INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®

NOTE TO USERS

Page(s) not included in the original manuscript are unavailable from the author or university. The manuscript was microfilmed as received.

176-184

This reproduction is the best copy available.

UMI

ECONOMICS IN EVERYDAY LIFE: INTEGRATING ECONOMICS INSTRUCTION INTO THE MIDDLE SCHOOL CURRICULUM

A Thesis

Presented to

The Faculty of Pacific Lutheran University

In the Partial Fulfillment

Of the Requirements for the Degree

Master of Arts

In Education

By

Christopher A. Coovert, MA

August 2000

Bell & Howell Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

ACCEPTED BY CHAIRPERSON

Louette McGraw 8/17/00

Louette McGraw, Chairperson date

RECEIVED FOR THE SCHOOL OF EDUCATION

Lynn G. Beck 8/21/00

Lynn G. Beck, Dean date

RECEIVED FOR PACIFIC LUTHERAN UNIVERSITY

Paul T. Menzel 8-21-00

Paul T. Menzel, date
Provost and Dean of Graduate Studies

ECONOMICS IN EVERYDAY LIFE: INTEGRATING ECONOMICS INSTRUCTION INTO THE MIDDLE SCHOOL CURRICULUM

AN ABSTRACT

By

Christopher A. Coovert, MA

Pacific Lutheran University, 2000

Chairperson: Louette McGraw

This thesis investigates methods of teaching economic concepts to middle school and junior high students from the perspective of a student teacher in an eighth grade U.S. History Classroom. It chronicles his experiences during a two-week economics unit, which attempted to relate economic topics to students' lives. The thesis examines the events of the two weeks and looks for evidence of student learning and engagement, while also considering the success or failure of unit objectives. Finally, it asks, "How should economics be integrated into the social studies curriculum?" The author finds that students learn most successfully when the content relates to their everyday lives, but that they often have difficulty applying the knowledge to more abstract situations.

ACKNOWLEDGEMENTS

I could not have completed this thesis without the help and support of many people. I would like to thank Tim Paulsen for giving me the freedom I needed to undertake this project, Louette McGraw for pushing the right buttons to motivate me and Kristin Faubion for putting up with all the late night writing sessions. I would also like to thank Lisa Kreiger, Desi Evans, Tom Edwards, Don Wentworth, my parents and all my cohorts for their support over the course of the past school year. Finally, and most importantly, I need to thank my students. Without them none of this would be possible.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

I always enjoyed observing Mrs. Smith's seventh grade social studies class. Her teaching was organized, informative, and engaging. She cared about students and worked hard to make learning as fun as possible. She also went out of her way to include me in what the class was doing. The focus of the seventh grade social studies curriculum at Alan Junior High is Eastern Hemisphere history and geography. Most of the curriculum centers on the history textbook, but Mrs. Smith tries to incorporate lessons on current events in the eastern hemisphere into her units to make the material seem more relevant to her students.

"Class," Mrs. Smith told the students, "today we are going to start a currents event project. Each group will find an article in the newspaper about an event relating to the Eastern Hemisphere. I will assign each group a different topic." The students were already sitting in groups of four, so the class did not have to spend any extra time getting into

groups. I took newspapers around the class and gave four or five to each group. Mrs. Smith was lucky enough to have a classroom set of the local daily newspaper delivered several times a week. There was no shortage of material for the students to examine.

She moved through the classroom, giving each group of students a different topic. "Group one, you need to find an article about medicine," she said. History, sports, the environment and the military were assigned in order to the next four groups. Finally, she came to group six. "You need to find an article dealing with the economy."

Curious to see what type of articles the final group would look for, I walked over to them. Immediately, Mandy, a girl I knew well from another class, turned to me and asked, "What's the economy?"

It took me a moment to collect my thoughts and explain the basic definition of economy to Mandy and the other girls in her group. I had to find a way to explain it in terms that they could relate to. "The economy is the way we buy and sell things," I said.

"Is it, like, money?" Mandy asked.

"Yes, basically it is the way we use money. So you should look for articles that relate to people buying and selling or some other way that money is being used."

"Okay," the girls said, as they busily got to work.

"I kind of thought the economy was something to do with money," Mandy admitted. "I just wasn't sure."

I nodded. "You were right, but it's good that you asked. Good luck!" (field notes, November 11, 2000).

As I moved on to see how some of the other groups were doing, I pondered the exchange. I have to admit I was a little surprised that they had almost no idea what economy means, but I should not have been. Traditionally, economics has not been part of the primary and middle school curriculum in most school districts. Students usually do not get any economics instruction until high school, and some never receive any training in economics at all (Walsted & Rebeck, 2000).

I first developed a serious interest in economics my freshman year in college. I entered Pacific Lutheran University planning on majoring in Political Science. I decided to take the introductory course in microeconomics because I thought it might enhance my understanding of political issues, which it did. More importantly, I found economics to be exciting on its own. The concepts I learned in that first class explained many mysteries that had always troubled me, and I found that I enjoyed the logical order of the principles of economics. As I continued in school and took more classes, I began to wonder why economics was not a greater part of the curriculum in my hometown school district. The middle school I attended included one quarter of economics in the eighth grade social studies curriculum, but my high school did not offer anything except the occasional mention of the economy in history classes. There was an economics course in the catalog, but it was never offered.

As I learned more, I also noticed that the general population seems to lack understanding of many

of the most basic economic principles. It seemed like most people did not really seem to understand how the market sets prices. For instance, there is widespread belief that product prices are determined by the cost of making the product and how much profit the seller wants to make. The reality is that prices are determined by what people are willing to pay and the availability of the product. A national survey conducted by the Federal Reserve Board of Minnesota (1998) confirmed some of my suspicions. It found that most Americans struggled to answer questions about six basic economic concepts. The average score of the adults who were asked 13 multiple-choice questions was 45 percent. According to David S. Dahl (1998), the respondents actually did slightly better than those on a similar survey conducted in 1992 by the National Council on Economic Education and The Gallup Organization. Still, the score shows that most people lack understanding of key economic concepts that affect their life everyday because "to function in

society, people should be economically literate" (Dahl, 1998, p. 8).

When I graduated from Pacific Lutheran University with a bachelor's degree in Economics and Political Science, I thought my future would be spent as an economics professor at the university level. It took only two months in a university economics Ph.D. program for me to realize I was wrong. My idea of economics was not spending all day working through endless math problems. I missed the excitement I had felt as an undergraduate. As much as I wanted to share that excitement with new generations of university students, I knew that I would not make it through four years of a graduate program I did not enjoy. When I left the university, I had little idea where the road would take me. I drifted into the business world and found it unfulfilling. Eventually, I realized that younger students deserved to learn the principles of economics just as much as college students. In fact, there is probably more need for qualified economics educators in the public school system than anywhere

else. That realization led me back to school and to this project.

The treatment of economics by public schools in the United States in uneven. The amount of economics instruction students receive in school varies from state to state, district to district, and even school to school. William Walsted and Ken Rebeck (2000) found that about 44 percent of students take a specific economics course during high school using data from a 1994 study of high school transcripts. In comparison, 95 percent took an American History course, 72 percent took western civilization of world history and 78 percent took a semester long course in government or civics. What the study does not tell us is whether the students are receiving economics instruction in other social studies courses. The authors admit, "Of course, some economics can be infused in courses in government, business, or other subjects, but these may not be good substitutes for the content coverage and analysis found in a traditional economics course" (p. 101). The study did not include data on how much

economics students are exposed to at the middle school level, but according to Nancy Gallavan and Judy Davis (1999) economics is not part of the traditional middle school core curriculum.

A 1987 study sponsored by the National Council of Economics Education found that only 58 percent of school districts were mandated by states to teach economics, while 35 percent follow additional local mandates (Highsmith, 1990). Incredibly, in 1987, 59 percent of the states did not have any specific economics requirements for public schools. The states that did require coverage of economic topics usually either mandated a single, semester-long course at the high school level or the inclusion of some economics in other high school courses. It was rarely mandated at lower levels. Robert Highsmith (1990) found that students in mandated districts tend to score better on standardized tests than students in districts which are not mandated to teach economics.

Some might wonder why should public schools teach economics. After all, research shows that many

students are graduating from high school with serious deficiencies in their reading, writing and math skills. Should not schools address these problems before worrying about economics? According to John Cogan, the answer is no. "Historically, education for citizenship has been a primary rational, whether spoken or inferred, for public education in the United States" (1996, p. 21). Students need preparation in basic economic theory so they can determine the difference between good and bad economic policy. According to Watts (1998), "It is more than plausible that improving the economic literacy of those who vote can strengthen the position of elected and appointed officials who work for good economic policies, and against bad ones" (p. 56). Paul Heyne, who I had the opportunity to work with at the University of Washington, explained the contribution of economics to citizenship education as well, "The principles of economics make sense out of buzzing confusion. They clarify, systematize, and correct the daily assertions of newspapers, political figures, ax grinders, and

barroom pontiffs" (Morton & Reinke, 1990, p. 84). Heyne's assessment hits the target. When students become voters, they will have to sort through the economic claims of politicians and pundits on an almost daily basis.

