learned about this, where was the role of values in that particular lesson?

Cara: “When I wrote that, it was mainly because a lot of people put money down on houses and then certain situations happen and they can’t always come up with the money to pay it. There could be payment plans to help them stay on track, because my family went through a lot during that crisis and we lost our house that we just built three years prior. We had put a lot of money down on the house and then over time we were just not able to keep paying for it” (4:15).

TS: In the course did you learn about the laws that were in place prior to the recession that were removed to make it easier to finance homes?

Cara: Yes.

TS: Did you know about those laws before you took this class?

Cara: No.

TS: If you had to put those laws back in place, would you?

Cara: “I think laws should be in place, because it causes fewer problems” (4:18).

---

TS: Examining your homework assignment “Frontline: Inside the Meltdown” (Appendix K), your written response to question number nine reads, “No, because not
everyone agrees on the worth of a house.” Do you have any thoughts on that assignment or topic?

Skylar: “I don’t think the government should step in. Whatever someone wants to do with their money, that’s their decision. I don’t think the government should tell someone they can’t buy something even if they believe that they won’t be able to afford it in the long run. It’s a good thing that people want to look out for others, but it’s their money, they made it and earned it, so I think everybody should have a right to decide whichever house they want” (6:15).

Ms. Morgan’s use of the Frontline documentary and homework assignment created space for students to form opinions about laws that restrict economic behavior. The examples above reveal how students used that space to form two different perspectives, shaped by their different experiences. Cara shares her first-hand experience of losing her home. Skylar’s opinions may reflect her experience as the daughter of small business owners. Both perspectives demonstrate students’ grasp of the concept that economic policies are shaped by human-made decisions, an indication of how a singular curricular choice with the smallest challenge to the official curriculum provides space for students to see beyond the truth claims of economics as scientific law.

A second document I presented to students for their reflection, sparked no values discussions by any of the students and the quotes below are representative of their responses,

TS: This is an assignment that you completed in class, titled ‘Financial Literacy in America: Individual Choices, National Consequences’ (Appendix M). The document explains that there has been a three-legged stool for retirement: Social Security, pensions, and personal savings, and that over the years two of those legs have grown
unsteady, prompting the need to focus on savings. What is your understanding of why
the two legs of the retirement have become unsteady?

Anna: “Is it because the economy was going down, like during the recession, like the
government just fell at one point and everything started to fall apart” (3:16).

TS: Can you recall any discussion about why two of the legs have grown unsteady?

Anna: “I would have to go back and look at that assignment again. I can’t remember off
the top of my head” (3:16).

None of the students had any recollection of a discussion about why two of the three legs of the
retirement stool have grown unsteady. In contrast to the values question in the Frontline
(Appendix K) assignment, question number eight in the Financial Literacy (Appendix M)
document, asked students to name the three “legs” of the traditional “stool” for retirement; pure
content recall from a paragraph in the document. What is missing in the Financial Literacy
document is a question about why two of the legs have become unsteady. Without asking this
question students were not prompted to consider the human decisions that have contributed to the
growing unsteadiness of two of the three traditional legs of retirement, leaving them without any
understanding of their role in preventing further erosion of traditional retirement supports.
Without asking this question it appeared that the weakening of two of these legs was an
economic phenomenon beyond citizens’ control or influence, ignoring the human choices that
were made, for example, to shift public pension plans to defined contribution plans, or to restrict
and reduce collective bargaining rights that traditionally protected retirement plans. Simply
stating that three legs used to exist and two have now become unsteady sent the message that
economies change in value-free ways, concealing the fact that politicians applied neoclassical
economics to erode the strength of unions, public and private pensions and social security, in
order to free the market for maximum exchange and consumption (Holzmann & Stiglitz, 2001). Finally, it suggested to students that the only recourse is to adapt to this changing context by focusing on their personal financial literacy in order to learn how to save more money, further distancing them from the agency of economic decision-making in a democracy.

The marginalization of economic values. An example of how the EPF marginalizes economic values is by attributing wealth accumulation solely to wise money management and ignoring the role structural inequalities play in wealth accumulation. To gain a deeper understanding of how specific content suited for a values-discussion was addressed, I observed the teaching of Standard EPF.8 d: “The student will demonstrate knowledge of the role of government in a market economy by explaining that governments redistribute wealth.” I broached this topic by asking students why there are rich and poor people in the U.S. The following quotes reveal students’ grasp of the influence structural factors—such as zip code or the unemployment rate—have on wealth accumulation. However, they attributed these insights to prior knowledge rather than to the EPF Course. None of the data suggested that students’ perspectives were explored, built on, or addressed in the EPF course. Students consistently reported an explanation of wealth accumulation in the EPF course built on wise money management.

TS: Why are there rich and poor people in the U.S.?

Anna: “If you grow up on the rich side of the family, you're always going to be on the rich side of the family. If you grow up poor, you're always going to be poor” (3:8).

-----

TS: Why are there rich people and poor people in the U.S.?
Cara: “I wouldn't say because people work harder because you could be poor and have as much ambition as anybody else. I think it also depends on what education you get because some people get better education than others so that impacts where you are going to end up in life” (4:8).

**TS:** I have heard people say that the rich are getting richer and the poor are getting poorer. Do you think that’s happening now? Why or why not?

Cara: “I don't think so because there's been a lot more opportunities for the poor now, like there's better Medicare and there's better housing systems, so I think it’s better now than what it used to be. I think people are starting to care more now and there are more organizations to help people” (4:9).

**TS:** Have you ever had a discussion about a topic like this in your EPF class about why people are rich and why people are poor? Is that content that has ever come up?

Cara: “I don’t think it has. We've just been going over insurance plans and things like that. Right now we're doing taxes so we haven’t really talked about the rich and poor” (4:10).

Cara makes a historically inaccurate statement that economic inequality is decreasing, in line with the historical narrative of American progress (VanSledright, 2008), she then references the unit designed to teach how governments redistribute wealth; a unit ideally suited to address this historical inaccuracy. Her response indicates an economic discourse that remained silent on the direction of economic disparity, the role taxes are designed to play in the redistribution of wealth to address economic disparity, and on whether or not the current tax structure serves to further or impede that goal. Additional student comments about the tax unit are included below, where students report learning how to pay taxes and how taxes significantly reduce their net income.
**TS:** Why are there rich people and poor people in the U.S.?

John: “I’ve done homeless work, and some of the people have disabilities that employers probably wouldn’t want to use as a representation for their work. I think that’s part of it. And then probably another part is that there’s not enough good paying jobs and somebody has to work at Walmart and the restaurant jobs...Not everybody can be at the top, not everybody can be at the bottom” (5:9).

**TS:** Did the EPF course influence the answer you just gave or did you already think this way prior to taking the class?

John: “I knew it going into the class” (5:25).

**TS:** I have heard people say that the rich are getting richer and the poor are getting poorer. Do you think that’s happening now? Why or why not?

John: “I definitely think that way.... I feel like America’s economy is kind of like grab, grab, grab and although a lot of people give to charity they want to make sure that they’re secure first instead of helping someone else so they want as much as they can get and that takes away from other people getting what they need” (5:10).

**TS:** Have you talked about how wealth is built?

John: “Like investments?”

**TS:** I’m asking if you if you have discussed how people build wealth, get rich.

John: “Ms. Morgan has gone over different types of investments and what the best options are for investments. But other than that, and budgeting, not really” (5:12).

**TS:** Why are there rich people and poor people in the U.S.?
Skylar: “For some people, it all depends on their backgrounds and upbringing and some people might not have had the chance to get a good education for what they want to do, and that’s why some of them are less fortunate because they didn't have all the resources in order to become successful, so I think that’s why some people are poor. And I think others are rich because some of them inherit wealth...so they're born into it. And then other people just work hard and determine that they want to make it in life and be successful” (6:9).

**TS:** When you think back to the economics and personal finance class, did it influence the answer you just gave, or did you already have that perspective?

Skylar: “I already had that perspective before” (6:23).

**TS:** I have heard people say that the rich are getting richer and the poor are getting poorer. Do you think that’s happening now or do you have an opinion about that?

Skylar: “I don’t necessarily think that’s true because everybody can change and the people who are poor, they can get work if they don’t already have it, or there are resources in order for them to become successful and make more money” (6:10).

**TS:** Do you recall having discussions in your EPF class about this, like why some people are rich, why some people are poor, why things are the way they are?

Skylar: “I don't think we got into detail about that, but I think some of what we talk about has to do with people being rich and people being poor and the reasons why they are.”

**TS:** If you recall some of those reasons, what do you recall learning?

Skylar: “It was basically just saying that if you don’t manage your money correctly and you don’t save a lot, it’s not going to benefit you in the future” (6:11).

--------
TS: Our conversation about the economics of this community and your explanation of how it is perceived as a wealthy community—yet in your opinion everyone here isn’t wealthy because there are rich, middle class and poor people—does any of that have a place in the EPF class?

Kathy: “I’m not sure. Maybe not. I think it’s more my opinion, like what I’ve gathered from observing my surroundings. Maybe some of the comments Ms. Morgan makes are about that, but not the actual [EPF] content. We go over like math and stuff like how to balance a budget and all that but not like the social terms of it, like the wealthy and all that” (1:6).

TS: So why do you believe there are there rich and poor people in the U.S.?

Kathy: “I think it’s about the different situation they’re coming to like whether they have debt or they make financial smart decisions, like invest in the right places because if you work hard enough, I think you can be successful money wise, but if you just spend your money on pointless stuff then it’s not going to be the best in the long run” (1:8).

TS: Thinking about the EPF class, how did it influence the answer you just gave?

Kathy: “Well, definitely like we’re studying budgeting right now... so if you spend all your money, and you keep overspending and then you have to put your bills on a credit card ... it’s not a wise decision, rather than slowing down and trying to figure it out, so you’ll be less financially in debt” (1:18).

TS: I've heard people say that the rich are getting richer and the poor are getting poorer. Do you think that’s happening now? Why or why not?

Kathy: “Yes, in some sense, because a lot of times the poor are older people that can be taken advantage of...There’s someone calling and telling my grandparents ‘you need to
pay this credit card bill’ and she’s like ‘I don’t have a credit card.’ I feel like it is a lot about fight for self, like survival of the fittest, so the people that know how to get rich like Trump, then they’ll be getting richer; they know how to invest” (1:9).

--------

TS: Why are there rich people and poor people in the U.S.?

Brent: “People sometimes inherit money and that makes them rich. I think the majority of rich people are people who work hard and pursue something they are interested in and that helps them get a nice job and lots of money. And poor people--like where I’m from in New York there were a lot of poor people--their parents kind of slacked off, did the 9 to 5 jobs at McDonalds or whatever, and so they didn’t go to college, they kind of go to a community college for a year or something like that so they weren’t necessarily pursuing higher education to get a high job” (2:8).

TS: Has anything like how wealth is accumulated ever been discussed in your class?

Brent: “Not people getting richer and the poor getting poorer, but definitely how people get rich in the first place” (2:10).

Students provided nuanced explanations for why some people are rich, why some are poor, and how people move in and out of poverty based on whether the official curriculum has reinforced or challenged their life experiences. For example, Skylar offers unequal education as a contributor to the wealth divide, combined with her meritocratic narrative of how people can change their economic circumstances. When zeroing in on how the EPF course addressed the topic, she summed it up as money management, and therefore one part of Skylar’s understanding was reinforced while another part was ignored, sending her the silent message that it held no value in the real-world of economics.
Kathy’s comment that what she labels “social terms” (such as her observation of poverty amidst her wealthy-labeled community) was not discussed in the course and may not fit, demonstrated how the economic discourse may cause students to question the appropriateness of evaluating economic and social phenomena in the EPF course. Her remarks capture how the normative economic judgments that factor into wealth accumulation (e.g., taxing earned income at a higher rate than income earned from dividends) were so far removed from the EPF course that students began to situate them outside the scope of the course’s focus on the technical application of “math and stuff” they were being taught to improve their financial literacy. Pairing Kathy’s understanding that wise investments lead to wealth accumulation, which she attributed to the EPF course, with her additional reflection “a lot of times the poor are older people that can be taken advantage of” confirmed a reoccurring theme: The EPF course’s failure to provide students with the tools to reconcile, or at a minimum to discuss, contradictions between the EPF content and their life experiences. Furthermore, Kathy adopted an ontology that assumed a fixed economic reality, where selfish individualism is rewarded; a reality she may or may not relish.

These examples reveal the impact of an EPF course that marginalized the role of economic values by focusing on personal financial literacy, ignored structural inequalities, and limited students’ exposure to the normative economic decisions that impact wealth accumulation. This marginalization is another example of how the unequal relations of power were masked in the EPF curriculum. As students adopted the personal financial literacy frame as the term of reference for explaining economic outcomes, it decreased the likelihood they drew on their own life experiences that contradicted the official curriculum to interject economic values discussions into the economics discourse.
Students’ expectations confirmed. A key insight to what happens in the classroom is what students take away from a course. During a second round of individual interviews conducted two-thirds of the way through the school year, I sought to gather students’ perspective on the course. The ideas students brought to the course had been reinforced and their underlying assumptions and misunderstandings were left unchallenged. The EPF course confirmed students’ money management expectations and their limited view of their role in the economy, largely due to the focus on the mastery of personal finance technical skills. Their responses strengthened my claim that the EPF course teaches students that economic circumstances change through individual choices and that economic and social phenomena can be understood and addressed through the application of technical approaches.

TS: Anything else that you would like to add now that you’ve taken this class for approximately five and half months, in terms of how you feel about economics and personal finance.

Cara: “I feel a lot more secure, because I would ask all the time, how do you do insurance, or how would you pay for this? All types of questions about the economy and money and now I know where to go and what the best options are for me when I graduate from high school” (4:16).

-----

TS: What would you say to someone interested in taking this class next year?

Anna: “I would say do it because when you get out of high school, it’s the real world and you’re on your own, no more holding hands with your parents. You definitely need to know about stocks, you need to know about your government and about taxes because I
had to file taxes this year and it’s not making me very happy. Saving money, spending it wisely, bankruptcy... it’s a life lesson and it will help you in the long run” (3:17).