Economics has additional value to students on a more individual level according to Todd Bucholz (1998):

> Real life is about economics. It is about finding a job, surviving a recession, battling inflation, saving for retirement, and investing in a mutual fund or playing the stock market. … We are all bounced around by seemingly abstract forces with names like "supply," "demand" and "productivity"—it helps to know which ways you are about to bounce. (p. 18)

Students do not need to wait to use this type of knowledge. Middle school students are already beginning to make decisions about how to spend money. "Personal finance should be the 'hook' that gets students to consider broader economic principles," according to Arthur Rolnick, senior vice president and director of research at the Minneapolis Federal Reserve (Fettig, 1999, p. 9).

Evidence suggests that students exposed to economics in school will have a greater understanding of complex economic and political issues as adults. Walstad and Rebeck (2000) found that respondents to the 1998 Federal Reserve Board survey "were more likely to give correct answers to each test questions than those without an economic education" (p. 19). While college courses made a larger impact, they "found that both the high school course in economics and the college course in economics have significant effects on economic understanding after controlling for other factors" (p. 20).

While education did make a difference in respondent success, "the level of economic understanding for the group with an economics course was not impressive" (p. 22). As a group, those with some economic education answered about half the questions correctly. "It indicates that many adults who have taken an economics course still lack an understanding of basic economics. It also suggests

economics education needs to be improved if we are to increase economic literacy in the United States" (p. 22).

There are signs that improvements in economic education are beginning to take place. Washington State approved new Essential Academic Learning Requirements in 1998 that include economics. "The Essential Academic Learning Requirements in the four goal areas form a common core of subjects and skills that all students in Washington will be expected to master" (Washington Commission on Student Learning, p. 3). The Washington Commission on Student Learning, which created the standards, is a group of legislators, educators and parents "directed by the Legislature to carry out the primary goals of the state's educational reform act" (p. 4). There is only one Essential Learning in economics. "The student understands basic economic concepts and analyzes the effect of economic systems on individuals, groups, and society" (1998, p. 103). It is broad enough to encompass the most important economics principles,

while allowing for the inevitable changes in the field. The Washington Commission on Student Learning breaks down the economics essential learnings further into benchmarks for the primary, middle and upper grades (see Appendix A). Other states are adding new academic requirements that include economics as well (Walsted & Rebeck, 2000).

The new middle and grade school benchmarks will require schools to teach economics to students before they reach high school. "Some may think that economics is too difficult a subject to be taught to children and youth, and that such instruction should wait until college. Nothing could be more incorrect. No one would even think of making such an argument for math and science education. Waiting until students are in college to teach economics is simply a matter of 'too little and too late" (Walsted, 1998, p. 26). Gallavan and Davis (1999) suggest that "well-developed practical economics content" should by integrated into the middle school social studies curriculum (p. 343).

Including economics in the essential learnings, however, is just the first step in the process of adding economics to middle school curriculums. Many social studies teachers have little experience with economic topics and are not sure how to integrate economics with history, geography and the other social science they already teach (Salemi, 1998, p. 43). In informal interviews, several teachers said they would like to include more economics in their classrooms but feared they did not have the training to do so (field notes, December 3, 2000).

The literature suggests that we need to find the best means of teaching economics to middle school students. This problem can be examined further through three more specific research questions. First, what economic content should we teach in a middle school economics curriculum? Second, how should we integrate economics content into the social studies curriculum? Finally, what instructional methods should we use to create engaging and effective economics lessons for middle school students?

This qualitative study will address these questions by examining the way one class of eighth graders reacted to a two-week economics unit. The unit was created to address the Washington State Essential Learnings in Economics and, more specifically, the middle level benchmarks (see Appendix A). It was then taught over a two-week period as part of a United States History course. While the dedicated economics portion of the class lasted only two weeks, economic topics were discussed in conjunction with history topics for the final ten weeks of the semester. Students also continued to participate in a stock market simulation game, which they began during the initial two-week period. Hopefully, examining these questions will improve my own understanding of teaching economics and social studies.

CHAPTER 2

LITERATURE REVIEW

There are few examples of complete middle level economics curriculums. The way economics is taught in public schools varies widely from state to state and district to district and districts that require economics generally include it in the high school curriculum (Walstad & Rebeck, 2000). Many districts only include it as a small part of a larger social studies curriculum. This often means that it is up to individual teachers to decide whether economics actually gets taught. Still, there are resources available for those who want to implement economics into middle school social studies curriculums. Most resources are available in the form of individual lessons or supplementary material that relates economics lessons to history. Many of these resources directly relate to the national standards created by the National Council on Economics Education (Gallavan & Davis, 1999). While these resources are an important source of lesson ideas and material, they do not

provide an underlying framework for teaching economics within a history or social studies class.

The development of any curriculum needs to start with the identification of learning objectives. The Washington State Essential Learning Goals (1998) and National Council on Economics Education voluntary content standards (1994) are two good places for us to start looking for these objectives. Second, we need to determine the general structure of the curriculum. The current trend in social studies is toward greater integration of the individual disciplines such as history, geography, and economics, although not everyone agrees that integration is desirable (Schneider, 1993). Third, we need to find engaging methods of teaching the basic principles of economics to students. There is a wide variety of literature dealing with engaging methods of teaching social studies that is pertinent to this discussion. The final step in curriculum planning is searching for and identifying useful resources on the Internet, in

books, and in journals that can help us create engaging lessons.

With these four steps in mind, I examined the state and national standards for teaching economics as well as the broader social studies standards created by the National Council for the Social Studies. Next, I looked at the debate surrounding social studies integration, before moving on to examine methods of engaging students in the social sciences. Finally, I examined a variety of practical resources for economics education.

Standards

The Washington State Essential Learnings contain only one learning requirement in economics. "The student understands the basic economic concepts and analyzes the effect of economic systems on individuals, groups, and society" (1998, p. 103). The standard is quite broad, so it is broken down into five essential understandings. The student will:

1. Comprehend key economic concepts and economic systems

2. Observe major forms of business and related careers comparing requirements and benefits of various careers.
3. Understand the monetary system of the U.S. and how individuals' economic choices involve costs and consequences
4. Examine how government policies influence the economy and understand the theoretical background of taxes
5. Examine the importance of international trade. (pp. 105-106)

Each of the five standards has benchmarks for students in primary, middle and high school (see Appendix A). For example, there are three middle level benchmarks for 1.1. The first asks students to "give and explain examples of ways that economic systems structure choices about how goods and services are to be produced and distributed" (p.105). The second asks them to "describe the role that supply, demand, prices, incentives, and profits play in determining what is produced and distributed in a competitive market system" (p.105). The final benchmark calls for students to "identify and analyze the three basic types of economic systems" (p.105).

The Office of the Superintendent of Public Instruction has not assigned specific grade levels to

the benchmarks at this time. These five standards and their middle level benchmarks provide a foundation for a middle school economics curriculum. Ideally, students would cover some economics each year through integration with other social studies topics. Considering the breadth of social studies subject in the EALRs, this seems to be the most likely way of providing coverage of all the topics.

The National Council on Economics Education (NCEE) (1997) has generated more detailed voluntary national standards. The Council's 20 content standards are divided into benchmarks for fourth, eighth and twelfth grade and contain specific tasks that students should be able to complete at each level (see Appendix A). The National Council's standards focus on the principles of economics, excluding the business-related concepts included in the Washington essential learning. The standards provide more detail than their state counterparts and give more specific information about what the standards mean. The benchmarks are divided into two parts. The first part specifies what

students will understand. The second explains how they should be able to use the knowledge they have gained.

The NCEE's first content standard provides a good example of middle school benchmarks. The first contents standard says, "Students will understand that productive resources are limited. Therefore, people cannot have all the goods and services want; as a result, they must choose some thing and give up others" (NCEE, 1997, p. 1). Since this is the first benchmark, the NCEE expects that it will be heavily emphasized at the grade school level, so there are 12 benchmarks for grade 4, five for grade eight and one for grade 12. Eighth grade benchmark one states, "Scarcity is the condition of not being able to have all of the goods and services one wants. It exists because human wants for goods and services exceed the quantity of goods and services that can be produced using all available resources" (p. 2). The fourth is, "The choices people make have both present and future consequences" (p. 2). These benchmarks are more specific than the Washington State EALRs. On one hand,

this could be useful to teachers seeking more specific learning objectives, but on the other hand the sheer number of benchmarks could be overwhelming to some.

The national standards were created by the NCEE after economics was included in the Goals 2000 Educate America act of 1994 (Siegfried & Meszaros, 1998). A variety of organizations including the National Association of Economics Educators, the Foundation for Teaching Economics and the American Economic Association's Committee on Economic Education participated in the creation process (Siegfried & Meszaros, 1998). According to Siegfried and Meszaros (1998) the standards are meant to be generic principles and not specific applications so states can base their specific standards around local economic interests. The twenty concepts are meant to be the essential learning necessary for "citizenship, employment, and/or life-long learning of economics" (p. 143). The standards were also meant to reflect consensus and the best work in the discipline of economics. This led to omission of many macroeconomic

principles and a failure to present both sides of some contested issues (Siegfried & Meszaros, 1998).

Conrad criticized the economics standards for ignoring "opportunities to teach history, social studies, geography, and civics" (1998, p. 168). While the 20 standards do a good job of covering most of the basic principles of economics, they include little discussion of how economics relates to the other disciplines of social studies. This is problematic because "voluntary standards in economics will not be widely adopted unless they can be integrated into the traditional elementary and secondary school curricula, which is already quite crowded" (p. 167). This, ultimately, is the problem of the national standards, there is little possibility that any K-12 curriculum could cover every benchmark of every standard. In fairness, the Voluntary Standards created for the Geography, History and Civics have tended to ignore the other social sciences as well. It would be very difficult for any K-12 social studies curriculum to cover every standard in all four disciplines. Buckles

and Watts (1998) found that the standards for each of these disciplines ignore opportunities to integrate principles of economics. They concluded that more cooperation would be needed to reduce the competition for classroom time that currently exists among the various social sciences. While the NCEE standards cannot be followed exactly, they are a useful resource for teachers seeking greater understanding of the Washington (or other) State EALRS.

The National Council for the Social Studies has taken a different approach to social studies standards. Instead of creating individual standards for each individual discipline, the National Council created ten thematic strands in social studies designed to encompass all of the social sciences. The standards are designed to:

1. serve as a framework for K-12 social studies program design through the use of ten thematic strands

2. serve as a guide for curriculum decisions by providing performance expectations regarding knowledge, processes, and attitudes essential for all students; and

3. provide examples of classroom practice to guide teachers in designing instruction to help students meet performance expectations. (NCSS, 1994, available online: www.socialstudies.org/standards/toc.html)

Several of the strands relate directly or indirectly to economics, but strand seven, "Production, distribution, and Consumption," attempts to answer the most basic questions of economics.

> People have wants that often exceed the limited resources available to them. As a result, a variety of ways have been invented to decide upon answers to four fundamental questions: What is to be produced? How is production to be organized? How are goods and services to be distributed? What is the most effective allocation of the factors of production (land, labor, capital, and management)? (NCSS, 1994, available online: www.socialstudies.org/standards/2.7.html)

In reality, this is theme is not as integrated as many of the other strands. The NCSS even admits, "In schools, this theme typically appears in units and courses dealing with concepts, principles, and issues drawn from the discipline of economics" (available online: www.socialstudies.org/standards/2.7.html). Economic topics could also be covered as part of most of the other strands, especially: 5.Individuals,

groups and Institutions; 6. Power, Authority, and Governance; 7. Science, Technology, and Society; and 10. Civic Ideals and Practices.

There are several advantages of taking an integrated approach to standards. First, it helps to prevent the inevitable competition for instructional time between disciplines. The individual subject area standards tend to include more information than can realistically be covered in schools, which will likely just leave curriculum planners frustrated. Second, the thematic standards provide a framework that can be supplemented by the individual subject area standards. "The social studies standards address the overall curriculum design and the comprehensive student performance expectations of a program of excellence, while the individual sets of discipline standards provide enhanced content detail to ensure quality instructional programs" (NCSS, 1990, available online: www.socialstudies.org/standards/1.4.html). Finally, the integrated standards help teachers to see cross-discipline connections, which are rarely pointed out

by the more specific standards. "Thus the two lines of effort to develop standards may be viewed as complementary rather than competitive, with the NCSS standards providing the broader, unifying perspective that will help to foster integration" (Schneider, 1993, p. 35).

The NCSS standards also avoid prescribing a detailed universal curriculum. Instead, the student performance standards "are broadly drawn so that while they set expectations, they also permit flexibility at the state and local levels" (Schneider, 1993, p. 36). This is encouraging because the standards allow for state and local concerns to be met and for very real regional differences in the Unites States to be addressed.

Integration

Any discussion of integration must begin with John Dewey. Dewey (1938) provides one simple rule for the organization of subject matter in school, "Anything which can be called a study, whether arithmetic, history, geography, or one of the natural

sciences, must be derived from materials which at the outset fall within the scope of ordinary life-experience" (p. 73). The arbitrary distinctions that schools have traditionally used to determine curriculum lead to educational experiences that do not relate to the students' own lives. This leads to "miseducative" experiences and student detachment from the educational process. Dewey blames the traditional method of breaking up subject matter for the difficulty students often have recalling information after a class is over. Knowledge "was segregated when it was acquired and hence is so disconnected from the rest of experience that is not available under the actual conditions of life" (p. 48). A curriculum organized around experiences would be integrated by necessity. Dewey avoids prescribing specific curriculum for all schools. "A single course of study for all progressive schools is out of the question; it would mean abandoning the fundamental principle of connection with life-experiences" (p. 78). But if life

experiences are used as a starting point, curriculum integration will be necessary.

Dewey provides a strong argument for integrating the curriculum based on the student's experiences, but integration in the Social Studies still requires a thematic center. Benjamin Barber builds on Dewey's work. He argues, "The fundamental task of education in a democracy is the apprenticeship of liberty-learning to be free" (1992, p. 4). For Barber, this means learning what it means to be a member of a democratic society. Social studies courses should be organized in a way that prepares students to understand the complex political, economic, and social issues that they will deal with as adults. This requires not only that students learn the basic facts of history and government, but also that they learn how to think. "The challenge in a democracy is to transform every child into an apt pupil, and give every pupil the chance to become an autonomous, thinking person and a deliberative, self-governing citizen; that is to say, to achieve excellence" (p. 12).

According to Stern (1998) a social studies curriculum designed to prepare students to participate in democracy would certainly include the principles of economics, along with history, civics, geography, legal studies and other social sciences. "You cannot understand politics and other social sciences—in other words—how the world works without understanding economics. And you cannot make an informed choice when you walk into the voting booth" (p. 2). Students need to learn the basic ideas of the disciplines as well as how to apply them to societal problems. Teaching economic principles has the added effect of helping students learn critical thinking skills because critical thinking is an important part of understanding economics (Morton & Reinke, 1990).

The National Council for the Social Studies also emphasizes education for citizenship. The NCSS official definition of the social studies, adopted in 1992 states:

> Social studies is 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, as well as appropriate content from the humanities, mathematics, and natural sciences. The primary purpose of social studies is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. (1994, available online: www.socialstudies.org/standards/1.1.html)

This definition conforms to Barber's ideas by grounding the study of the social studies in preparation for citizenship. In fact the NCCS goes further. "Two main characteristics, however, distinguish social studies as a field of study: it is designed to promote civic competence; and it is integrative, incorporating many fields of endeavor" (available online: www.socialstudies.org/standards/1.1.html). In a sense, it seems the NCSS is saying that the various social sciences should always be taught in an integrated fashion, and that it is not natural to do otherwise. However, they clarify that there is a place for teaching specific disciplines. "It is important for students in social studies

programs to begin to understand, appreciate, and apply knowledge, processes, and attitudes from academic disciplines. But even such discipline-based learning draws simultaneously from several disciplines in clarifying specific concepts" (available online: www.socialstudies.org/standards/1.1.html).

It is easy to see the logic behind this statement. History cannot be understood without some discussion of the political and economic institutions of the time period being studied. Civics cannot be understood without historical perspective on political institutions and customs. Understanding economics requires an understanding of history, civics, and some sociology. All of the social sciences require background knowledge in geography. The NCSS is simply affirming what is obvious to most of us: the social sciences are interrelated subjects. It is natural to group them together around common themes in schools.

The NCSS also draws on Dewey, calling for social studies programs that draw on real experiences and current academic trends.

> The more accurately the K-12 social studies program addresses the contemporary conditions of real life and of academic scholarship, the more likely such a program is to help students develop a deeper understanding of how to know, how to apply what they know, and how to participate in building a future. (NCCS, 1994, available online: www.socialstudies.org/standards/1.1.html)

The commitment to relate curriculum to student experiences is welcome because students often have a hard time relating to traditional social studies curriculum. Students often complain that history and other social science classes are boring because they do not relate to their own lives (Scheurman, 1998). In many ways, the success of integration depends as much on relating the curriculum to students as it does on the integration itself.