--------

**TS:** What would you say to someone interested in taking this class next year?

Skylar: “I think it’s a good course and everyone needs to take it...everybody should know how to budget and finance for the future, everyone needs it if they don’t want to be in debt. It will help, especially in college...whether they are working or if their parents are giving them money every month or week, they have to learn how to budget” (6:16).

--------

**TS:** After taking the EPF class for about 5 and ½ months, if you had to describe it to someone interested in taking it next year, what would you say?

John: “For someone that doesn't really know much about money and how it can be used or how to get money, I think this is a good class on teaching people who are starting to contribute to the economy....Since I have a job and I've had to learn that stuff I’m skimming through it fairly easy. But we're doing this project where you had to find a job and then take the annual income and Ms. Morgan does all the taxes and I see people get surprised about how much they have left. I know that taxes take a lot but I see people that don't necessarily have jobs get overwhelmed that so much gets taken out at one time and how much they have to live off of... what they thought would be a lot of money isn’t as much as they thought” (5:18).

**TS:** An aha! for students. Are there discussions at that time about what those taxes go to, such as what they pay for?
John: “Yeah, I probably didn't hear most of it because I kind of already know that they go towards roads and funding buildings, schools, maintenance work, and programs like Social Security and the military. Taxes go to everything we use that we almost take for granted” (5:19).

Students entered the EPF course with money management expectations and a limited view of their role in the economy. Their predisposition was that they were in need of knowledge and skills to play the game of real life. Mid-way through the year their expectations were confirmed and even strengthened. They entered inclined to learn the rules of the game and later expressed that they felt equipped for the game. Their comments reflected the pragmatism of the content, its timeliness as they consider post high school-graduation plans, and the influence the content had on their life choices,

Kathy: “I was going to move out and get an apartment while I was in community college, but we were doing a budgeting assignment and it's so expensive to do that. I wouldn't be able to work enough to afford it while in school so I decided I would stay at home, live there and work while I get my four-year degree and get enough money to buy an apartment when I'm a full-on teacher” (1:7).

Students valued their improved personal financial literacy for the purposes of navigating the economy. What was missing from their comments was any expansion of their view of their role in the economy. Students made no mention of how their new skill set could be applied to address economic and social phenomena, and offered no comments reflecting an understanding of the relationship between economics, personal finance and active citizenry.
Conclusion: The Limited Role of Economic Decision-Making and Economic Values

I entered the EPF classroom, conceptual framework in hand, seeking to understand how the role of economic decision-making and economic values would be addressed and what teachers and students understood about how wealth is accumulated. This task seemed so simple and yet it was so complicated, for the reasons detailed in Chapters Two and Three, such as, the complex nature of the classroom, where teachers and students enter with various philosophies, beliefs, ideologies and lived experiences that shape their understandings of the curriculum (Gee & Green, 1998; Pinar, 1995), and my belief that the economic discourse could not be captured in a fixed, agreed upon measure (Merriam, 2002). In addition, although the official curriculum presented a fixed reality based on the scientific models of neoclassical economics, I entered with the perspective that the economy is a social construction (Dow, 2008) and that various economic theories have distinctive ways of explaining the economy, and therefore no single economic model could sufficiently explain all economic outcomes or be used to solve all economic problems (Chang, 2014; Nelson 2011). My initial analysis during the early phases of classroom observation data collection was that I could feel the tension of my research being situated at the intersection of these contexts. As I write this chapter’s conclusion I’m struck by the desire to account for why I found what I found and I remind myself that my discussion Chapter Five holds a place for that task. So, I turn to summarize the story the data tells of limited space in the EPF course for the role of economic decision-making and economic values and a simplistic view of wealth accumulation built on wise money management.

Emphasis on Personal Finance Roles, Whose Values Went Undetected

The EPF SOL curriculum is designed to prepare students to function in the following six roles: “consumers, workers, savers, investors, entrepreneurs, and active citizens” (Virginia
Department of Education, 2009, n.p.). The first five of the six roles lend themselves to content built on personal finance and orthodox economics and the data bore out this connection and emphasis. The sixth role, active citizen, was perceived as residing primarily within the economics portion of the EPF curriculum. Teachers recognized the inherent role of economic decision-making and economic values discussions in the economics portion of the EPF curriculum and provided examples of how they incorporated them into their lessons. Teachers and students failed to recognize the underlying values embedded and transmitted in the personal finance portion of the EPF curriculum, perceiving them as value-neutral.

**Personal Finance Eclipsed Economics**

Numerous factors contributed to the eclipse of economics by personal finance. More than double the time was spent teaching personal finance, with seven months dedicated to personal finance and two and a half months to economics. High stakes were attached to students’ proficiency and teachers’ pass rates on the end of course W!SE Financial Literacy Certification Test. Against EPF teachers’ recommendations, the school district flipped their pacing guide and required Personal Finance be taught prior to economics. The data demonstrated the barriers this change presented in students’ lack of context for applying macroeconomic thinking or using a normative approach to understand economic and social phenomena. Without the background of a macroeconomics lens, introducing normative discussions to the personal finance curriculum (e.g., why people are rich or poor) was perceived as a political or ideological challenge to the official curriculum’s explanation of wealth accumulation built on wise money management, or outside the scope of the content. Finally, teachers who valued the dual purpose of an equally balanced economics and personal finance curriculum complied with and unconsciously assisted in the shift towards a personal finance-focused curriculum. Ms.
Morgan’s lessons overwhelmingly stemmed from an epistemology of economics as science, where economic and social phenomena were taught to be understood through the application of a scientific and technical approach.

**Teacher’s Curricular Choices Reinforced Orthodox Economics**

Ms. Morgan’s life experiences, beliefs and concerns influenced her curricular choices that reinforced orthodox economics. Ms. Morgan’s belief that the road to economic success—or even economic stability—is rough, in particular for students from lower socioeconomic families, influenced her teaching. She was motivated by her desire to prepare students for financial decisions for which she felt personally unprepared. Ms. Morgan’s beliefs tended towards alignment with the official curriculum. Although the data reveals inconsistencies, such as her recognition of the role external and structural factors play in the accumulation of wealth, her belief that economic outcomes are ultimately the result of individual choices dominated her contribution to the economic discourse. Her lessons primarily communicated the message that an individual’s role in the economy is to function as a consumer, worker, saver, investor, or entrepreneur. She conveyed to students her belief that the capacity to influence and shape economic outcomes sits outside the average citizen’s control and therefore the economic citizenry role is best exercised by communicating with elected officials about the economic decisions that are made by their technically expert appointees. Two of Ms. Morgan’s concerns inadvertently contributed to her reinforcement of an orthodox economics epistemology. Ms. Morgan subscribes to the principle that a teacher’s voice should remain neutral and she was concerned with imposing her values on students, a factor which moved her closer to the personal finance curriculum due to her perception of that content as value-free. Finally, Ms. Morgan’s empathy with, and sympathy for, her students manifested in a concern that delving too deep into
the role structural inequalities play in economic outcomes could make students uncomfortable. She therefore minimized the time and depth she spent on content of that nature.

**Students Positioned to Adopt Tenets of Orthodox Economics**

Students entered the course with a desire to learn the rules of the personal finance game. At the beginning of the year they consistently expressed their expectation to learn money management and budgeting skills. The curriculum and the EPF Course aligned with much (yet not all) of their thinking as they revealed no indication of receiving any external (implicit or explicit) messages that EPF would encompass content on the role of economic citizen. As juniors and seniors, they engaged with the EPF discourse at a critical juncture in their lives as they prepared for high school graduation, the brink of financial independence for many students. Their desire to gather as many tools as possible to prepare them for financial success was matched perfectly with a curriculum promising to deliver that end upon their allegiance to its tenets: consume wisely, work hard, save, invest often and wisely, produce much, and trust the *neoclassical economics* experts to make the broader economic decisions that shape and constrain these activities.

**Students’ Misunderstandings Persisted**

Students exited the course with a limited view of their role in the economy, primarily focused on their human capital contributions, in line with Ms. Morgan’s thinking and with orthodox economics. Students were not provided with the knowledge and skills to reconcile contradictions between their life experiences, their observations of economic and social phenomena and the claims of the official curriculum. Students’ beliefs that contradicted the official curriculum’s claims, such as Skylar’s observation that unequal education contributes to the wealth divide, went unaddressed. Students’ understandings, and even misunderstandings,
that aligned with official claims, such as a deference to technical experts for economic decisions, were reinforced.

**Complicated Understandings of Wealth Accumulation**

The data on Ms. Morgan and her students’ understandings of how wealth accumulates is complicated. Ms. Morgan held contradictory beliefs, made known by her comments on the primary role individual choices play in determining wealth, personal finance lessons that aligned with those comments, and economics lessons that directly challenged that view, such as her use of the *Waging a Living* documentary, highlighting people who worked hard, played by all the rules and continued to struggle financially. Students provided a myriad of explanations for why some people are rich and why some are poor. While they recognized the role that structural inequities play in wealth accumulation they also held misunderstandings such as Cara’s perception that economic inequality is decreasing. Students consistently reported the EPF curriculum’s interpretation of wealth accumulation as built on wise money management.

**The Story Told by the Missing Data**

What is notably absent from the overall economic discourse is any substantial form of critical thinking. This is a pedagogical observation, regarding the skill set of critical and analytical thinking that is used to evaluate and solve problems (Bonney & Sternberg, 2011). The lack of critical thinking is captured by the following three contexts. First, students did not question the limits or reliability of the implicit and explicit claims of the curriculum, that people’s lot in life is the sum total of their decisions and that this is a fair and moral way to sort out winners and losers for the greater social good. In fact they adopted these claims and used them in their explanations of why things are the way they are,

*John: “Not everybody can be at the top, not everybody can be at the bottom” (5:9).*
Kathy: “I feel like it is a lot about fight for self, like survival of the fittest” (1:9).

Second, students did not make connections between what they were being taught and their future responsibility as democratic citizens to make economic policy decisions. While they reported feeling empowered to make better choices in their private lives, there was no recognition of how to apply their newly acquired knowledge and skills in their public lives.

Third, while students referenced their improved scientific and technical knowledge, there was little to no representation of phronetic knowledge, where students made reasoned value judgments about economic and social phenomena. The curriculum and Ms. Morgan didn’t teach, and the students didn’t ask, why the economy is the way it is.

The following chapter discusses the implications of an economics discourse that provides little space for economic decision-making and economic values, and therefore lacks phronesis.
CHAPTER 5 DISCUSSION

Introduction

I began this study with an interest in understanding how a contemporary high school economics and personal finance classroom addresses the role of economic decision-making in a democracy. Based on my experiences as a high school social studies teacher I had ideas about what I thought might be happening. My grasp of the current K-12 economics context, economics education’s firm commitment to neoclassical economics (CEE, 2010), that exists within a macroeconomic transition from Keynesianism to neoliberalism (Harvey, 20005; Giroux, 2017; Parker 2008), led me to make the deliberate choice not to approach my research through the lens of critical theory, as traditionally associated with the Frankfurt School (Sensoy & DiAngelo, 2015). From my review of the critical scholarship on the K-12 economics discourse, (Agnello & Lucey, 2008, 2008a; Feiner & Roberts, 1990; Ferber & Nelson, 2003; Maier & Nelson, 2007; Maier, Figart & Nelson 2014) I saw the need for descriptive empirical research regarding the current K-12 economics education discourse. Using the approach Becker (2010) advocates, shrugging off the impediments of academic writing to communicate in the simplest terms, I’ll explain the contribution my research makes toward addressing this need.

The stated goal of Virginia’s Standards of Learning for Economics and Personal Finance (EPFSOL) (Virginia Department of Education, 2009) reads: “Students need a strong foundation in economics and personal finance to function effectively as consumers, workers, savers,
investors, entrepreneurs, and active citizens” (n.p.), suggesting multiple and possibly competing goals for the content. Based on the above described context I wanted to understand what space is provided in the economics discourse for the active citizenry role. My findings make a clear case that despite both the National (CEE, 2010; 2013a) and the EPFSOL inclusion of the word “citizen,” the aims of personal finance--to teach students their role as worker, consumer, saver, investor and entrepreneur--have almost completely eclipsed citizenship goals. In fact, if the economics discourse was a basketball game pitting personal finance against economics, personal finance would be winning by a large enough margin to send economics fans packing at half time. Not only have they eclipsed citizenship goals, but they have construed those non-citizenship roles quite narrowly as well. In this discussion, I will address those findings by revisiting my conceptual framework, noting areas in which the empirical evidence supported that framework, and those areas of the framework that need some revision based on the findings. That discussion will address the key question that underlies this research: What are the consequences for democracy if the space for teaching the role of active citizenry in shaping the economy is closed off in our economics courses? That discussion will be followed by the presentation of an argument for a reformulation of economics education in which citizenship goals are at the center of the curriculum.

Revisiting the Conceptual Framework

My conceptual framework was built after a thorough review of the literature as a tool designed to facilitate the analysis of data in response to my inquiry questions. As stated above, my literature review revealed K-12 economics education commitment to one economic theory, neoclassical economics (CEE, 2010), dominated by the narrow perspective of a positivist lens.
This theory was supported by standards, curriculum, and supplementary materials influenced by, advocated for, and produced by the Council of Economics Education. Empirical economics-education research was primarily focused on measuring students’ mastery of neoclassical economic theory. That approach has created a closed loop within the world of K-12 economics education research. In that approach, economics is narrowly restricted to one economic theory, and for the convenience of measurement, narrowed even further to the declarative knowledge of vocabulary framed to neatly fit such a theoretical mold. Empirical studies analyze and report on the results that those narrow measures yield.

In contrast, the theoretical framework that I constructed included the assumption that the economy is socially constructed (Dow, 2008) alongside the more dominant neo-classical perspective. This inclusion created the space to acknowledge that various economic theories provide legitimate explanations of how the economy works (Nelson, 2011), and those explanations inform multiple approaches to address economic problems (Chang, 2014; Nelson, 2011; Reardon 2009). With the goal of capturing the economics discourse, my conceptual framework was built from these divergent perspectives and thus the categories of orthodox and non-orthodox emerged.

For each of those perspectives, I discussed the associated ontological, epistemological, and axiological assumptions. My review of the historical progression of the discipline of economics influenced my decision to add the ontological assumptions of economics, anticipating the potential for understanding to be revealed through the lens of economic certainty and predictability as opposed to economic uncertainty. The literature and my questions on economic-decision making and economic values warranted the categories of positive and normative epistemologies. Specific to my goal to apply a phronetic lens to this research, the
third category of axiological assumptions of economics was added. Finally, as the EPF course I examined was broken into *economics* and *personal finance* content the categories of microeconomics and macroeconomics were added, noting their potential to be addressed through both orthodox and non-orthodox approaches to economics.

The data supported my use of all three categories of economic assumptions, but as I anticipated during my creation of the framework, the data revealed much overlap between the three categories of economic assumptions. As discussed in Chapter Three, my initial goal to selectively script for only one category was discarded after the pilot, upon recognizing how data, more often than not, fits into more than one category. Figure 6 addresses the data’s support of the framework. Overall the official curriculum reflected the orthodox economic assumptions.

![Figure 6. Relationship of the Data to the Conceptual Framework for Observing & Capturing the Economics Discourse in a High School Economics and Personal Finance Course](image)

<table>
<thead>
<tr>
<th>Ontological Assumptions of Economics</th>
<th>Orthodox</th>
<th>Non-Orthodox</th>
</tr>
</thead>
<tbody>
<tr>
<td>The world is certain with calculable risks. Individuals are selfish and rational.</td>
<td>The world is uncertain. Individuals are not always selfish and rational.</td>
<td>Supported by teacher and student comments. Not supported by the official curriculum.</td>
</tr>
<tr>
<td>Strongly supported throughout all forms of the data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epistemological Assumptions of Economics</td>
<td>Positive Economics is a science and economic and social phenomena can be understood through the application of scientific and technical approaches.</td>
<td>Normative Economics is a social science. Positivism has its limits and all propositions are not testable. Understanding economic and social phenomena requires the application of a normative (values-based) approach.</td>
</tr>
<tr>
<td>Strongly supported throughout the data.</td>
<td>Supported by student and teacher comments and by the occasional choice of teacher selected supplementary materials.</td>
<td></td>
</tr>
<tr>
<td>Axiological Assumptions of Economics</td>
<td>When individuals act in their own interest it results in the best outcomes for the whole of the economy and of society.</td>
<td>What is good for the individual may not always be good for the whole of the economy or the whole of society.</td>
</tr>
<tr>
<td>Represented in the data through the heavy focus on personal finance and students’ interpretation of economics as personal finance.</td>
<td>Weakest category represented in the data. Noted in the occasional student or teacher comment.</td>
<td></td>
</tr>
</tbody>
</table>

**MIXECOMICNICS**
- Economics curricula focuses on teaching students concepts such as supply and demand, to equip them to become wise consumers, productive employees, and entrepreneurs, in order to navigate the economy and contribute to the growth of the market.
- Microeconomics is taught with the assumptions of pure competition.
- Solutions to economic problems are cast in terms of improving individuals’ personal financial literacy.
- Encroachment of personal finance and marginalization of macroeconomics, heavily supported by the data.

**MACROECONOMICS**
- Economics curricula teaches students to examine broader macroeconomic concepts such as those that shape and constrain personal finance choices or employment and income opportunities in order to make informed economic decisions.
- Macroeconomics assumes the uncertainty of the market.
- Solutions to economic problems consider both personal choices and structural options.
- Microeconomics and macroeconomics were cordoned off and macroeconomic concepts and structural considerations were not brought to bear on personal finance content.
Non-orthodox viewpoints were present in student and teacher interview data where they expressed doubts about a predictable and certain economic reality (e.g., Ms. Morgan stating that someone can play by all the rules and still end up with financial struggles), and most often where their life experiences contradicted a positivist epistemological assumption, causing them to posit normative explanations for observed economic and social phenomena. Orthodox axiological economic assumptions were supported throughout the data in terms of the EPF curriculum’s underlying value that people’s lot in life is the sum total of their individual decisions (in the form of wise finance choices), and that this is ultimately a fair and moral way for sorting out winners and losers for the greater social good. Teacher and student data also supported the orthodox axiological economic assumptions by expressing their role in the economy as primarily limited to their human capital contributions to economic productivity. This finding reflects what Parker (2008) characterized as a new kind of “self-enterprising, self-reliant citizen” (p. 67) in his review of democratic citizenship in the social studies education literature. In this sense one could argue that the curriculum addressed a form of libertarian citizenship.

A noteworthy finding of the relationship between the data and the framework follows. The framework presented a summary of both microeconomics (economics concerned with individual decisions) and macroeconomics (economics concerned with measuring and understanding economy-wide phenomena), based on the assumption that the course would consider economic issues at those two grain sizes, and noting that the course was designed for an equal balance between economics and personal finance content. During the creation of the framework I struggled with how to include these two categories, noting that microeconomics is taught as personal finance, and within the economics discipline, personal finance has long been considered a subfield of economics (Grimes, 2012; Ross, 2008). Ultimately, despite both
teachers’ stated preference for an equally balanced economics and personal finance curriculum, similar to earlier studies documenting teachers preferences (VanFossen, 2000), the data revealed a disproportionately heavy focus on microeconomics, and the cordonning off of microeconomics and macroeconomics into separate camps, with implications that are discussed below.

The binary categories of the conceptual framework functioned to capture the economics discourse but they also brought to life the inherent problem of categorizing the social science of economics in separate boxes. In some-ways the inadequacy of a “model” designed to capture the economics discourse mirrors the inadequacy of the “models” used in teaching economics and personal finance. A reoccurring theme in the data was that people toggle between multiple and sometimes competing economic perspectives when considering real-world and hypothetical scenarios. The rigid, singular approach to economics they were largely restricted to in the classroom was insufficient for explaining the real life economic and social phenomena they discussed.


This study brings Flyvbjerg’s (2001) phronesis to bear on the high school economics discourse and provides answers to his value-rational questions, in terms of where are we going with high school economics and personal finance, who gains and who loses and by which mechanisms of power, whether this is desirable, and what should be done. The validity of this case-study suggests the possibility that the findings discussed here are likely to exist elsewhere (Flyvbjerg, 2006; Yin, 2014). The weight of that assertion is increased by the case study’s teacher-participant who, despite her critique of the official curriculum’s emphasis on
microeconomics, and life experiences and social commitments that made her more likely to challenge the orthodoxy of the EPF curriculum, reinforced it.

**What’s Happening?**

As previously discussed, the EPF curriculum and course materials marginalized the role of explicitly applying value judgments to economic and social phenomena. Simultaneously the course implicitly and explicitly underscored the value that solutions to economic and social problems are addressed through the mastery of a technical approach to personal financial literacy. The literature revealed increased attention to financial literacy after the 2008 financial crisis, and an international trend of using the crisis as a justification for this focus (Davies, 2014; Pinto, 2012, 2013; Schug, 2012; Willis, 2009). Davies (2006, 2014) claimed that students are not being, and should be, prepared to take an active democratic role to develop a broader understanding of the financial world, including teaching students about the responsibility of both the financial industry and the government. My findings confirm this direction and Davies’ claims. Evidence from this case-study, summarized below, clearly indicates that financial literacy is on the path to supplant economic literacy.

The course prepared students to succeed on the W!SE Financial Literacy Certification Test and prepared them to accept and learn to navigate the current fixed economic realities, that are taught and accepted as beyond their control. The EPF course did not provide students with the knowledge and skills to act on their responsibility as democratic citizens to make economic policy decisions that address economic problems of their times, such as growing economic inequality or the erosion of America’s social safety net.

There is a well-recognized goal to teach students to reason effectively using economic knowledge in both their public and private lives (Armento, 1987; Rosales & Journell, 2012;
VanFossen, 1995; VanSickle, 1992) and my findings reveal the public piece of this goal to be at risk. The economics discourse was so technical, sterile, and closed that students questioned the appropriateness of including normative discussions such as why the poor are poor and how our current economic system could be improved to benefit more people. Teachers also struggled with the inclusion of normative economics, expressing sentiments of stealth incorporation of that content.

It would seem logical that as students and teachers read the world (Freire, 1970) and recognize the EPF curriculum’s failure to reflect, account for, or begin to explain various economic phenomena, such as when people work hard and play by the rules of the EPF’s scientific models yet fail to experience the promised rewards of economic security and prosperity, that they would challenge those models. Yet the combination of: the curriculum’s alignment with society’s larger meritocratic narrative (Huber & Form, 1973; Kluegel & Smith, 1986; McNamee, 2009); student and teachers’ own multiple and sometimes competing beliefs; and the scientific, technical, and closed nature of the EPF curriculum, functioned to bury these tensions so deep that students failed to recognize the conflicts between the models and their observed economic realities. When there was faint recognition of these frictions they either relegated the phenomena to outside their control, such as Brent’s sentiment that people don’t have any say in the economy unless they are a CEO or on the Federal Reserve (2:13), or they adopted the belief that they must get on board with the selfish individualism rewarded in the current economic reality, such as Kathy’s remarks that “it is a lot about fight for self, like survival of the fittest, so the people that know how to get rich, like Trump, then they’ll be getting richer; they know how to invest” (1:9).
**Who Gains and Who Loses, and by What Mechanisms of Power?**

**The financial industry gains and democracy loses.** The financial industry gains and democracy loses when economic literacy becomes financial literacy (Arthur, 2011; Emami & Davis, 2009; Davies, 2006, 2014; Maier, Figart & Nelson, 2014; Peterson & McGoldrick, 2009; Reardon, 2012; Warner & Agnello, 2012). The encroachment of financial literacy on economic literacy that I observed in the EPF course is foreshadowed in the literature (Grimes, 2012; Mankiw, 2009; Miller & VanFossen, 2008). As students were taught that personal wealth maximization is their only role in the economy, an allegiance to the financial markets was cultivated, “I didn't know about stocks... I love stocks, I'm obsessive about it. (Kathy, 1:23). “This is what I like, I've been playing the stock market game, it's kind of my favorite game now” (Brent, 2:20).

Concurrently students didn’t recognize their role in economic-decision making, as economics was perceived to exist outside their reach, in the form of laws similar to the natural laws of science. In alignment with the orthodox epistemology in the conceptual framework, these economic laws were described as responsible for maintaining self-correcting economies where, as John explained, “one company can't drive up the price so no one can afford to pay for it, which shapes the economy to a point where there's always competition” (5:16). Students expressed their trust in technical experts to make economic decisions if and when they are necessary. Relegating economic decisions to experts privileges those who have access to that knowledge. Particularly troubling is that the official curriculum’s anointed “experts” represent one faction among many in the field. Consider the topic of retirement security referenced throughout the data. While the official curriculum (Appendix M) offered no explanation for the instability of pension plans and social security, divergent ideas and policy solutions abound
(Holzmann & Stiglitz, 2001). Students were not taught to recognize that multiple economic perspectives exist, or that they have a role in shaping economic policies. Students were not provided with the knowledge and skills to make informed choices about whether current economic patterns serve valuable ends or whether new policies should be implemented to build a more equitable society. As democracy requires an informed citizenship, future citizens need as many tools as possible for understanding and solving economic and social problems. This requires students to use critical thinking skills, consider economic contexts, and hold discussions of values and interests about desirable economic outcomes, in order to make reasoned choices about how to move towards those outcomes, all of which were rarely present in the economics discourse of the EPF course.

**Economic inequality gains and democracy loses.** Protecting democracy from the threat of concentrated wealth requires an economics discourse that demystifies economic policies. Elucidating the value judgements embedded in economics provides students with the skills to understand and identify when economic and political systems interact. The EPF course made no attempt at this endeavor and left students without any foundation for understanding growing economic inequality or without the knowledge and skills to identify solutions to the problem. For example, Cara’s doubts about the meritocratic narrative and her understanding of the structural factors that influence economic inequality, expressed in the following response to a question about why the poor are poor and the rich are rich, “I wouldn't say because people work harder because you could be poor and have as much ambition as anybody else. I think it also depends on what education you get because some people get better education than others so that impacts where you are going to end up in life” (4:8), were not reconciled with her misunderstanding that economic inequality is decreasing (4:9). As Cara’s statements suggest,
students entered the course with an understanding that structural factors’ influence economic outcomes, yet they consistently reported the EPF courses’ explanation of wealth accumulation as built solely on wise money management. To conceive of economic policies that reduce inequality students need to be made aware that a problem exists, discuss structural causes of the problem, grasp that economies are malleable, and spend time examining the tolls that unsustainable inequalities exact on society, such as the undermining of the meritocratic values on which democracy rests (Piketty, 2014; Saez, 2013; Saez & Zucman, 2014; Wilkinson & Pickett, 2009). I did not observe these discussions in the classroom nor did this approach surface elsewhere in the data.

Wright-Maley and Davis (2017) remind us that great thinkers throughout modern history from Rousseau to Jefferson have expressed concerns about economic inequality’s threat to democracy. They point out the vast reaches of market-oriented thinking’s expansion into all aspects of our lives. The course, as demonstrated in my findings, contributed to the acceptance of neoliberal ideology amongst a group of students who were at the cusp of becoming adult citizens. In that sense, the EPF course I observed recasts citizens as consumers, and orthodox economics as science, and is an example of how unequal relations of power are masked in school curricula. This amounts to a win for neoliberal ideology (Giroux, 2017; Harvey, 2005; Parker, 2008) which remains invisible and therefore goes unchallenged, becomes more entrenched, and points America further in the direction of unbridled capitalism, leading to the support and popularity of policies that increase inequality at the expense of a more egalitarian democracy.