Critics challenge several claims of the NCSS and other proponents of integration. Schug and Cross (1998) outline eight myths of curriculum integration, although not all of them are relevant to this discussion. First, they argue that curriculum integration is not supported by empirical research, as most supporters of integration contend. Instead, they argue that "numerous studies reveal support for

discipline-based learning. In civics, for example, student achievement is related to the number of government courses taken, the organization of the curriculum, and the amount of time spent in the classroom and on doing homework" (1998, p. 54). Schug and Walsted found similar results in a 1991 study on economics education. The evidence, however, does not really prove that separate subject area classes are more desirable, only that students with extensive backgrounds in a single subject matter score better on tests than those with less background in the subject. This is a logical outcome, but it does not prove anything unless we assume that an integrated curriculum will inevitably expose students to less information about each discipline--an assumption that seems ludicrous.

The authors' fourth myth is that integration leads to more time for all subjects.

> Our experience is that the opposite is true. When integration is done, it is accomplished by using the content and skills with which the teachers are most familiar. At the elementary level, this means that integration is often accomplished within reading and language arts. It is rarely

> accomplished in science and social studies. The result is that, despite, the best of intentions, important areas of curriculum are left out or underrepresented in the school day. (Schug & Walsted, 1998, p.55)

A closer inspection of this argument, however, finds that there is no evidence that integration is responsible for the exclusion of certain subjects from the curriculum, only that teachers are struggling to utilize integration techniques correctly. The solution may not be abandoning integration; it may be providing more training.

The fifth myth, that integration leads to better curriculum planning, is closely tied to the fourth. Schug and Cross contend that we will never know if this is true because the costs of finding out are too high. "Curriculum integration makes it difficult to know what is being taught and learned" (1998, p. 55). Again, this not an argument against integration. Integration certainly requires good curriculum planning, whether it is better than planning in a discipline based system is irrelevant.

One of the main arguments for integration is that the world is not organized into neat categories, but the authors contend that this too is a myth. "Many people work in specialized fields in which information may be changing, but many of the tools for problem solving are based in knowledge and skills derived from discipline-based knowledge" (1998, p. 56). Still, they admit that "at some basic level" the argument that the world is not divided into disciplines is true (p. 56). The truth is that no matter how specialized a career field might be, it will still require the application of other less specific fields. More importantly, it seems likely that most students will never work in highly specialized fields. Again, the authors make a valid point without making a compelling argument against integration.

Ultimately, Schug and Cross bring up several concerns about integration within the social studies that educators should keep in mind, but they do not make a compelling case against integration. "Meaningful curriculum integration requires a large

investment in staff development and planning," the authors conclude (1998, p. 56). The question I would ask them is what curriculum development does not require this investment? Most of the criticisms they lob at integration are really criticisms of the broader educational system. Still, some of the criticisms do highlight issues that provide direction for the development of integrated curriculum. Planning is crucial to integration, and integration should not be done for the sake of integration. There are times when it is natural to teach non-integrated lessons, just like there are times when not integrating would be silly. Within the social sciences, connections between subjects are natural and usually apparent.

The key to addressing the concerns of critics might be finding an underlying theme to social studies education. Barber's (1992) education for citizenship is one valid theme. Tranter and Gibson (1998) provide an alternate "humanities" approach. "We assert that a humanities approach goes beyond organization of curriculum content by attempting to capture the

essence of human experience; past, present and future" (p. 121). Like, the education for citizenship approach, a humanities approach to social studies education seeks to prepare students for citizenship, but the focus is on "global citizenship." It is easy to see how these two objectives could be combined to create a powerful social studies curriculum that includes economics.

Engagement

One of the greatest challenges of social studies education is finding ways to engage students. Too often, students report that they do not like social studies classes; they complain of uninteresting subject matter that does not relate to their own lives (Newmann, G., & Scheurman, G, 1998). As Dewey (1938) explained, when students cannot relate experiences to their own lives, they experience little real learning. Students are telling us that they are not prepared to participate in civil life when they leave school. Two studies released in the early 1990s indicated that eighteen to thirty year-olds were less prepared to

take part in civic life than past generations (Cogan, 1997). "Many of the young people interviewed cited their poor civics education as a primary reason for their apathy. They simply do not see any connections between the social studies content courses they take in school and the issues in the world in which they live" (p. 33). What can be done to develop a more engaging, relevant social studies curriculum that includes economics?

First and foremost, students must be able to relate the content of social studies courses to their own lives. Dewey (1938) tells us that we must follow two principles while designing educative experiences: the principle of continuity and the principle of interaction. "The principle of continuity in its educational application means, nevertheless, that the future has to be taken into account at every stage of the educational process" (p. 47). In many social studies classrooms this is not happening. Students are simply being taught the facts of history, with little or no discussion about what it means to them today.

The principle of Interaction means simply, "that experience does not occur in a vacuum." (p. 40) Students live in the world. They are curious about what they see in their homes, on the streets and in the media. When curriculum is related to the other information students are interacting with it becomes more relevant.

In the case of economics, the way the subject is framed will contribute to student interest. Morton and Reinke (1990) suggest that economics courses should be preparing students for citizenship. The process of learning to be a citizen is as much about learning to think as it is about learning a set group of facts. "Learning about the economy or becoming economically literate is as much a process as it is the acquisition of factual material. In fact, teachers should use economic content as the foundation for teaching students to think and to choose" (p. 86). This means avoiding traditional methods of teaching social studies, such as textbooks and vocabulary worksheets. The goal should not be filling the students' minds

with as much information as possible; it should be helping them distinguish the important from the unimportant. "Reading and talking about what was should give way to reading and talking about what is and what ought to be" (1990, p. 86).

Scheurman (1998) suggests that teachers who teach social studies, especially history, as one long list of facts "may be contributing to many students' perception of social studies as the least interesting, most irrelevant subject in the school curriculum" (p. 9). He offers constructivist teaching techniques as one part of the solution to the problem. At the most basic level, this means that techniques should be utilized which allow students to create their own understandings of the social sciences. Instead of lecturing about the law of supply and demand, a teacher could facilitate an activity that helped the students derive the law for themselves. Piaget's work found that children understood best when they made their own discoveries (Duckworth, 1996). "Piaget's emphasis is that we have to do the work ourselves,

making the connections, even if people take pains to point out to us connections they have been able to make" (p. 18). This statement has profound implication for economics and social studies educators. In the past, lecture and reading the textbook have been the two most common instructional techniques in social studies (Morton & Reinke, 1990, p. 86). Neither of these methods is likely to help students create their own understandings.

Piaget's theory of cognitive constructivism is closely related to the ideas of social constructivism, which originated with Vygotsky. "Accepting Piaget's view of how individuals build private understandings of reality through problem solving with others, Vygostsky further explained how social or cultural contexts contribute to a public understandings of objects and events" (Scheurman, 1998, p. 8). Vygotsky's work emphasized the social context of learning:

> The social context molds cognitive processes, while it is also part of the developmental process. Social context means the entire social milieu, that is, everything in the child's

> environment that has either been directly or indirectly influenced by the culture. (Bodrova & Leong, 1996, p. 9)

In the classroom, this means that educators need to be aware of the environments that are influencing students both in and out of school. Social constructivism offers two other suggestions for teachers according to Scheurman:

> First, what teachers have traditionally viewed as errors in student thinking should be understood as misconceptions that both indicate a student's readiness to learn and offer an entry point for teachers to provide scaffolding for that learning. Second, students should have frequent opportunities to interact with peers and more experienced people" (1998, p. 8).

Social studies educators should utilize group work and group discussion to gain the cognitive benefits of social interaction.

Constructivist techniques offer part of the solution to social studies educators looking for ways to engage students through real learning experiences, but it is important that constructivist, student-centered techniques are employed with care. "Although students exposed to these 'student-centered' techniques often display greater enthusiasm than those

in more conventional 'teacher-centered' classrooms, this is no guarantee that quality learning is taking place" (Newmann & Scheurman, 1998, p. 23). It is easy to develop interesting activities, but it is much more difficult to ensure that the students will learn from the activities. Newmann and Sheurman offer three criteria for "authentic intellectual achievement," which can be applied to constructivist style teaching techniques. First, students should be able to construct knowledge in such a way that it can be thoughtfully applied, not merely reproduced. Second, the constructed knowledge must be based in disciplined inquiry. "Disciplined inquiry includes a command of the facts, vocabulary, concepts and theories used in a domain" (1998, p. 24). It is crucial that the knowledge students construct corresponds with the accepted assumptions in the field. Finally, the knowledge should have value beyond school. Objective exams and other contrived activities often have little value outside of the classroom. "It is our contention that the cry of 'relevant' or 'student-centered'

curriculum is, in many cases, an imprecise expression of the desire for student accomplishments to possess authentic value beyond low-level measures of competence in a subject" (p. 25).