The social studies discipline loses. As economics education moves towards personal finance and becomes more technical and applied, arguments have been made, and may grow louder, to remove economics from the social studies. Recall that Virginia’s law already specifies
that in addition to social studies educators, the EPF Course may be taught by agriculture, math, business and information technology, family and consumer sciences, or marketing teachers (Virginia Department of Education, 2014). This is a significant potential loss, as the field of economics is historically been a social science in the academy and in the K-12 arena (Evans, 2004; Frey, 1999; Lopus, Morton & Willis, 2003; NCSS, n.d.; Samuelson, 1976; Solow, 1985; and VanFossen, 2006). Teachers outside the discipline may not necessarily bring the same commitment to teaching for democratic citizenry as social studies educators (Barr, Barth & Shermis, 1977; NCSS, 1979, 2010, 2013; Parker, 1989; Shaver, 1977). As this study reveals, even a teacher as committed to holding values discussions as Ms. Morgan finds it difficult in the present context. Both Ms. Morgan and Mr. Walker expressed their concerns about the potential loss of values discussions when EPF is taught outside the social studies discipline, as in the following quote by Ms. Morgan:

*What we add to it in social studies is the values piece because that's how we're trained to look at things. I want kids to know that there are two, three, or four sides--maybe more than that--to every issue and you don't have to accept it” (8:56).*

**Mechanisms of Power**

The high school economics course, including the curriculum, the W!SE exam that measured student mastery of the curriculum, and bulk of teacher and student classroom discourse was driven by a personal finance curriculum sponsored by the corporate finance industry (Alpert & MacDowell, 2012; Pinto, 2012, 2013). In other words, that industry has used the EPF course as a mechanism of power (Flyvbjerg, 2001) to further its self-serving ends at the expense of preparing those youth for democratic citizenship. Summarily, my findings expose two factors that operated concurrently as mechanisms of power to hand the financial industry a win at
democracy’s expense. The first factor was the limiting of space for economic decision-making and economics values in the EPF Course thus making the role of economic citizen invisible by excluding the human choices behind economic outcomes. The second factor was the extensive influence of the W!SE Test as bulleted here:

- Use of the W!SE Test drove what was taught, with curriculum units and materials based directly on the W!SE Personal Finance Curriculum Outline;

- The school district used the W!SE Test as justification for their 2017 decision to require that personal finance be taught prior to economics, flipping the order of the content, in opposition to EPF teachers’ recommendation to begin the year teaching economics. The impact of that decision, was captured by Mr. Walker’s comment, “When we teach personal finance first we’re skipping over the whole idea that the economy exists because of the people who form it. When we taught economics first, we began a discussion of wants, needs, factors of production, and how decisions can make for better or worse situations, including unintended consequences” (7:18, 7:20) and student data supported his claim;

- The school district built their EPF pacing guide on the W!SE Test, including the allocation of approximately the first seven of the nine-month EPF course to personal finance, and used the W!SE Test Personal Finance Curriculum Outline for unit completion dates, and included pre-test dates, post-test dates, remediation dates, re-take dates, and second re-take dates, that concluded at the end of April;

- The W!SE Test score was used as a final exam grade for all students (if the grade was higher than the second semester student average);
• The W!SE Test was used as a high-stakes, graduation certification credential for all non-advanced, diploma-seeking students;

• Personal finance content was cordoned off in order to cover content in time for the W!SE Test, as opposed to integrating economics and personal finance, (e.g., Kathy’s comment in response to whether the course covered their power as democratic citizens to shape the economy, “I don’t think we’ve really gotten into [that]... we go into like the ‘we have to get this done,’ the W!SE test and all that” (1:14)), and similar comments made by both teachers confirming the relegation of normative discussions to the post-W!SE Test, economics portion of the EPF content that began in April;

• The majority of Ms. Morgan’s curricular choices, as provided by the school district (see Appendix I) were resources drawn from or built to support the W!SE Personal Finance Curriculum;

• All student participants described their course takeaway as an improvement of their personal financial literacy.

These mechanisms of power functioned to leave students with the impression that the reason to study economics and personal finance was primarily to solve individual, not societal, problems. In Chapter Two a review of the Standards revealed the tensions between the various goals for economics education (CEE, 2010; Virginia Department of Education, 2009) and compared their competing goals to Labaree’s (1998) argument that public education is caught in a battle between serving democratic politics or the capitalist market. Economics education clearly served the latter.
Is This Desirable?

What Should be Done? Research, Policy and Classroom Recommendations

Is This Desirable?

Across the disciplines in K-12 education the need to prepare students to think critically and analytically, thereby equipping them to evaluate and solve problems, has been widely embraced (Bonney & Sternberg, 2011). Apart from any ideological and political discussions about various economic theories, it is desirable to prepare students with the knowledge and skills to address and solve economic and social problems. An EPF course that privileged personal finance over economics, limited the role of economic decision-making and space for values discussions, and drew on only one economic theory--neoclassical economics--worked counter to this goal and is not desirable. This approach failed to develop students’ capacity to think outside the existing paradigm and imagine realistic solutions to today’s problems. It sent the message that their influence is limited to individual versus societal change and that they should focus their efforts inward. The closed nature of the EPF curriculum created a reinforcing loop where students were taught to seek constant proof that our current economic system explains, and even justifies, existing economic outcomes.

What Should be Done?

Research recommendations. As economics education is often taught as a science that can be understood through the application of scientific and technical approaches, economics education research is often researched from the same, mostly quantitative paradigm. That

---

13 I build on Sensoy & DiAngelo’s (2015) definition of privilege as a term academics use to describe how society works, in reference to rights, advantages and protections enjoyed by some at the expense of and beyond the rights, advantages and protections available to others, and as a product of structural advantages. They refer to the social and institutional advantages dominant groups receive due to their position of power (p. 58). I content that in a similar vein the financial industry, a product of structural advantages, has exercised its dominance to influence the economics and personal finance curriculum to further their structural advantages and at the expense of the role of democratic citizenry in economics.
circular reasoning lead to research about how best to achieve questionable ends, which led to calls for more qualitative research based on direct classrooms observation (Miller & VanFossen, 2008), and the need to describe students’ economic understanding for problem solving (Miller & VanFossen, 1994; VanFossen, 1995). This study attended to both of these gaps but also suggested the need to consider the economic models that are presented to students, their axiological assumptions, and the implications for democratic citizenship education. In addition, my findings made a contribution to Levstik & Tyson’s (2010) claim of a lack of economics education research committed to the social studies goal of education for democratic citizenry (Barr, Barth & Shermis, 1977; NCSS, 1979, 2010, 2013; Parker, 1989; Shaver, 1977).

The study made an empirical contribution to critical pedagogues’ critique of the dominant economics paradigm and their advocacy of alternative social justice and pluralist economic approaches (Agnello & Lucey, 2008, 2008a; Arthur, 2011; Emami & Davis, 2009; Feiner & Roberts, 1990, 1995; Ferber & Nelson, 2003; Maier, Figart & Nelson, 2014; and Reardon, 2012). However, additional empirical research is needed to verify and expand on my claims regarding the direction of the secondary economics education discourse. Ostensibly, insight has been provided on the possibilities of awakening a critical consciousness with a normative approach.

As Virginia requires all high school students to have an online experience prior to graduation, and the EPF is currently one of the few readily available choices¹⁴ the economics education scholarship would benefit from a close examination of how the role of economic decision-making and economic values is addressed online.

¹⁴ “To meet the graduation requirement to complete an economics and personal finance course, an online course is available to all Virginia public schools through VDOE’s Virtual Virginia. The course, aligned to the Economics and Personal Finance SOL and developed with the support of the Virginia Bankers Association Education Foundation and the Virginia 529 College Savings Plan, includes cartoons, interactive graphics, simulations using characters in economic situations and assessments. The course is available at no cost to all Virginia public schools” (Virginia Department of Education, 2017).
Noting the concern referenced above of the removal of economics from the social studies discipline, and as the Virginia Department of Education provides additional options for students to meet the EPF graduation requirement that among others, includes a career and technical education framework (Virginia’s Career and Technical Education Center, n.d.), the social studies scholarship would benefit from a study examining how questions similar to the ones in this study are answered in classrooms outside the social studies discipline. Another area to extend the research culminating from this study is to consider how the role of economic decision-making and economic values is addressed in the Advanced Placement Economics course, as it is not wed to the W!SE Test. In light of high socioeconomic student enrollment in advanced placement courses, there are questions to be answered about the social stratification created if one group of students receives the knowledge and skills to shape our economy and another group is taught to adapt to existing economic conditions.

Finally, as this study addressed the limited role economic decision-making and values discussions hold in the economics and personal finance course, additional benefits would be realized from an intervention that intentionally weaves in a normative approach to the existing EPF curriculum in order to observe its potential for creating students’ economic agency. Consider the following example. Both the *National Standards for Financial Literacy* (CEE, 2013a) and *The PISA 2012 Financial Literacy Framework* (OECD, 2013) rationalized the need for more financial literacy by citing the growing complexity of economic problems, providing examples such as the demise of the social safety net, “Retirees’ pensions have been largely replaced with defined contribution plans, shifting the responsibility for saving and investing from the employer to the employee (CEE, 2013a, p. iv).” Although the CEE’s example did not go as far as explaining the economic policy decisions that lead to the pension shift, at a minimum it
acknowledged that historically employers provided pensions. Including this historical fact in the EPF classroom may open the space for students to conceive of one avenue for restoration of the safety net beyond their individual responsibility to save and invest. At minimum, it would make visible the value choices behind economic decisions that shape personal finance choices and signal the connections between economic decision-making, personal finance and economic outcomes.

A normative economics intervention could provide insight on where the contradictions between life stories and the official and enacted curriculum emerge. For example, would lower socioeconomic students be more receptive to a normative curriculum that speaks more directly to their life experiences, as opposed to a high socioeconomic population where a normative curriculum may challenge their privilege?

**Policy recommendations.** As more states pass legislation mandating economics and personal finance course graduation requirements—as advocated by the CEE’s state affiliates—the social studies community should be attentive to the distribution of content between personal finance and economics. Consider the alarm that would and should sound if the military industry wielded the influence over the history curriculum to the extent that the personal finance industry influences the economics and personal finance curriculum. This is the frame that I urge this policy recommendation to be viewed. With additional state-mandated economics and personal finance courses on the horizon, the social studies community may also want to advocate that economics and personal finance courses be taught solely by social studies teachers. Other concerns are the adoption of the W!SE Test at either the local or state level as a graduation certification credential, noting the potential for the Test to heavily focus the curriculum towards personal finance.
District and school curriculum directors may take steps to teach economics prior to personal finance and/or look for opportunities to blend economics and personal finance content. Secondary economics educators could benefit from professional economists’ perspective on normative economics, who acknowledge an unsettled debate on whether positive economic analysis must precede normative economic analysis, yet don’t accept a strict division between the two, noting the necessity of their interdependence, particularly in making economic policy decisions (Lipsey, 2008).

**Classroom recommendations.** I will present two perspectives with recommendations for incorporating more normative economics into the EPF classroom, first outlining the challenges teachers who wish to significantly alter their practice may likely face. I then make the complimentary argument that there are simple steps with the potential for lasting impact that teachers can take to create space for normative economics.

**Challenges to significant changes in the EPF classroom.** Teachers who wish to dig deep and significantly alter their practice to include a normative approach may first seek to understand the role of hegemony, including the recognition of how their own inconsistencies contribute to that hegemony (Gee & Green, 1998; Pinar, 1995). This may be the most difficult step because of the breadth and invisibility of ideological influences that teachers, no different than the rest of us, are exposed. Giroux (1981) describes hegemonic influences as being distributed and produced throughout a whole range of institutions, such as schools, family, mass media and more. Second there is the pedagogical challenge of identifying, creating and incorporating materials that create this space in teachers’ daily lessons. This challenge is compounded by the limited time teachers have for planning, and the convenience created by the mechanisms of power that drive the official curriculum (e.g., W!SE Test) with their abundance
of shelf-ready materials freely provided to teachers (see EPF Resource List, Appendix I). The money and power behind the official curriculum dwarfs the influence of curriculum with counter perspectives such as those put forward by Maier and Nelson (2007) or my own curriculum designed to bring the issue of economic inequality into the high school classroom (Sober Giecek, 2007). A separate, but related discussion, examines the extent to which teachers, even those who hail from a critical perspective, have encountered formal pedagogical approaches to teaching for social justice (Parkhouse, 2016).

Third there is the moral dilemma of creating a balance between content that prepares students to pass the W!SE Test, and to navigate and succeed within the current economic context, while simultaneously teaching them to challenge this context, as so clearly articulated by Ms. Morgan’s comment, “You can have a person that has followed the rules and they've put away this percentage of money for their retirement and they've done all these things and then they could still end up in a bad situation that's outside their control” (8:30, 8:31). Brantlinger’s (2013) practitioner research study speaks to this challenge as he chronicled serious barriers in his attempt to teach critical mathematics while simultaneously providing students with the concrete knowledge and skills they needed for college mathematics.

**Simple, effective steps for implementing change in the EPF classroom.** While acknowledging these formidable challenges, my study also provided context for simpler approaches teachers can adopt to alter practice. Teachers can routinely review their lessons, or individual artifacts of the official curriculum, and ask themselves, and their students, “what’s missing” from this narrative, or “why does this economic condition exist?” While my review of the standards noted the official curriculum’s justification of their narrow approach as an effort to avoid confusing and frustrating teachers and students (CEE, 2010), advances in learning theories
point to the importance and effectiveness of teachers replacing the model of the child as an empty vessel to be filled with knowledge, with active inquiry into students’ thinking, providing the foundation on which more formal understanding of subject matter is built (National Research Council, 2000). The whole educational endeavor itself implores teachers to make their content relevant and accessible to their students (Dewey & Small, 1897). Inquiry methods (Loyens & Rikers, 2011) draw out and build on students experiences and help them make sense of their world. My findings revealed the inability of the official curriculum to provide students with the knowledge and skills to reconcile their competing understandings and explanations that were not aligned with the curriculum. Although it is beyond the scope of this study, this finding has implications for the culturally relevant pedagogy scholarship (Scherff & Spector, 2011) and will be briefly touched on below in the suggestions for future research.

A review of the inquiry method literature cites numerous iterations of inquiry learning (e.g., project based learning), yet defines it simply as the classroom practice of posing questions to provide a deeper understanding of subject matter in order to facilitate the application of knowledge outside the classroom (Loyens & Rikers, 2011). Revisiting the lesson of the broken, three-legged stool of retirement referenced throughout this study, introducing the idea that citizens have a role in shaping economic outcomes could be as simple as asking students to brainstorm possible reasons two of the three legs have become unsteady and following up with a full group discussion on the pros and cons of economic policies advocating the privatization of public pension plans and social security. Making visible the economic policy decisions that created economic conditions disrupts the hegemony of the official curriculum, and is the first step towards teaching for economic agency. Watts (2005), the highly-regarded scholar of K-12 economics education—and firmly committed to the neoclassic economic model—argues that
students’ economic reasoning does not automatically evolve from domain-specific content, and he calls on teachers to use inquiry-based activities focused on real-world economic problems to find solutions to these problems. This inquiry approach, by necessity, breaks down the detrimental false barrier between the economics and personal finance content, recognizing the connections between the two and revealing the normative economic decisions embedded in personal finance curriculum. Making space for students to question and trace the backstory on economic conditions encourages critical thinking, and while it may open the door for students to question power and privilege (Sensoy & DiAngelo, 2015) it differs from critical pedagogy in that it is not specifically designed for emancipatory purposes (McLaren, 2015). This distinction is one of the contributions this research added to the economics education scholarship, providing a pragmatic bridge between the current economics education discourse, dominated by the official curriculum, and the direction called for by critical scholars (Agnello & Lucey, 2008, 2008a; Arthur, 2011, 2012; Feiner & Roberts, 1990, 1995; Ferber & Nelson, 2003; Warner & Agnello, 2012).

**Limitations**

This study’s biggest limitation is directly tied to one of the findings. My intent was to observe the economics portion of the EPF course, but as thoroughly discussed in Chapter Four, the school district made a decision just prior to my data collection phase at the start of the school year, to require personal finance be taught before economics. Both Ms. Morgan and Mr. Walker made clear their view that economics provides more opportunity for incorporating economic decision-making and economic values in the curriculum. I have no doubt that if I had the opportunity to observe the economic discourse of the economics portion of the EPF curriculum
that I would have observed more space for this content. Although that would have provided additional insight into the role of economic decision-making and economic values, my claims are firmly grounded in the data, with the district’s decision to begin the course with personal finance serving as additional data for these claims.

Lingering questions include how my findings may have differed if the study were conducted in a school with a majority of low socioeconomic students. Although there was variation in my student participants’ socioeconomic status, Creighton High--with a 99% graduation rate and less than 7% of the population eligible for free and reduced lunch--is an affluent school. Knowing that school context matters and that socioeconomic status influences economic thinking, Creighton High students, despite their individual socioeconomic status, exist within a school context where affluence is a point of reference. The *official curriculum* is telling a story that affirms the experience of many Creighton High students and of the Creighton community. If this same study was conducted in a high poverty school there may have been a greater need to resolve conflicts between students’ life experience and the *official curriculum*. An additional question is how my findings would have differed if the data included observations and interviews from an honors-level EPF course, noting potential for pedagogical adjustments.

**Conclusion**

**The Luxury of Time for Constructive Criticism**

Teachers who wish to create space for economic decision-making and economic values discussions in their classrooms should take time to reflect on their internal struggles with the content and seek opportunities to openly communicate with students about these struggles. Busy teachers are afforded far too little time for reflection on their practice. If Ms. Morgan were given
the luxury of sitting back to observe her own practice and review the curriculum as I have done, she may be surprised at what she would discover and she may or may not come to some of the conclusions I have made. If there were one thing I could change about this entire research process it would have been to have Ms. Morgan work alongside me during data analysis to bring her perspective to bear.

In my own teaching, I have faced similar dilemmas as expressed by Ms. Morgan, such as the desire not to impose my beliefs on my students. As a high school teacher, when students inquired about my political leanings, I responded that if I taught them the skill set I hoped to impart, they would know where I stood based on the subtleties of the content I incorporated into the class. In the academy, discussions with colleagues about concerns over values imposition have lead me to be forthright with college students about my critiques of particular methods or curriculum. My experience has been that revealing my thinking, with all its inherent and messy contradictions provides students with an example of a process for unpacking ideas they may wrestle with. It allows both students and teachers to share our inconsistencies in our beliefs and to examine where our life experiences align or contradict the official curriculum. Walking openly through this process beside students builds their critical thinking skills as they begin to recognize the normative decisions behind economic and personal finance’s scientific truth claims. Directly holding these discussions about the curriculum creates a classroom climate of honesty and comfort that allows students to openly disagree with the teacher, as we openly disagree or agree with the curriculum, ultimately removing the concern of teacher or curriculum imposed values. As economics educators if we teach students the rules of the personal finance game, while working together to examine if the rules are fair, or how the rules can be improved,
we bring students alongside of us in developing economic agency for active citizenry in our democracy.

As a life-long teacher advocate there were numerous times when, despite my constructive critiques of the impact of Ms. Morgan’s contributions to the economics discourse, I rationalized or empathized with the possible reasons behind her instructional choices, such as the expediency of using official curriculum materials in light of all the demands placed upon her. Ms. Morgan faced all the barriers described above as challenges to significant change, and I humbly recognize the magnitude of these challenges. The dilemma I observed of Ms. Morgan’s desire to challenge the official curriculum while simultaneously teaching it and reinforcing it could itself be the topic of full dissertation research in terms of the coping mechanisms teachers develop to adapt to rigid policy goals (Lipsky, 2010; Weatherley & Lipsky, 1977).

This discussion would not be complete without also acknowledging the heartfelt relationships Ms. Morgan built with her students, the respect and high esteem they held for her, and the practical life skills they acquired and attributed to her teaching, much of which is not visible in this study as it lies outside the scope of the research questions. Nevertheless, I recognize the value Ms. Morgan brings to the EPF course and the passion she has for providing students the skills to navigate the economy. I am also extremely appreciative of the student participants who were so gracious with their time and so candid in sharing their viewpoints with me. Any and all critiques should be viewed through the constructive lens I applied in my quest to shed light on the role of economic decision-making in the economics discourse, which would not have been possible without both Ms. Morgan’s time and her willingness to open her classroom to me and without the students volunteering their time and openly sharing their assignments with me.
Final Reflections

The first semester of the doctoral program when I first learned of the word phronesis, or practical wisdom, I was immediately drawn to it, as it speaks to so much of what I believe in. Phronesis seemed to embody what we may be losing in today’s science-driven, technology-obsessed society. Subsequently throughout my literature review and during my data collection it was apparent that the official curriculum and the EPF course emphasized the rules of the game, presenting those rules as techne (know-how) built on episteme (science) without space for phronesis. Flyvbjerg (2001) reminds us that phronesis underlies both techne and episteme. Yet, as any thorough qualitative researcher does, I played the doubting and believing game (Elbow, as referenced by Maxwell, 2013, p. vii.), particularly during my data analysis phase. My desire to produce relevant research was an ever-present voice. Of course it’s important to teach students personal finance skills. How can a discourse that appears so tightly closed make room for something that sounds as lofty as phronesis? Yet as I write this final paragraph I am confident in my plea that the economics and personal finance classroom successfully employs two of Aristotle’s three knowledge types, technical knowledge and scientific knowledge and would greatly benefit from the addition of his third knowledge type that involves reasoned value judgments about what is good or bad for man, phronesis.
CODA

In my review of the economics education literature and in my efforts to affirm economics as a social science, I felt the need to explore the origins of the economics discipline. As my research sought to bring together several distinct veins of scholarship to seek space for values discussions in an arena that explicitly claims a cordonning off of normative economics, I recognized the need to build a conceptual framework. I wrestled with the organization of this tool. Due to my familiarity with the K-12 economics education literature I could not justify the use of a complex tool comprised of the numerous heterodox models when the official curriculum had explicitly stated its commitment to a neoclassical model. Therefore, in juxtaposition to the orthodox, neoclassical model I settled on the heterodox category as a catch all, while recognizing the imperfection of this limitation in particular in categorizing the epistemological assumptions respectively as positive and normative. There were additional gray areas, but this one stood out to me. I ultimately landed on placing positive economics under the orthodox category after noting that the authors of the most prolific economics textbook, Samuelson and Nordhaus (2010), introduce the discipline by defining both positive and normative economics and then declaring their textbook to be solely focused on positive economics because of its use of analysis and empirical evidence to provide answers as compared to normative economics’ ability to simply inform debates. Note that this silence on value judgments functions as another mechanism of power. Samuelson and Nordhaus’s approach was most in line with what I had
found present in the K-12 economics education literature. Obviously heterodox economics clearly encompasses both positive and normative economics, however I understood various economic models (particularly the pluralists) to be much more inclusive of normative approaches than the neoclassical models taught in the K-12 arena. The tool provided working definitions and a platform to capture and analyze the data, but as noted in Chapter Three, I recognized the overlaps within the framework early on in the data collection phase.

My findings suggest that perhaps a more useful, and less complicated approach would have been to simply use the lens of phronesis as I was ultimately seeking to understand the values of the economics and personal finance classroom, and what attends to or shuts down phronesis. What I discovered is that the combination of foregrounding financial literacy over economics, the cordonning off of personal finance and economics into separate camps, and a values-neutral approach to personal finance, all served to limit the space for values discussions and economic-decision making in the economics and personal finance classroom.
References


Counts, G.S. (1932). *Dare the schools build a new social order?* New York: John Day.


Appendix A

Recruitment Flyer and Informational Letter about the Study

Purpose of the Study
My name is Tamara Sober and I am a graduate student in the Department of Education at VCU. I am conducting a research study to understand more about the economic thinking that occurs in the high school economics and personal finance classroom.

Volunteers Sought I need approximately 10 student volunteers enrolled in the Economic and Personal Finance course to participate in the study. I’m seeking racially diverse female and male volunteers with parents of various income levels.

Incentive Each student participant will be given a $35 VISA GIFT CARD as a thank you for his or her participation.

Requirements of Participation Each student will participate in one 20-minute interview in September and one 30-minute interview in October. Digitally recorded interviews will be conducted in a confidential setting at school, before or after normal school hours, at a convenient time for the student. Students will be asked to provide samples of their work completed for the economics and personal course.

Privacy and Confidentiality Pseudonyms (fake names) will replace all students' names in any information that is gathered (through the interviews and work samples) and there will be no identifying information connecting the students to the study. The consent forms contain the specific details on privacy and confidentiality.

Interested in Participating in the Study? If you are interested in participating in this study complete the attached Parent/Guardian Consent, Student Assent, and Student Demographic Data forms and return them to the envelope marked “Economics and Personal Finance Study” in the main office by [date].

If you have questions please contact me at XXXXX, or XXXXXX or you may contact my advisor and principal investigator on this study, Dr. Gabriel Reich at XXXXX.
Appendix B

Student Participant Recruitment Script

- My name is Ms. Sober and I am a graduate student in the Department of Education at VCU. I am a former high school social studies teacher and I am conducting a research study to understand more about the economic thinking that takes place in the economics and personal finance classroom.

- I need approximately 10 student volunteers to participate in the study. I need as much variation in the student sample as possible: males, females, students of all races, and students whose parents have different income levels.

- I know high school students are busy and so as an incentive to participate I’m offering each student participant a $35 Visa gift card as a thank you for his or her participation.

- The requirements of the study are: participation in one 20-minute interview in September and one 30-minute interview in October and samples of your work completed for this economics and personal finance class, during September and October when the study is being conducted.

- The interviews will be conducted here at school, before or after normal school hours, and scheduled at a convenient time for you.

- I will replace students’ names with fake names on any information that is gathered and there will be no way to connect student participants to the study.

- If you are interested in being in the study you and your parents must sign the forms I am distributing right now and return them to the main office prior to [date].

- Are there any questions I can answer now about the study?

- If you have questions later please contact me at XXXXXX, XXXXXX or you may contact my advisor, Dr. Gabriel Reich at XXXX.
Appendix C

Teacher Consent Form

Research Study on the Economic and Personal Finance Course – Fall 2016

You are invited to participate in a study being conducted as a doctoral dissertation by Tamara Sober under the supervision of Dr. Gabriel Reich. This consent form outlines information about the study. Before you sign this consent form, it will be discussed with you in detail by the researcher at which time you will be free to ask any questions regarding the language of the form or your participation in the study. You may take home an unsigned copy of this consent form to think about it and discuss it with family or friends before making your decision.

Purpose of the Study

The purpose of this study is to understand the economic thinking that occurs in the high school economics and personal finance course.

Requirements of Participation

There will be eight formal classroom observations of two of the Economics and Personal Finance classes, for a total of 16 observations. Each classroom observation will last approximately 90 minutes, thus a total of approximately 24 hours of classroom observations. You will participate in one 45-minute interview in September and one 45-minute interview in October. Digitally recorded interviews will be conducted in a confidential setting at school, before or after normal school hours and at a time most convenient for you. Before the completion of the project, you will have an opportunity to review the findings of the interviews to ensure that meanings developed from the research process accurately reflect your experiences and views. There will be a small amount of time required to coordinate the observations and interviews and to provide official
curriculum materials, such as lesson plans and samples of student work products used during the formal observations of the economics and personal course.

**Risks, Benefits, and Costs**

The research is not expected to cause any harm or discomfort. You do not have to talk about subjects you do not want to talk about or answer any questions you do not feel comfortable answering. You may leave the project at any time as explained below under Voluntary Participation and Withdrawal.

A benefit you may receive from participating in this study may be the additional learning that occurs during the interviews when you explore your own economic thinking and reflect on your teaching, the students’ thinking and the official economics curriculum. An additional benefit is the general experience and knowledge gained from participating in a formal research study. Finally, the information we learn in this study may be used to inform future decisions in regards to the policy and practice of high school economics education.

There are no costs for participating in this study other than your time.

**Privacy and Confidentiality**

Potentially identifiable information about participants will consist of this consent form, audio files and transcripts of interviews, researcher field notes, journal entries, and communications with the researcher. A pseudonym will replace your name in documented field notes and in all collected data and will not be connected to the consent form or other forms containing identifying information. Data are being collected only for research purposes. All electronic data will be kept in password protected computer files on the researcher’s laptop computer. Hard copies of data will be kept in locked filing cabinets at the researcher’s home. Transcripts of interviews will be destroyed after the minimum time required for data retention has been met per the VCU Data Retention Policy and any CCPS data retention policy. All other data containing identifiable information on computer files and hard copies will be destroyed upon completion of the research study. Access to all data will be limited to the researcher. Findings from this study may be presented at meetings or published in papers, but names will not ever be used in these presentations or findings.

**Voluntary Participation and Withdrawal**

You do not have to participate in this study. If you agree to participate in the study you may stop participation at any time without reason and without penalty or loss of benefits to which you are otherwise entitled. You may also choose not to answer particular questions that are asked in the study. If you leave the study, you will be given the option of having any data already collected about you destroyed and not used in the project.