One advantage of following these principles is that they respond to many of the criticisms commonly voiced against constructivist classrooms. Critics often complain that constructivism is too chaotic and does not provide the means to teach widely accepted principles of social sciences, mathematics and science. Quality curriculum development will allow students to construct their own ideas, while keeping them on a course set out by the instructor. It will help students develop knowledge that will be useful to them outside of school, and it will provide opportunities for students to work together in a social context. When combined with Dewey's philosophy of experience, constructivist ideas provide a powerful framework for creating an engaging curriculum.

Like the other social sciences, economics has gained a reputation as an uninteresting subject.

Wentworth and Western (1990) recommend that teachers employ inquiry tasks as a means of creating engaging economics lessons. "The high school economics course should not aim to teach a heavy load of content—of what economists know" (1990, p. 78). There is no reason to fill student's minds with endless economic facts. "Instead the high school course should focus on three tasks: it should teach economics background knowledge, focus sharply on principles that organize instruction and practice with those principles in tasks of inquiry and reasoning" (p. 78). Economic principles can be applied to explain a variety of real life situations that students might not be able to explain easily. Allowing students to use economic reasoning to solve mysteries in everyday life is one excellent way of getting them interested in economics. Wentworth and Western suggest several assumptions that can be used in this way including: scarcity forces people to choose; people choose purposefully among alternatives; producers and consumers respond in predictable ways to incentives; and the consequences

of choice lie in the future. For example, students could be asked why teacher's salaries are lower than those of professional baseball players. They could then discuss the relevant economic principles in groups in order to find an answer to the problem. The inquiry model of economics is closely related to the constructivist ideas of Piaget and Vygotsky. Economics as a discipline, in fact, is well suited for allowing students to construct their own knowledge.

This approach to economics education requires careful planning and the use of a variety of different activities. Learning as a process suggests that "teachers should use case studies, problem-solving activities, mysteries, simulations, discussions, group activity, peer instruction, interviews, field trips, guest speakers, debates, current events, position papers, speeches, and newspapers" (Morton & Reinke, 1990, p. 86). Hands on activities dealing with current issues will generally be interesting to students. One example of this approach is "Rationing Kidney Transplants: An Ethical Problem" (Morton & Reinke,

1990). This example forces students to examine the issue of distributing kidneys to transplant hopefuls, and then make their own decisions during discussion of a hypothetical situation.

Finally, economics instruction should be current. It does little good to provide activities dealing with issues that were important before the students were born. "Good economics instruction requires insight, imagination, and the ability to show the relevance of economics to current issues" (Reinke, Gilliard, & Morton, 1990, p. 93). This means that teachers need to keep up with current economics trends and the issues that interest students. The Internet makes this easier than it has ever been in the past, according to Weiser and Schug (1999). "Good teachers have always tried to demonstrate to their students the important connections between classroom activity and the 'real world' of work, family, and civic responsibility. Now, many teachers are using the timely information on the Internet to demonstrate and dramatize those connections" (p. 69). Teachers are also finding that

using the Internet as a teaching tool increases student motivation. "Internet investigations are driven by the student using his/her intelligence, experience, and imagination to acquire knowledge and build connections. We regard this type of learning as highly active" (p. 69). Teachers looking for ways of developing engaging economics lessons should not overlook the Internet and other technology resources.

Most of the literature dealing with economics methods is constructed in a broad fashion. There is little specific research on teaching economics to middle level students, and most of the more specific literature deals with high school students. Peltz, Powers and Wycoff, however, emphasize the importance of helping middle school students understand "what economics is and their role in a world economy" (1994, p. 23). They suggest teaching "world economics" as part of a larger interdisciplinary unit. The proposed unit builds on constructivist ideas, using hands-on activities to help students construct their own connections. The author lists several activities

appropriate for economics instruction at the middle level including a trip to the grocery store, inviting a speaker to explain the currency exchange system to the class and creating a simulated exchange in class, and stock market jeopardy.

Any of these activities could be quite engaging and valuable, although there is the potential for misuse. A trip to the grocery store will only be valuable if students have an idea as to why they are going and what they are looking for. The teacher will have to act as a facilitator and leader to help them learn about the economy and business from the trip. The other activities require similar scaffolding. Still, the authors are on the right track. Their World Economics unit is based on constructivist principles and seeks to relate the ideas to the students' lives.

It should be clear that creating a social studies curriculum that will engage middle level students is possible. The ideal curriculum will avoid excessive jargon, emphasize thinking over memorization, and, most importantly, relate to the students' lives. The

last requirement cannot be emphasized enough, and luckily for us, it is the easiest one to fill. As Dawson (1975) tells us, relating economic problems to students' lives is easy.

> For example, let us take the problem of inflation. Why would a teen-ager be interested in the issue? Because one's own level of living can diminish as a result of it. The average teenager has a voracious appetite for such things as popular recordings, clothes, hamburgers, drive-in movies, bicycles, and automobiles…. Rising prices may mean that he or she will enjoy fewer of those things wanted. (1975, 72)

While inflation may not be the hot topic it was in 1975, there are still many important economic issues that directly relate to middle level students. Identifying these issues is one of the keys to creating an effective, engaging curriculum.

Curriculum Resources

The NCEE provides a wide variety of curriculum resources for all levels of education. The advantage of these publications is they are all specifically related to the NCEE standards. A good place to start is the Voluntary National Content Standards in Economics. The 1997 publication includes a complete

list of the national standards, along with the benchmarks for each grade. More importantly, it includes a listing of lessons in other NCEE publications that can be used to meet each standard. United States History: Eyes on the Economy (1995) presents a series of mysteries in U.S. history that students can use economic reasoning to understand. The lessons are not grade level specific and can easily be adapted for any middle or high school level classes. These lessons provide good explanations for historical events, but they do not provide the initial instruction in economic reasoning that students might need before they solve the mysteries provided in the lessons. This two-volume set, however, would be useful to history teachers who want to incorporate more economic ideas in their lessons.

The NCEE's World History: Focus on Economics (1996) provides world history lessons with an economic perspective. The lessons are focused around two questions. Why do some economies grow and prosper while others remain stagnant or decline? What causes

people to make choices that help or hinder economic growth? These lessons are useful for helping students to understand these basic economic concepts in the context of various world history events. Again, however, they are not designed to teach the initial economic concepts that students will need to understand before they can see the connections to history.

Recent articles have also suggested that economic reasoning can be used to teach alternative approaches to current environmental problems. Wentworth, Schug and Morton (1997) observe that the best way to protect endangered species might be to provide incentives to protect them, instead of penalties for not protecting them. Schug and Shaw (1997) then apply these ideas in a specific lesson plan about saving endangered wolves in Yellowstone and Elephants in Africa. Anderson and Wentworth (1997) take a similar approach to water consumption, questioning the wisdom of policies that subsidize water use. They provide background for educators on the issue, as well as specific teaching

activities. Many of the suggested activities do an excellent job of engaging students and demonstrating concepts in an understandable way. Both of these lessons provide strong links between economics and current events, although neither relates specifically to history. Most importantly, students are likely to be interested in the lessons. Environmental protection is a hot topic, and most students probably have a prior understanding of some environmental issues. These lessons would be easy to relate to the student's lives.

Many useful curriculum resources can be found online. The NCSS provides a variety of Internet resources for social studies teachers in Surfing the Social Studies (1999). The economics chapter gives suggestions on how the Internet may be utilized by teachers and lists several useful sights for economics educators. The authors also provide sample-teaching activities that will help students find and use economic resources online. This book is a useful starting point for teachers looking to incorporate the

Internet into their teaching or for those looking for online resources they can adapt to a more traditional setting.

The NCEE provides a variety of resources at its Web site Economics America, www.economicsamerica.org. The site contains the content standards and resources for implementing them as well as the basic information about the NCEE, but its most useful feature is a collection of online lesson plans. There are only a few specifically designed for middle school, but many of the high school lessons can be adapted for grades 6-8. The lessons can be sorted by grade level, concept, title, and standard. The sorting feature is especially useful for teachers looking for lessons to teach a specific concept or essential learning. This database is a very good resource for teachers looking to add economics lessons to their classes for the first time. Many of the lessons have links to civics, geography and other social sciences and could be adapted into a larger curriculum. The NCEE site also contains a catalog of publications available to

teachers seeking sources of economics curriculum and a list of links to other economics education sites.