**Questions**

In the future, you may have questions about your participation in this study. If you have any questions, complaints, or concerns about the research, contact:
Consent

I have been given the chance to read this consent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My signature says that I agree to participate in this study. I will receive a copy of the consent form once I have agreed to participate.

Teacher Participant (printed) ____________________________________________________

Teacher Participant’s Signature & date ____________________________________________

Witness to the signature of the teacher participant (Name printed) 15

Witness to the signature of the teacher participant (Signature & date)

Principal Investigator’s Name (printed) _____________________________________________

Principal Investigator’s Signature & date 16

15 The Commonwealth of Virginia requires that a witness sign the informed consent document as a witness to the signature of the research subject (but not necessarily a witness to the entire consent process). Retrieved from VCU IRB http://www.research.vcu.edu/human_research/irb_wpp/XI-2.htm on February 28, 2016.

16 The purpose of this signature is to ensure that the principal investigator is aware of who has been enrolled in studies. The principal investigator’s signature date need not correspond to that of subject or witness, but should be provided after both the subject and witness have signed.
Appendix D

Parent/Guardian Consent Form

Research Study on the Economic and Personal Finance Course – Fall 2016

Dear Parent(s)/Guardian(s):17

Your child is invited to volunteer to participate in a study being conducted as a doctoral dissertation by Tamara Sober under the supervision of Dr. Gabriel Reich. This consent form outlines information about the study. If you agree to allow your student to participate, 1) this consent form, 2) your child’s assent form, and 3) the demographic data form must all be signed and returned to the main office at [_______] High School, by [date]. From the volunteer pool approximately 10 students from the Economic and Personal Finance classes will be selected to participate in the study.

Purpose of the Study

The purpose of this study is to understand the economic thinking that occurs in the high school economics and personal finance course.

17 The U.S. Department of Health and Human Services defines “parent as a child's biological or adoptive parent” and “Guardian means an individual who is authorized under applicable State or local law to consent on behalf of a child to general medical care.” Retrieved from VCU IRB, http://www.research.vcu.edu/human_research/irb_wpp/XV-1.htm on February 28, 2016.

18 According to the Code of Virginia§.1-207, “child; juvenile; minor; infant or any combination thereof means a person less than 18 years of age” who is not legally emancipated. Retrieved from VCU IRB http://www.research.vcu.edu/human_research/irb_wpp/XV-1.htm on February 28, 2016.
**Requirements of Participation**

Each student will participate in one 20-minute interview in September and one 30-minute interview in October. Digitally recorded interviews will be conducted in a confidential setting at school, before or after normal school hours, at a convenient time for the student. In the first interview students will be asked questions about their beliefs and ideology, family and pop culture influences to get a sense of the influences on their economic thinking. In the second interview students will be asked to reflect on their economic thinking in relation to lessons they were taught in their economics and personal finance class. Students will be asked questions such as, “What did you learn?” and “How did the lesson change your thoughts?” Students will be asked to provide samples of their work completed for the economics and personal course, such as homework assignments or tests they take in the class. Before the completion of the project, students and parents will have an opportunity to review the findings of the individual interviews to ensure that meanings developed from the research process accurately reflect the students’ experiences and views.

**Risks, Benefits, and Costs**

The research is not expected to cause any harm or discomfort to your child. Students do not have to talk about subjects they do not want to talk about or answer any questions they do not feel comfortable answering. They may leave the project at any time as explained below under Voluntary Participation and Withdrawal.

A benefit your child may receive from participating in this study may be the additional learning that occurs when they explore their own economic thinking during the interviews, and the general experience and knowledge gained from participating in a formal research study. Student participants will be provided a $35 Visa gift card as a thank you for their time and participation. The information we learn in this study may be used to inform future decisions in regards to the policy and practice of high school economics education.

There are no costs for participating in this study other than the time spent in the interviews.

**Privacy and Confidentiality**

Potentially identifiable information about participants will consist of this consent form, audio files and transcripts of interviews, researcher field notes, journal entries, and communications with the researcher. A pseudonym will replace participants' names in documented field notes and in all collected data and will not be connected to names on the consent form or other forms containing identifying information. Data are being collected only for research purposes. All electronic data will be kept in password protected computer files on the researcher’s laptop computer. Hard copies of data will be kept in locked filing cabinets at the researcher’s home. Transcripts of interviews will be destroyed after the minimum time required for data retention has been met per the VCU Data Retention Policy and any CCPS data retention policy. All other
data containing identifiable information on computer files and hard copies will be destroyed upon completion of the research study. Access to all data will be limited to the researcher. Findings from this study may be presented at meetings or published in papers, but names will not ever be used in these presentations or findings.

**Voluntary Participation and Withdrawal**

Your child does not have to participate in this study. If you allow your child to participate in the study he or she may stop participation at any time without reason and without penalty or loss of benefits to which she/he is otherwise entitled. Your child may also choose not to answer particular questions that are asked in the study. If your child leaves the study, you will be given the option of having any data already collected about your child destroyed and not used in the project.

**Questions**

In the future, you may have questions about your child’s participation in this study. If you have any questions, complaints, or concerns about the research, contact:

Student Investigator  
_Tamara Sober_  
School of Education  
_Virginia Commonwealth University_  

Principal Investigator  
_Dr. Gabriel Reich_  
School of Education  
_Virginia Commonwealth University_  

**Consent**

_I have been given the chance to read this consent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My signature says that I agree to allow my child to participate in this study. I will receive a copy of the consent form once I have agreed that my child may participate._

Student’s Name (printed)___________________________________________________

Student’s Signature & date ___________________________________________________

Parent/Guardian’s #1 Name (printed) __________________________________________

Parent/Guardian’s #1 Signature & date __________________________________________

(2nd parent/guardian signature is optional)

Parent/Guardian’s #2 Name (printed) __________________________________________

Parent/Guardian’s #2 Signature & date __________________________________________
Witness to the signature of the student and the student’s parent/guardian (printed name)

Witness to the signature of the student and the student’s parent/guardian (Signature & date) ____________________________

Principal Investigator’s Name (printed) ________________________________________________

Principal Investigator’s Signature & date ______________________________________________

---

19 The Commonwealth of Virginia requires that a witness sign the informed consent document as a witness to the signature of the research subject (but not necessarily a witness to the entire consent process). Retrieved from VCU IRB http://www.research.vcu.edu/human_research/irb_wpp/XI-2.htm on February 28, 2016.

20 The purpose of this signature is to ensure that the principal investigator is aware of who has been enrolled in studies. The principal investigator’s signature date need not correspond to that of subject or witness, but should be provided after both the subject and witness have signed.
Appendix E

Student Assent Form

Research Study on the Economic and Personal Finance Course – Fall 2016

You are invited to volunteer to participate in a study being conducted as a doctoral dissertation by Tamara Sober under the supervision of Dr. Gabriel Reich. This assent form outlines information about the study. If you agree to participate, 1) the parent/guardian consent form, 2) this assent form, and 3) the demographic data form must all be signed and returned to the main office at [_______] High School, by [date]. From the volunteer pool approximately 10 students from the Economic and Personal Finance classes will be selected to participate in the study.

Purpose of the Study

The purpose of this study is to understand the economic thinking that occurs in the high school economics and personal finance course.

Requirements of Participation

Each student will participate in one 20-minute interview in September and one 30-minute interview in October. Digitally recorded interviews will be conducted in a confidential setting at school, before or after normal school hours. In the first interview students will be asked questions about their beliefs and ideology, family and pop culture influences to get a sense of the influences on their economic thinking. In the second interview students will be asked to reflect on their economic thinking in relation to lessons they were taught in their economics and personal finance class. Students will be asked questions such as, “What did you learn?” and “How did the lesson change your thoughts?” Students will be asked to provide samples of their work completed for the economics and personal finance course, such as homework assignments or tests they take in the class. Before the completion of the project, students and parents will have an opportunity to review the
findings of the individual interviews to ensure that meanings developed from the research process accurately reflect the students’ experiences and views.

**Risks, Benefits, and Costs**

The research is not expected to cause any harm or discomfort. Students do not have to talk about subjects they do not want to talk about or answer any questions they do not feel comfortable answering. They may leave the project at any time as explained below under Voluntary Participation and Withdrawal.

A benefit students may receive from participating in this study may be the additional learning that occurs when they explore their own economic thinking during the interviews, and the general experience and knowledge gained from participating in a formal research study. Student participants will be provided a $35 Visa gift card as a thank you for their time and participation. The information we learn in this study may be used to inform future decisions in regards to the policy and practice of high school economics education.

There are no costs for participating in this study other than the time students will spend in the interviews.

**Privacy and Confidentiality**

Potentially identifiable information about participants will consist of this consent form, audio files and transcripts of interviews, researcher field notes, journal entries, and communications with the researcher. A pseudonym will replace participants' names in documented field notes and in all collected data and will not be connected to names on the consent form or other forms containing identifying information. Data are being collected only for research purposes. All electronic data will be kept in password protected computer files on the researcher’s laptop computer. Hard copies of data will be kept in locked filing cabinets at the researcher’s home. Transcripts of interviews will be destroyed after the minimum time required for data retention has been met per the VCU Data Retention Policy and any CCPS data retention policy. All other data containing identifiable information on computer files and hard copies will be destroyed upon completion of the research study. Access to all data will be limited to the researcher. Findings from this study may be presented at meetings or published in papers, but names will not ever be used in these presentations or findings.

**Voluntary Participation and Withdrawal**

You do not have to participate in this study. If you agree to participate in the study you may stop participation at any time without reason and without penalty or loss of benefits to which you are otherwise entitled. You may also choose not to answer particular questions that are asked in the study. If you leave the study, you and your parents will be given the option of having any data already collected about you destroyed and not used in the project.

**Questions**
In the future, you may have questions about your participation in this study. If you have any questions, complaints, or concerns about the research, contact:

Student Investigator  
_Tamara Sober_  
_School of Education_  
_Virginia Commonwealth University_

Principal Investigator  
_Dr. Gabriel Reich_  
_School of Education_  
_Virginia Commonwealth University_

**Assent**

_I have been given the chance to read this assent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My signature says that I agree to participate in this study. I will receive a copy of the assent form once I have agreed to participate._

Student’s Name (printed)_______________________________________________________

Student’s Signature & date _____________________________________________________

Witness to the signature of the student (Signature & date)

Witness to the signature of the student (Name printed)

Principal Investigator’s Name (printed) ______________________________________

Principal Investigator’s Signature & date__________________________________________


___22 The purpose of this signature is to ensure that the principal investigator is aware of who has been enrolled in studies. The principal investigator’s signature date need not correspond to that of subject or witness, but should be provided after both the subject and witness have signed.
Appendix F

Student Demographic Data Form

The data below is being collected because the study will benefit from having as much variation in the student participant sample as possible: males, females, students of all races, and students whose parents have different income levels. Some of the questions are asking about personal information. All information will be kept strictly confidential. You may skip any question you do not wish to answer. Thank you for your participation!

Student’s Name: _______________________________

1. How old are you? _______

2. What is your gender?
   o Female
   o Male

3. With which of the following racial/ethnic categories do you most closely identify?
   o African American
   o White
   o Asian American
   o Latino
   o American Indian or Alaska Native
   o Native Hawaiian or Pacific Islander
   o Other _________

4. What is your best estimate of your family’s annual income?
   o Less than $30,000 a year
   o Between $30,001 and $60,000 a year
   o Between $60,001 and $90,000 a year
   o Between $90,001 and $120,000 a year
   o More than $120,001 a year
Appendix G

Interview Protocols

1st Teacher Interview Protocol
1. Share with me the details of your education and your professional background, how you came to be a teacher, and to work here, and the courses you teach.
2. If you were to meet someone for the first time and they asked you to describe yourself, your likes, interests, dislikes, how you spend your free time, what would you say to them?
3. Describe some of the major influences on your current thinking, beliefs and ideology?
4. Describe childhood memories you recall about how your family approached economics or economic issues.
5. Any childhood memories about personal finance that you recall… that shaped your thinking…
6. How does economics and personal finance relate to your life/family today?
7. What role do you believe you play in the economy?
8. How does the economy affect your community?
9. Apart from the goals of the official curriculum, do you have any personal goals for teaching the economics and personal finance course and if so, describe them.
10. Anything else you’d like to share?

2nd Teacher Interview Protocol
1. What do you believe is the role of economic decision-making in a democracy?
2. What factors do you believe affect income?
3. Why are there rich people and poor people?
4. What is your understanding of how wealth is built?
5. What are the most important reasons for students to learn about economics and personal finance?
6. How would you describe the economics and personal finance course to someone unfamiliar with it?
7. What role do you believe values discussions should play in the Economics and Personal Finance (EPF) course?
8. Where are the opportunities to introduce values discussions into the EPF curriculum and could you provide some examples of the ways you introduce these discussions?
9. Let’s examine a document you used in the classroom and discuss where there may or may not be space for values discussions.
   (See Appendix __ “Financial Literacy in America: Individual Choices, National Consequences” used on 09/09/16)
10. If you could make changes to the EPF course what kind of changes would you make?
11. Should economics and personal finance be taught as a Science or a social Science or both.

*Note, the first and second set of questions were combined for the teacher interview with Daniel Walker.

**1st Student Interview Protocol**

1. If you were to meet someone for the first time and they asked you to describe yourself, your likes, interests, dislikes, how you spend your free time, what would you say to them?
2. Would you describe yourself as an A-B student, B-C student, or a C-D type student?
3. Describe some of the major influences on your current thinking and beliefs? For example, who or what inspires you? These might be pop culture influences, sports heroes, youth pastors, etc.
4. The EPF is a required course… when you entered the class, what did you think you would learn about?
5. Name 2 things you know about economics and personal finance?
6. How does economics and personal finance relate to your life?
   a. Do you receive an allowance? Have a part-time job?
7. How does economics and personal finance affect your family?
8. What role do you play in the economy?
9. How does the economy affect your community? or Can you describe the economics of this community?