The Foundation for Teaching Economics provides another general-purpose economics resource Web site at www.fte.org. The site provides information on FTE programs, an extensive bulletin board that teachers can use to share ideas and resources with one another, and another excellent collection of lessons plans and lesson plan resources, which can be used either in their entirety or as the starting point for developing new lessons. The lesson plan section is divided into several different sections, but it is not searchable like the Economics America Collection. The first group of lessons, called "award winners," contains material submitted by teachers from around the country. Most are aimed at high school students but could easily be adapted for the middle grades. Most of these lessons employ group work, simulation or other active learning techniques. As a whole they are engaging and pedagogically sound. One of my favorite lessons, submitted by Roland Lewin (2000), explains how to set

up a classroom economy, which can be used to demonstrate key concepts throughout the entire semester.

The second group of lesson plans is based on the curriculum of the Economics for Leaders summer program sponsored by the FTE. These lesson plans are organized in a coherent, linear fashion, and take students through all of the NCEE voluntary content standards. Each lesson lists the content standards addressed, the lesson objectives, and the basic outline of the lesson. The lessons provide a variety of discussion and simulation ideas instead of prescribing only one way for teaching the lesson. The advantage of these lessons is that they actually cover all the topics involved in the national standards. The disadvantage is that they set a very quick pace, which would have to be slowed considerably for middle level students. Still, as a starting point for curriculum development they could be very helpful.

The final group of lessons at www.fte.org relate to the FTE's Economic Forces in American History

program. This program seeks to help American History teachers understand and teach students about the economic factors involved in history. Instead of providing complete lessons plans, this section provides information that could be useful to a teacher developing a history lesson plan. For instance, "The Rise of Big Government in the 20th Century" (2000) provides a loose outline on the development of big government. Next it provides a list of "connections to economics." Finally, it provides a brief description of the economic way of thinking, "The nature of the system of incentives within the electoral process is such that, as government grows, it becomes increasingly responsive to the demands of special interest groups, often at the expense of the general public" (2000, section 4). The information in the EFIAH section is important because it helps link economics and history together. This will be one of the main tasks of social studies teachers who want to apply an integrated approach to the social studies.

The Stock Market game, located at www.SMG2000.org, is one of the most popular online economics teaching tools. The site provides a stock market simulation that allows students to buy and sell stocks online. The game is designed for teachers to use as a teaching tool with their classes, so the organization also provides a variety of curriculum materials, including complete lesson plans. Some of the material is online, but the bulk of it is contained in publications that can be ordered for a fee. The lesson plans are designed to meet the national content standards, so they could easily be adapted to meet state EALRS as well. One of the advantages of using the Stock Market as a teaching tool is that it can be used to teach a wide variety of economic concepts. An entire economics curriculum could probably be structured around the stock market game. One downside to this site is that classes must pay to participate. Another is that it is only practical in classrooms that have access to a number of computers connected to the Internet on at least a

weekly basis. Still, there are resources available on the Stock Market game site that could be useful, even if the class is not participating in the complete official simulation.

One of the best features of the stock market simulation is that is adaptable to many grade levels. Cox suggests that middle school teachers "use the game to motivate students to do more sophisticated research and to keep accurate records of their team's transactions" (1997, p. 350). The stock market provides an excellent means of getting students interested in basic economics, but it is also provides means for integration. The study of current events should be an important part of middle level social studies. The stock market game encourages students to follow the news. "The Stock Market Games encourages students to follow those events from the vantage point of how those events are affecting their own personal investments in the game, instead of from a position of being unaffected by those events" (Cox, 1997, p. 348). The Stock Market game also provides opportunities to

integrate math, English and other social studies with economics.

It would not be possible for me to review an exhaustive list of economics resources here. Instead, I have chosen some of the most accessible, innovative and utilitarian to help find a starting place and foundation for curriculum development. While there will always be a place for textbooks and other print resources, it is amazing how much is already available online. Less than ten years ago, many teachers had probably not even heard of the World Wide Web. As support for economics education continues to grow, I expect that the Web will become an even more important tool between economics teachers who might be the only economics "expert" in their building or district. As this happens, the sites provided by organizations like the NCEE and the FTE will become even more useful. Right now, they are the best starting points for exploring economics education resources on the World Wide Web. Both sites contain long lists of useful links in addition to their own extensive resources.

CHAPTER 3

CONCEPTUAL FRAMEWORK

The conceptual framework for this study was grounded in two complementary pedagogical theories. Dewey's (1938) theory of experience and education provided the initial foundation for my examination of curriculum. The constructivist theories of learning advanced by Piaget (1970), Vygotsky (1986), Brown (1999), or, at the most basic level, the idea that "individuals discover, or construct, their own unique intelligences" (Brown, 1999, p. 327), added a psychological perspective to the framework. The entire curriculum development and implementation process was guided by the idea that students need to relate to the curriculum (Dewey, 1938) and that students should be given opportunities to construct their own knowledge (Brown, 1999).

Research Questions

The literature suggests that economics education in the United States needs improvement (Dahl, 1998), and the new Washington State Essential Academic

Learning Requirements (Washington State Commission on Student Learning, 1998) require economics to be taught at the middle school level. Economics, however, is not a traditional part of the core middle school curriculum (Peltz, Powers & Wycoff, 1994), so middle school teachers are looking for new effective techniques of adding economic instruction to middle school social studies. This need is the essence of this study's underlying research question: what are the best methods of teaching economic concepts to middle school age students?

An initial examination of the literature suggested three more specific research questions that can be used to answer to better understand the underlying questions. First, what economics content should I teach to middle school students? Second, how should I integrate economics content into the social studies curriculum? And third, what instructional methods should I use to teach economic content?

This study was designed to investigate the three research questions in a logical, internally consistent

manner. The research design started with the underlying question, broke that question into the three research question, and then pursued three distinct, but interrelated research strands. Each strand looked at the pertinent literature to the individual question, then used the literature as a basis for designing the curriculum and assessing the results of the curriculums implementation in the classroom (see figure 1).

The inquiry for the first question, what economic content should be taught to middle school students began with a review of the pertinent standards. The Washington State Essential Learning Requirements (1998), Voluntary National Content Standards in Economics (1997), and National Council for the Social Studies (1994) each provided lists of economic topics that should be taught at the middle school level. These three lists of standards suggested a variety of economic topics that could be taught to young people. The standards were used as the primary basis for developing objectives for the two-week economic unit,