**2nd Student Interview Protocol**

1. Why are there rich and poor people in the U.S.?
2. Think back to the EPF class… Was the answer you just provided influenced by being in that course and if so, how?
3. I’ve heard people say right now that the rich are getting richer and the poor are getting poorer. Do you think that’s happening now? Why or why not?
4. What is your understanding of how wealth is built?
5. Has there been a time in the EPF course when values have been brought into the discussion? (Clarify that values discussions relate to what something should be like, for example, how the economy should work or what economic policies are good for certain people).
6. What do you believe is the role of economic decision-making in a democracy?
7. Has there been anything in the EPF course that gave you the idea that you do have a role to influence or shape it like to change it for better or worse?
8. Let’s examine one of your assignments that you completed in class. (Explore if and how values discussions were involved in the assignment. See Appendix __ “Financial Literacy in America: Individual Choices, National Consequences” used on 09/09/16 and Appendix ___ “Frontline: Inside the Meltdown,” homework assignment copied from students’ notebooks.)
9. After approximately five and a half months of instruction in economics and personal finance, how would you describe the course to a student interested in taking it next year.
Appendix H

Virginia Economics and Personal Finance Standards of Learning
Approved: November 17, 2009

Students need a strong foundation in economics and personal finance to function effectively as consumers, workers, savers, investors, entrepreneurs, and active citizens. The Standards of Learning for Economics and Personal Finance present economic concepts that help students interpret the daily news, understand how interdependent the world’s economies are, and anticipate how events will impact their lives. The understanding of how economies and markets operate and how the United States’ economy is interconnected with the global economy, prepares students to be more effective participants in the workplace. On a personal level, students learn that their own human capital (knowledge and skills) is their most valuable resource and that investing in education and training improves the likelihood of their future economic success.

The Standards of Learning for Economics and Personal Finance also help students develop thinking skills that include analyzing real-world situations, economic reasoning, decision making, and problem solving. The topics of economics and personal finance teach that resources are limited; thus, people must make choices that may include substitutions or alternatives. Students practice using a set of tools for analyzing choices of all types, including those related to personal finance. Students learn the benefits of compound interest over time and that poor money management can lead to difficulty in obtaining credit. Students practice weighing costs and benefits of options when making choices about such things as careers, insurance, housing, investments, savings, automobiles and health care. Students practice these skills as they extend their understanding of the essential knowledge defined by the Standards of Learning for Economics and Personal Finance.

EPF.1 The student will demonstrate knowledge of basic economic concepts and structures by
a) describing how consumers, businesses, and government decision makers face scarcity of resources and must make trade-offs and incur opportunity costs;
b) explaining that choices often have long-term unintended consequences;
c) describing how effective decision making requires comparing the additional costs (marginal costs) and additional benefits (marginal benefits);
d) identifying factors of production;
e) comparing the characteristics of market, command, tradition, and mixed economies; and
f) identifying Adam Smith and describing the characteristics of a market economy.

EPF.2 The student will demonstrate knowledge of the role of producers and consumers in a market economy by
a) describing how consumers, producers, workers, savers, investors, and citizens respond to incentives;
b) explaining how businesses respond to consumer sovereignty;
c) identifying the role of entrepreneurs;
d) comparing the costs and benefits of different forms of business organization, including sole proprietorship, partnership, corporation, franchise, and cooperative;
e) describing how costs and revenues affect profit and supply;
f) describing how increased productivity affects costs of production and standard of living;
g) examining how investment in human capital, capital goods, and technology can improve productivity;
h) describing the effects of competition on producers, sellers, and consumers;
i) explaining why monopolies or collusion among sellers reduces competition and raises prices; and
j) illustrating the circular flow of economic activity.

EPF.3 The student will demonstrate knowledge of the price system by
a) examining the laws of supply and demand and the determinants of each;
b) explaining how the interaction of supply and demand determines equilibrium price;
c) describing the elasticity of supply and demand; and
 d) examining the purposes and implications of price ceilings and price floors.

EPF.4 The student will demonstrate knowledge that many factors affect income by
a) examining the market value of a worker’s skills and knowledge;
b) identifying the impact of human capital on production costs;
c) explaining the relationship between a person’s own human capital and the resulting income potential; and

EPF.5 The student will demonstrate knowledge of a nation’s economic goals, including full employment, stable prices, and economic growth by
a) describing economic indicators, such as gross domestic product (GDP), consumer price index (CPI), and unemployment rate;
b) describing the causes and effects of unemployment, inflation, and reduced economic growth;
c) describing the fluctuations of the business cycle; and

d) describing strategies for achieving national economic goals.

EPF.6 The student will demonstrate knowledge of the nation’s financial system by
a) defining the role of money; and
b) explaining the role of financial markets and financial institutions.

EPF.7 The student will demonstrate knowledge of how monetary and fiscal policy influence employment, output, and prices by
a) describing the purpose, structure, and function of the Federal Reserve System;
b) describing government’s role in stabilizing the economy; 
c) describing sources of government revenue; and 
d) explaining balanced budget, deficit, and national debt.

EPF.8 The student will demonstrate knowledge of the role of government in a market economy by 
a) identifying goods and services provided by government to benefit society; 
b) identifying the role the government plays in providing a legal structure to protect property rights and enforce contracts; 
c) providing examples of government regulation of the market; 
d) explaining that governments redistribute wealth; and 
e) explaining that taxes and fees fund all government-provided goods and services.

EPF.9 The student will demonstrate knowledge of the global economy by 
a) explaining that when parties trade voluntarily, all benefit; 
b) distinguishing between absolute and comparative advantage; 
c) distinguishing between trade deficit and trade surplus; 
d) explaining exchange rates, and the impact of a strong dollar and weak dollar on economic decisions; 
e) describing the costs and benefits of trade barriers; 
f) describing the effects of international trade agreements and the World Trade Organization; and 
g) explaining growing economic interdependence.

EPF.10 The student will develop consumer skills by 
a) examining basic economic concepts and their relation to product prices and consumer spending; 
b) examining the effect of supply and demand on wages and prices; 
c) describing the steps in making a purchase decision, including the roles of marginal benefit and marginal cost; 
d) determining the consequences of conspicuous consumption; 
e) describing common types of contracts and the implications of each; 
f) demonstrating comparison-shopping skills; 
g) maintaining a filing system for personal financial records; 
h) examining the impact of advertising and marketing on consumer demand and decision making in the global marketplace; 
i) accessing reliable financial information from a variety of sources; 
j) explaining consumer rights, responsibilities, remedies, and the importance of consumer vigilance; and 
k) examining precautions for protecting identity and other personal information.

EPF.11 The student will demonstrate knowledge of planning for living and leisure expenses by 
a) comparing the costs and benefits of purchasing vs. leasing a vehicle;
b) comparing the advantages and disadvantages of renting vs. purchasing a home;
c) describing the process of renting housing;
d) describing the process of purchasing a home;
e) calculating the cost of utilities, services, maintenance, and other housing expenses; and
f) evaluating discretionary spending decisions.

EPF.12 The student will demonstrate knowledge of banking transactions by
a) comparing the types of financial institutions;
b) examining how financial institutions affect personal financial planning;
c) evaluating services and related costs associated with personal banking;
d) differentiating among types of electronic monetary transactions;
e) preparing all forms necessary for opening and maintaining a checking and a savings account;
f) reconciling bank statements;
g) comparing costs and benefits of online and traditional banking; and
h) explaining how certain historical events have influenced the banking system and other financial institutions.

EPF.13 The student will demonstrate knowledge of credit and loan functions by
a) evaluating the various methods of financing a purchase;
b) analyzing credit card features and their impact on personal financial planning;
c) identifying qualifications needed to obtain credit;
d) identifying basic provisions of credit and loan laws;
e) comparing terms and conditions of various sources of consumer credit;
f) identifying strategies for effective debt management, including sources of assistance;
g) explaining the need for a good credit rating;
h) comparing the costs and conditions of secured and unsecured loans; and
i) comparing the types of voluntary and involuntary bankruptcy and the implications of each.

EPF.14 The student will demonstrate knowledge of the role of insurance in risk management by
a) evaluating insurance as a risk management strategy;
b) distinguishing among the types, costs, and benefits of insurance coverage, including automobile, life, property, health, and professional liability; and
c) explaining the roles of insurance in financial planning.

EPF.15 The student will demonstrate knowledge of income earning and reporting by
a) examining how personal choices about education, training, skill development, and careers impact earnings;
b) differentiating among sources of income;
c) calculating net pay;
d) investigating employee benefits and incentives; and
e) completing a standard W-4 form.

EPF.16 The student will demonstrate knowledge of taxes by
   a) describing the types and purposes of local, state, and federal taxes and the way each is
      levied and used;
   b) exploring how tax structures affect consumers, producers, and business owners
classify differently;
   c) computing local taxes on products and services;
   d) examining potential tax deductions and credits on a tax return;
   e) explaining the content and purpose of a standard W-2 form; and
   f) explaining the similarities and differences between state and federal taxation of
      inheritances.

EPF.17 The student will demonstrate knowledge of personal financial planning by
   a) identifying short-term and long-term personal financial goals;
   b) identifying anticipated and unanticipated income and expenses;
   c) examining components and purposes of a personal net worth statement;
   d) developing a personal budget;
   e) investigating the effects of government actions and economic conditions on personal
      financial planning; and
   f) explaining how economics influences a personal financial plan.

EPF.18 The student will demonstrate knowledge of investment and savings planning by
   a) comparing the impact of simple interest vs. compound interest on savings;
   b) comparing and contrasting investment and savings options;
   c) explaining costs and income sources for investments;
   d) examining the fundamental workings of Social Security and the system's effects on
      retirement planning;
   e) contrasting alternative retirement plans; and
   f) describing how the stock market works.
Appendix I

EPF Resource List

When the school district first offered the EPF course there was no textbook or other formal resources. Teachers were given a jump drive created by the Council for Economic Education. Ms. Morgan created her own materials and eventually a group of teachers created a notebook that the school district copies, binds and distributes to each student in the course. I created the document below, based on the resources Ms. Morgan shared with me, that are provided by the school district to all EPF teachers.

Resources offered/provided by the school division:


About
- “K-12 Critical Skills Courses: Join the 50,000 teachers who are already implementing EverFi courses across the U.S. and Canada. Through our partnerships with private-sector leaders, forward-leaning foundations and non-profits, these online digital courses are available to K-12 schools at no charge.”
- “EverFi™ – Financial Literacy is an engaging, online resource that uses video, animations and interactive activities to bring complex financial concepts to life. The platform contains 9 modules covering a variety of topics, including: Savings, Banking, Credit Cards & Interest Rates, Credit Score, Financing Higher Education, Renting vs. Owning, Taxes & Insurance, Consumer Protection, Investing.”
- Aligned to the Jump$tart Coalition for Personal Financial Literacy National Standards and to the U.S. State Financial Literacy Standards

Financial Backing
- New Enterprise Associates, $11 billion
- Bezos Expeditions is the personal investment company of Jeff Bezos, Founder and CEO of Amazon.com.
- Rethink Education
- Tomorrow Ventures is the investment vehicle for Eric Schmidt, Executive Chairman of Google.
- Evan Williams – Founder and former CEO of Twitter
- Advance Publications, Inc., is a privately held communications company.
- Rethink Impact invests in entrepreneurs, tech platforms, and networks that are ecosystems of change
- Allen & Company is a boutique investment bank.
- War Horse Cities CDC
- Michael Chasen – Founder of Blackboard and Social Radar

**Impact**
EverFi is active in over 20,000 K-12 schools across North America and our courses are used by millions of students every year.

**Use**
Ms. Morgan introduced EverFi to the students on the day they were learning about how wealth is built on 091517. She referenced it as a tool they can use to review. Referenced the “Savings” unit.

---

**Junior Achievement**
Retrieved on 022717 from: https://www.juniorachievement.org

**About**
- “We are the nation's largest organization dedicated to giving young people the knowledge and skills they need to own their economic success, plan for their futures, and make smart academic and economic choices. Junior Achievement's programs—in the core content areas of work readiness, entrepreneurship and financial literacy—ignite the spark in young people to experience and realize the opportunities and realities of work and life in the 21st century.”
- Website provides detailed grid of specific correlations between JA Programs and Virginia’s EPF Standards, Common Core Standards and CEE Economics Standards, CEE Financial Literacy Standards, NCSS Curriculum Standards – High School, Jump$tart Coalition for Personal Financial Literacy National Standards (and more)…

**Financial Backing**
- $2,500 – $4,999,999:
  CrossKnowledge, the distance learning partner of Wiley, Inc. (content, online library)
- $1,000,000 – $2,4999,999:
  American Honda Finance Corporation
  The Hartford Financial Services Group, Inc.
  HSBC Bank USA, N.A. and HSBC Holdings plc
  Junior Achievement of Georgia, Inc.
  Junior Achievement of Southeast Texas, Inc.
- $250,00 – $499,999
  American Express Foundation
  Citi Foundation
  Emerson
ManpowerGroup

Impact
Junior Achievement USA reaches more than 4.8 million students per year in 209,651 classrooms and after-school locations. JA programs are taught by volunteers in inner cities, suburbs, and rural areas throughout the United States, by 109 Area Offices in all 50 states.

Use
I did not observe Ms. Morgan using Junior Achievement materials.

---

Gen i Revolution
Retrieved on 02/17/17 from http://www.genirevolution.org/

About
- “The Gen i Revolution consists of sixteen interactive missions in which students complete a variety of activities to help them learn important personal finance concepts. Within each mission, students are introduced to a character who is facing a particular financial crisis. As a part of the Gen i Revolution, the student learns about the crisis, strategically selects “Operatives”, and then completes activities with the ultimate goal of solving the mission.
- “The competitive nature as well as the engaging activities provides a motivating learning environment for students. Combined with the Learning, Earning and Investing® print materials, the Gen i Revolution provides a comprehensive investor education program that your students will love.”
- Aligned with the Council for Economic Education’s standards. All missions are aligned to CEE’s National Standards for Financial Literacy
- Gen i Revolution aligns to the topics on the W!SE Financial Literacy Certification Test. (per http://councilforeconed.org/resources/gen-i-revolution/)

Financial Backing
- Product of the Council for Economic Education

Impact
“Gen i Revolution has been used by more than 225,000 students nationwide, with meaningful results. Students who used Gen i and LEI have demonstrated statistically significant gains in knowledge of, comfort with, and attitudes toward personal finance concepts. When compared to a control group, students’ knowledge increase was 65% greater when using Gen i, and students’ changes in attitude were also positive – 92% of student responses reflected a positive change, compared to only 8% for a control group.”