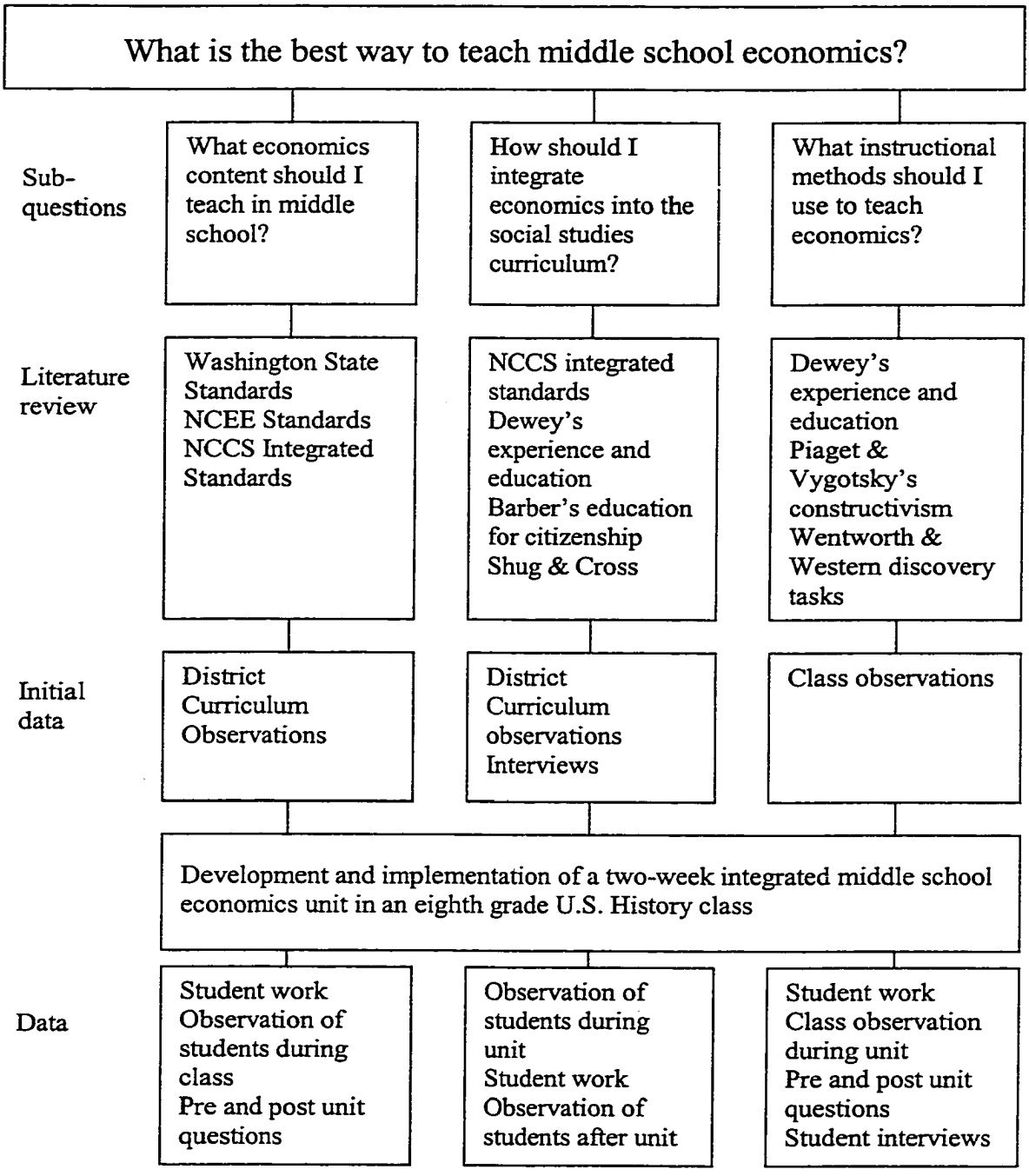


Figure 1: The conceptual framework of this study combines three strands of inquiry.

but there was no way that every National Content Standard or even every sub topic of the Washington State EALRs could be covered in two-weeks. Initial data collection in the schools was used to further narrow the objectives. Observations of the students during class provided information on what topics would most interest students, and a pre-test helped gauge what they already knew and most wanted to know about economics.

During the two-week unit, observations of class sessions and student work provided the primary data for analyzing, first, whether the objectives were met, and second, whether they were pedagogically sound. At times, this meant that unit objectives had to be revised, but the primary emphasis was on examining unit outcomes.

Inquiry into the second question, how should economics content be integrated into the middle school social studies curriculum, began with a review of the most pertinent literature on integration in schools and the social studies. Dewey (1938), the NCCSS

(1994), and Barber (1992) make a strong case for integrating the curriculum thematically to prepare students for citizenship. The literature guided curriculum development and provided a filter for analysis of curriculum implementation. Shug and Cross' (1998) concerns about social studies integration were also kept in mind during the development of the unit. Most of the individual lessons integrated other academic content with lessons on economics (see Appendix B). Moreover, education for citizenship was an always implicit, and sometimes explicit, goal of the entire unit.

During the two-week unit, student work and observation of the class provided the primary feedback on the success or failure of the integration. Students' writing assignments, group discussions and final tests (see Appendix C) were analyzed in search of understanding or lack thereof, of integrated lessons. Student behavior and comments during the two weeks were also monitored to determine if the students were engaged or confused by integration.

The final question, What are the best methods of teaching economic concepts to middle school students, proved to be the most complex because there are really two parts to effectiveness. First, the students must learn the objective, and second, the students must become interested in the subject matter. Certainly, the two outcomes are interrelated (Dewey, 1938), but it seems important to find lessons that accomplished both goals.

Dewey (1938) argued that students will not learn well if they cannot relate the material to their own lives. Duckworth (1996) and Brown (1999) argue that students should be allowed to construct their own knowledge. These two ideas guided the planning process as I attempted to design engaging lessons to teach unit objectives. Much of the literature concerning economics pedagogy specifically, also builds on constructivist principles to create more specific lesson ideas. This made it possible to incorporate their ideas as well.

As with the first two questions, the most important data gathered during the unit came in the form of class observations and student work. Writing assignments and tests provided the clearest indication of how well the students understood key concepts. The class response to lessons and activities was carefully watched in order to see how interested students were in the subject matter. At times, students were also interviewed informally to find out what they thought about the unit. Finally, several questions on the final unit test asked the students for their opinion on the unit.

CHAPTER 4

METHODS AND PROCEDURES

Methodology

The study was conducted using qualitative inquiry. By taking a qualitative approach I was best able to best address the issues central to evaluating and implementing an economics curriculum. Realistically, there was no other method that I could have utilized for the study. It is not quantitative in nature. There was no way to study test results or the effects of various techniques in laboratory conditions. By taking a qualitative approach I was able to best evaluate the existing social studies curriculum, implement my own methods of teaching economics and evaluate the result. The qualitative approach also allowed me to incorporate new foci that emerged as I began to implement the new curriculum.

Elliot Eisner (1991) outlined six key features of qualitative inquiry. This study incorporates all six features. First, qualitative inquiry must be field focused. This study was based in the classroom and the

larger envelope of the school and district. It could not have been conducted outside of the classroom. The only way to find out how students would react to new curriculum was to actually expose them to it. At the same time, I conducted my study within the framework of the district and state curriculum guidelines. This gives it real world relevance to other teachers who will have to deal with rules and procedures if they attempt to implement their own economics curriculum.

The second feature of qualitative inquiry is that the self is an instrument in the study. "The self is the instrument that engages the situation and makes sense of it" (p. 34). In this case, I was teaching the class and directly working with the students as they progressed through the curriculum. My own ideas and values served as a filter for the entire research process. It necessarily follows that the study has an interpretive nature. I did not merely catalog a series of events in the classroom. Instead, I looked for meaning in the actions of my students. My interpretations were based on my own experiences and

knowledge of current education theory. "Qualitative inquiry penetrates the surface" (p. 35), Eisner tells us, and my study has gone beyond surface analysis in order to find the best ways of implementing an economics curriculum.

Rather than taking on the role of a detached researcher, I have assumed the position as an active participant in the learning process. In reality, I am both a researcher and subject in this study. This close involvement in the study allowed me to write with expressive, descriptive language. The implementation and development of the curriculum is presented as a story. This makes it accessible to all audiences and helps convey a sense of what really happened in the classroom. This type of language and participation allowed me to pay close attention to particulars, Eisner's fifth element of qualitative inquiry. Rather than treating the students as nameless, faceless numbers, I treated each as a unique individual, paying attention to their thoughts and

feelings. In order to provide this detail I paid close attention to what happened in the classroom.

Finally, Eisner tells us that a successful study will exhibit coherence, insight and instrumental utility. In this case the entire process was ordered. I progressed through the various steps of curriculum development, into implementation and finally analysis. It provides insight through its attention to detail and has utility because it addresses a situation that a large number of social studies teachers will be facing over the next few years. While this study does not provide a ready-to-implement curriculum, it does provide information about how students learn economics.

Procedures

Before I could begin to develop specific economics lessons, I had to first study the social studies curriculum used by my school district and mentor teacher. The official district curriculum for eighth grade U.S. history includes only history, geography, and civics topics. The primary focus is the

history of the United States from settlement by Native Americans through the Civil War. Although it also includes civics content related to the Constitution and U.S. geography content.

Still, I needed to study what was actually being taught at Allen. This was done primarily through daily observations of my mentor teacher from September through December. As I observed the class I examined his teaching methods and the subject matter of the class, as well as student reaction to various lessons, assignments and activities. I employed a two column field note approach to record first what happened in the class, and second, my own reaction to the day's events. This allowed me to faithfully record what happened, while still keeping track of my own thoughts on what was happening in class. At times, I also participated in class activities and projects. These opportunities gave me a chance to note the results of my own interactions with the students and to see how my relationship with the students was different than that of my mentor teacher. The observations of the

class resumed in February, but after three weeks I took over the class for the remainder of the school year.

At times, I also observed four other social studies teachers in the building. This allowed me to see alternate methods of teaching similar content. For these observations I continued to take two-column field notes, but my focus was a bit different. While my observations of my own class paid close attention to individual student interests and behavior, in other classes I focused more on the teacher's instructional methods and course content. Student reaction to the lesson was still important, but I looked more at the overall student reaction than at individual behaviors. These observations were not conducted on a regular schedule, but every teacher observed was seen at least four times.

Interviews with other social studies teachers in the building and the school district's social studies curriculum specialist also provided information about the district and school social studies and economics

curriculum. The interviews were not conducted in a systematic way; instead, I looked for opportunities to talk about my study in the course of natural conversations. Most of teachers whom I approached were interested in talking about economics. Generally, I began by asking teachers if they currently taught economic content as part of their regular curriculum. None of the teachers I spoke to at Allen answered yes to this question, so I followed up the first question by asking them: first, Why do you not teach economics? Second, Would you like to integrate more economics into the curriculum? And finally, What resources would help you teach economics?