Use
- Ex. Mission 1 “Building Wealth Over the Long-Term”
- Ex. Mission 2 “Investing in Human Capital: Job Choice”
- Ex. Mission 3 “Investing in Human Capital: Education”
W!SE Financial Literacy Certification Test and Test Prep Materials

- **About**
  “Working In Support of Education (W!SE) is an educational 501(c)3 nonprofit dedicated to improving lives by developing financial literacy and readiness for college and the workplace. Our initiatives are built on five pillars: relevance, real-world experiences, strong partnerships, volunteerism and assessment. We strive to reach low- to moderate-income communities across the country.”

- **64% or higher is passing**

---

**Financial Backing**

- **Founders**
  AIG
  Allstate
  Ameriprise Financial
  Bank of America
  Bloomberg
  Citi
  Citi
  Columbus
  Credit Suisse
  Deloitte
  EY
  Ernst & Young
  Europes
  FedEx
  GE Capital
  HSBC
  JPMorgan Chase
  KPMG
  M&T Bank
  Morgan Stanley
  Naat
  New York
  Northrop Grumman
  PNC Bank
  Pfizer
  Prudential
  Raytheon
  RSA
  State Farm
  TD Bank
  United Healthcare
  USAA
  Wachovia
  Wells Fargo
  Xerox

**Impact**

- **National, not listed**
• State: When the state passed legislation mandating the EPF Course as a high school graduation requirement the W!SE Test was one of several assessment options, but was listed as the recommended option by the state for end of course assessment.

Use
• Jackson School District: “Beginning with students who entered 9 grade for the 1st time in 2013-2014, Standard Diploma students must earn a Career and Technical Education credential in order to graduate. As a ‘safety net’ for ALL diploma requirements, the school division requires all students enrolled in Economics and Personal Finance to sit for the W!SE test. Students who pass the test are exempt from their final exam. Since W!SE testing is a county-wide requirement, much like SOL testing, all hands should be on deck” (W!SE Financial Literacy Certification: A Remediation Guide for the Jackson County Public Schools’ Economics and Personal Finance Teachers, Spring 2016 Testing Season, p. 3)

• Ms. Morgan and Mr. Walker held periodic review sessions during and outside class to prepare students for the W!SE Test.

Sample Review Questions and Answers

From the “Investing - Practice Questions”
16. Matthew and Alicia just had a baby. They received money as baby gifts and want to put it away for the baby's college tuition. Which of the following has the lowest potential growth rate over the next 18 years?

   a. Savings accounts
   b. Certificates of deposit
   c. U.S. government savings bonds
   d. Common stocks

Correct Answer: a.
Reason: Stocks have the highest potential growth rate and the highest risk of loss. Savings accounts have low interest rates and the lowest potential growth rate. Both savings and checking accounts are safe because they are FDIC insured up to $100,000 per individual at one institution. Bonds have a much lower potential growth rate than stocks, and there is less risk that the bondholder will not receive the bonds face value on maturity date.

From the “Interest Cost of Money - Practice Questions”
9. The "Rule of 72" is an easy way to:

   a. Approximate your savings balance each year
   b. Calculate how fast your savings will double in value at given interest rates
   c. Calculate how much tax you will owe on the interest earned
   d. Calculate the length of time it takes to pay off a credit balance
Correct Answer: b.
Reason: The Rule of 72 is a formula to approximate the time it will take for a given amount of money to double at a given compound interest rate. The formula is 72 divided by the interest rate earned. In a little over seven years, $100 will double at a compound annual rate of 10 percent (72/10 = 7.2 years).
Appendix J
Welcome to the Millionaire Game

Welcome to the Millionaire Game

Answer each question "TRUE" or "FALSE". For each correct answer, you will receive 5 points. For each incorrect answer, you will lose 5 points. For any FIVE questions, you may hold up the "MILLIONAIRE" sheet with your answer. If you answer correctly, you will receive 10 points. If you answer incorrectly, you will lose 10 points.

1. Most millionaires are college graduates.
2. Most millionaires work fewer than 40 hours a week.
3. More than half of all millionaires never receive money from a trust fund, estate, or inheritance.
4. More millionaires have American Express Gold Cards than a Sears store credit card.
5. More millionaires drive Fords than Cadillacs.
6. Most millionaires work in glamorous jobs, such as sports, entertainment or high tech jobs.
7. Most millionaires work for big Fortune 500 companies.
8. Many people become millionaires by winning the lottery.
9. College graduates earn about 65% more than high school graduates earn.
10. Most millionaires do not manage their money; instead they rely on personal accountants.
11. Day traders usually beat the stock market and many of them become millionaires.
12. If you want to be a millionaire, avoid the risky stock market.
13. Millionaires have to borrow money to make money so they tend to carry a balance on their credit cards.
14. If you save $2000 a year from age 22 to age 65 at 8% annual interest, your savings will be $700,000 at age 65.
15. Single people are more often millionaires than married people.
1. What happened to make the firm Bear Stearns go out of business?

2. What are credit default swaps? What role did they play in the meltdown?

3. What is the Federal Reserve Bank? What role did it play when Bear Stearns was in financial trouble?

4. What is the Treasury Department? What role did it play with Bear Stearns' financial troubles?

5. Why did the federal government take over Fannie Mae and Freddie Mac?

6. Secretary Paulson decided not to guarantee a government loan for Lehman Brothers as he had for Bear Stearns with the JPMorgan takeover. What happened as a result of that decision?
7. Why did the government give AIG a loan of $85 billion after refusing to loan money for the Lehman Brothers acquisition?

8. The last scene in the film shows the leaders of the largest banks being told by Henry Paulson that they would have to accept government capital injections (money). What was the rationale for that decision?

9. Should there be laws to restrict the value of houses people buy and the amount of leverage used to buy the house? What is the problem with having such laws in a free market?
Appendix L
Budgeting and Money Management Notes

Budgeting and Money Management: Notes

A budget is a plan for ____________________ and ____________________

In order to reach your financial goals, they need to be SMART:
S
M
A
R
T

Short Term:
Intermediate:
Long term:

Your budget is based on your personal income.

Your income is the total of your ________________ ___________________ : from

If you are not single, it is usually based on your __________________ income with your spouse or partner.

Your goal should be a ____________________ ____________________

A budget is balanced when ____________________ and ____________________ are even.

If you spend more than you make, you have a ____________________

If you make more than you spend, you have a ____________________

Disposable income:

Discretionary income:
Needs:

Wants:

Every budget has different categories:

Fixed expenses:

Variable expenses:

Periodic expenses:

What if your budget plan shows a deficit right away? What options do you have?

Reduce ________________________________ spending first (sorry, cable).

Increase ________________________________ (hello, second job).

A budget is a plan for now and later. It pays to be

Realistic:

Responsible:

Restained:

Remember opportunity cost?

Life is about trade-offs:

Step 1: Track your expenses for 1-2 months to see what you really make and spend

Step 2: Divide your expenses into needs and wants, fixed and variable.

Step 3: Determine what is in and what is out based on your SMART goals. You shouldn’t be in deficit!
Did you pay yourself first?

Do you have an emergency fund?

At least __________ months, more if you have a family to support. LIFE HAPPENS!!

You don't have a __________________ unless you can say yes to both of these items.

You are not ready to __________________ unless you are doing both of these things.

How is "wealth" determined?

____________________________ minus ________________________________

An asset is:

A liability is:

List 3 factors that influence a person's financial plan:

List 3 strategies that are useful for managing your money:

In general, when is it most important to develop a financial plan?
Appendix M
Financial Literacy in America: Individual Choices, National Consequences

As the national financial system becomes increasingly complex, there is evidence that the burden is too much for most
Americans, especially low-income and disadvantaged individuals. Savings rates are down. The level of personal bankruptcies
is up. Research shows that a large percentage of people of all ages, incomes, and education levels lack the basic financial
knowledge and skills to ensure long-term stability for themselves and their families.

1. True / False: Savings are up in America.

2. True / False: Personal bankruptcies have increased in America.


For many Americans, talking about money is at least as uncomfortable as discussing sex. A recent Charles Schwab
study found that most parents felt better prepared to give their teens advice on the "birds and the bees" than on
investing.

3. True / False: Parents would rather talk to their kids about sex than about money.

Alarmed by the fact that foreclosures are up 57 percent over last year, consumer credit card debt is increasing at an annual
rate of 6 percent, and Americans' savings will replace less than 60 percent of their income on average after retirement, public-
and private-sector groups have launched a flurry of programs aimed at promoting financial education. Part of the problem is
that the financial systems that consumers navigate have become so complex.

4. List three things that alarm public- and private-sector groups, causing them to create financial education
programs.

For Genette Brooks, 30, the ease with which she could take out credit cards as a college student eventually put her
$20,000 in debt. "I didn't know what I was getting into," says Brooks, who graduated with a degree in human resources
management and lives in Buffalo. A big reason for the debt, she says, was that no one had ever taught her how credit
cards work or how to use them. She says she didn't realize that a zero percent introductory rate could later balloon to
30 percent or that making only the minimum payments can lead to a rapid pileup of debt.

5. What two mistakes did Genette Brooks make that led to her high credit card debt? Read all the way to the end of
the paragraph...the mistakes are at the end.
   a. zero percent introductory rate could later balloon
eb. making only minimum payments can lead to rapid pileup

The Roots of Financial Literacy
Many people assume that financial literacy is a modern issue. But financial education was more common in many American
schools in the early 20th century than it is today. A textbook called Hamilton's Essentials of Mathematics, published in 1917
and 1920, written for students in grades two through eight, explained simple financial concepts such as earning money, paying
bills, establishing cash and savings accounts, paying taxes, purchasing insurance, and understanding the federal budget.

True / False: Financial literacy was not studied in American schools until recently.
Over the years, these topics vanished from school as the nation became increasingly focused on consuming rather than saving. Long-term planning evolved into the tradition of the three-legged stool for retirement: Social Security, pensions, and personal savings. With two of those legs getting more unsteady by the year in the new century, the third—savings—has assumed a growing, critical significance. With the overall rate of savings dropping to dangerously low levels in recent years, this “stool” is in jeopardy of collapsing entirely.

7. Over the years, what has the nation become increasingly focused on, instead of saving?

8. What were the three “legs” of the traditional “stool” for retirement?

The Specter of Debt
Over the last three decades, the massive growth in debt has been a major element of the changing financial environment.

- Sixty percent of American households carry over some portion of their credit card debt every month. The average balance is more than $4,000.\footnote{See Reference}
- Twenty percent of families with an annual income below $50,000 spend close to half of their net income on debt payments.\footnote{See Reference}
- More than three-fourths of college undergraduate students have credit cards, most have multiple cards with an average total balance of $2,748. Ninety-five percent of college graduate students have cards; each has an average of four cards with an average total balance of $4,776.

9. What fraction of undergraduate students have credit cards?

According to USNWR’s “Financial Literacy Crisis,” educating teens may be the answer:

Research shows that young adults who are financially literate tend to be the children of college graduates. Parents play an important role in teaching their kids about money. Many parents shy away from discussing personal finance with their teens, often because they falsely believe the teens aren’t interested in learning about it. In fact, 60 percent of teenage respondents cited learning about money management as a top priority.

10. True / False: The research shows that parents don’t have much of an impact on knowledge of financial matters, and that kids don’t care about it anyway.
Appendix N
Budgeting and Money Management Vocabulary List

Budget: a plan for saving and spending

Short term goal: your expenses now: monthly expenses (rent, car payment, etc.)

Intermediate goal: your expenses annually: within a year or two (vacation)

Long term goal: your expenses in the future (kids college fund, retirement account)

Personal income: Your income is the total of your total earnings: from a job, investments, etc.
  • If you are not single, it is usually based on your combined income with your spouse or partner.

Balanced budget: when income and expenses meet

Deficit: when expenses exceed income

Surplus: when income exceeds expenses

Disposable income: the amount of money you make after taxes are taken out. This is your “take home” pay you can use to pay bills, etc.

Discretionary Income: surplus in your budget after you have paid for all of your NEEDS

Needs: things you need to survive (food, clothing, shelter)

Wants: things you would like to have but can live without (more cell phone data, eating out at a restaurant)

Fixed expense: expense that is the same every billing period (rent, car payment, etc.)

Variable expense: expense that changes from billing period to billing period (water bill, electric bill, etc.)

3 R’s of budgeting (list and define): Realistic (you’re not going to buy a new car right now), Responsible (you don’t need a new car anyway), Restrained (not spending too much now pays off later)

Opportunity cost: the thing you give up when making a choice

Trade offs: weighing the costs and benefits of different options before making a choice.

Pay yourself first: have money directly sent to a savings account from your paycheck, or do this yourself the minute you get paid

Emergency fund: enough money to live on for 3-6 months if you are unable to earn your usual income

Net Worth: Assets minus liabilities

Liability: Debt (money you owe, that you are legally responsible to repay)
**Asset**: Property owned that is worth value, can be used to repay debts

**Equity**: The value or worth of what you own
Vita

Tamara L. Sober was born April 26, 1966, in Hopewell, Virginia and is an American citizen. She graduated from Hopewell High School in 1984, received a Bachelor of Science in 1988 in Political Science from Florida State University in 1988, and a Master of Science in Educational Theory and Practice from Florida State University in 1995. She began her career as high school government and economics teacher in Chesterfield County, Virginia, was employed by the Virginia Education Association for over twelve years holding the positions of Assistant Director of Government Relations and Assistant Director of the Office of Teaching and Learning and is currently on staff at the Virginia Commonwealth University School of Education’s Center for Teacher Leadership. Selected publications include: Teaching about economics and moneyed interests in 21st century democracy (2017). Atmospheric Change: A VCU study offers some wise ideas for boosting teacher morale, a key factor in student achievement (2017). Teacher Agency, Resistance, and Risk: The Case of Richmond Teachers for Social Justice (2013). Taxation, Economic Development and Funding for Public Schools: Lessons for Members and Citizens (2009). Teaching Economics As if People Mattered (2007).