While developing the curriculum, I consulted a wide-variety of sources on teaching the broad discipline of social studies and the specific sub-discipline of economics. These sources included current research on engagement and integration in social studies, and specific curriculum resources for economics. I broke the literature into four groups--standards, integration, engagement, and resources—in

order to analyze it better. I looked for common themes both among and within the four literature groups in order to find the best ideas in the field. I also analyzed literature in light of my own observations in hopes of finding commonalties. The literature provided the conceptual framework for the study, guiding both the creation and analysis process.

During the teaching portion of my research, I continued to take detailed observation notes on the behavior of my students and their reaction to the curriculum. Once again, these were conducted in a two-column fashion, although the process was a bit different. Since I was actually participating in the class, I was not able to take detailed notes during the class itself. Instead, I recorded a basic outline of what happened in class, so I could fill in the details later in the day. This allowed me to create a picture of what happened in class each day. I also conducted informal interviews with the students to better understand their reactions. These interviews generally consisted of little more than one question:

What did you think of what we did in class today? Some students responded candidly and provided a lot of feedback. Others were less willing to talk, possibly because they feared I would be upset if they told me they did not like the course content.

I also gathered student feedback through three different questions attached to three different assignments. First, the students completed a pre-test the week before we began the economics unit (see Appendix C). In addition to several questions about economic concepts, it asked them what they would like to learn about the economy and how it works. At the end of the two-week unit, the final unit asked students if they enjoyed learning about economics, what part of the unit they most enjoyed, and asked them to suggest ways to improve the unit test (see Appendix C). Finally, the students were asked several questions at the end of the stock market simulation about their interest in the economics unit (see Appendix C).

Student work was another important source of data for the final study. While I looked at a wide variety of work samples, I chose only the most relevant to include as examples in the final study. These included writing samples demonstrating student thinking about economics, stock market simulation worksheets, final unit exams and the worksheets from the stock market simulation (see Appendix C). Writing assignments were important because they forced students to coherently explain how they were thinking, not regurgitate answers. For example, one homework assignment asked students to explain how they thought the prices of goods were determined and then make a value judgement on the system. The final tests gave students the opportunity to demonstrate what they had learned about economics and to give their opinion of the unit. The stock market simulation was one of the central integrated activities of the unit, so it was important to look at the work students completed as part of it in order to assess student learning and engagement. The pre-test also provided important information

because it helped me discern how much the students knew about economics before the unit began. If the students had shown a stronger background in the subject, I would have adjusted the unit content accordingly.

As the data on the student's learning emerged during the two-week unit, I analyzed it through three primary filters that emerged in the literature. First, I analyzed the success and failure of individual lessons in light of the lesson objectives. Student work and comments provided key insights into student learning from each lesson and showed student understanding of key objectives. Through this filter I looked for evidence that objectives were either too simplistic or too difficult for middle school students to meet. Although, when students did not seem to meet objectives, I had to consider a variety of factors including: time of the lesson, my own delivery of the lesson, and the students' prior knowledge before I could pass judgement on a particular learning objectives.

Next, I analyzed student work and classroom activity in light of the relevant integration issues. This meant looking at lessons and breaking down objectives by field in order to see whether students were able to learn subject matter from multiple disciplines from single lessons. This filter also suggested a focus on the overall unit's place in the context of the history curriculum. During subsequent history lessons I would often pose questions related to economics during class in order to see if the students could apply economic knowledge to other subjects.

Finally, I looked at student engagement in hopes of finding the methods that most interested students in economics and provided opportunities for substantial learning. In this context, I looked both for student success in learning the material and also for signs that students were interested in the material. While these two outcomes are often linked, I considered them individually. It is possible for students to be excited by a simulation or activity

without learning anything. This filter relied heavily on classroom reaction to material for data, although student work was also important.

Finally, I looked for overall patterns that began to emerge. What type of lesson was most successful? What topics needed to be taught first? Which topics were the most interesting to middle school students? The three research filters provided a framework for answering these questions.

Finally, I took care to protect the identity of my students, colleagues and school district in this paper. The students, teachers, the school and school district were given pseudonyms to protect their privacy. Alternate names allowed me to craft a coherent story containing many student voices without compromising the trust of my students.

Ethical Considerations

The nature of my qualitative inquiry created two ethical concerns. My study required me to work closely with my mentor teacher as well as other members of the social studies department at my school. Noddings has

pointed out that in these situations "we must be faithful to the teacher's trust" (1986, p. 508). She details an ethic of caring that requires us to refrain from passing judgements on teachers that do not involve the purpose of the research. I have followed this guideline throughout this paper, commenting only on issues that relate directly to social studies engagement, social studies integration or the teaching of economics. Further, I have refrained from passing moral judgements on the quality of the teaching I have observed, focusing on what works rather than what seems to not work. In this way, I have met my obligation to the teachers who aided me in my research.

Second, qualitative inquiry requires that we consider the ethical issues of using student work samples in research. I obtained permission from my students before using their work as examples, but I did not always tell them how the samples would be used. My evaluation of student work avoids applying labels to the students. Instead, it offers

descriptions of the knowledge students have gained or not gained during various lessons. I attempted to apply the same ethic of caring to my dealings with students that I did to my dealings with teachers. This meant that the goal of my teaching was always, first, to benefit the students, and second, to enhance my research. I attempted to provide the best learning experiences possible for the students in my class. By doing this, I was consistent with Noddings ethic of caring, but I was also true to my own research.

CHAPTER 5

ECONOMICS IN THE CLASSROOM

Settings

Allen Junior High is one of five Junior Highs in the Winder school district. The district encompasses both the city of Winder, located in a fertile river valley, and hills on two sides of the valley. The city proper composes less than half of the district's total area, which includes urban, suburban and semi-rural areas. Winder began as a farming community, and there are still farms in parts of the valley. But it also serves as a bedroom community for nearby industrial areas in Tacoma, Seattle and South King County.

Winder's 18,524 students are predominately white, although the number of minorities has increased in recent years. The largest minority group is Asian Americans who comprise 5.13 percent of the district's population. A complete breakdown is included in table one. The district's staff mirrors the student body. Minorities compose only about five percent of the certificated staff. The district staff is also

predominately female. Males compose only 30 percent of the total staff, although the biggest disparity is among elementary school teachers and specialists.

The ethnic breakdown at Allen mirrors the district. The student body is 88.5 percent white. Asians are the largest minority group, but they compose only 4.71% of the student body. About 18 percent of the students qualify for free or reduced lunches. Allen is located in the heart of the district, near downtown Winder and the district offices. Its attendance area, however, has developed a strange shape because of recent growth patterns. Many students are now bussed to school from the western portion of Fern Hill to join the students who live in the city proper. Many students now attend Allen despite living closer to other junior highs in the district.

The staff at Allen is 91 percent Caucasian and includes three administrators, two counselors, three secretaries, 47 teachers and a security guard, along with other support personnel. The teachers are evenly

divided between men and women, and 64 percent hold master's degrees. The staff is, at least outwardly, tight knit and generally works together well. The school's current principal is in her second year. She was vice-principal for two years prior to being promoted after the former principal left for a high school job in the district. She is enthusiastic and energetic when dealing with both staff and students. Her cheerleader style seems to be designed to create school spirit among both staff and students.

The first Allen Jr. High was built in 1955, but major renovations took place in the late 1960s after the school was damaged by fire. More recent renovations took place in 1986. The main school building houses 28 classrooms in two stories. Two other buildings house the gymnasium, cafeteria and music classrooms. Area growth has forced Allen to accommodate more students than it was originally built to house, so 10 portables currently provide additional classroom. Lockers line the main hallways of both floors of the main school. Students must share lockers

because of the high enrollment. The Hallways feature white tile floors and light colored paint. Skylights provide natural lighting in the second floor hallway, and the light is filtered to the first floor through windows between the two floors. The natural lighting is important, because the overhead artificial lighting is not very bright. The skylights and benches placed in the second-floor hallway give a pleasant feel.

The main building classrooms have light-colored tile floors. The only carpeted areas are the library, offices and staff rooms. The overhead lighting is mediocre, but windows add natural lighting. The classrooms on the South side of the building have normal windows, about four feet above the floor. The North side classrooms, which overlook the school's courtyard, cafeteria and gym, have smaller windows, about six feet above the floor. These make it difficult for the students to see outside and minimize distractions. The classrooms are basically square shaped. Some rooms have chalkboards, while others have newer white boards. Usually, two of the four walls are

lined with boards of some kind. A third is for windows, and the fourth provides space for cabinets, shelves and other storage areas. The rooms are filled with traditional desks for student use, but desk arrangements vary widely depending on teacher preference. Some utilize traditional rows, while others employ a variety of group arrangements. Each classroom has one Macintosh computer connected to the district's network. Computers for student use are concentrated in computer labs.

My classroom was located on the second floor of the main school building. The desks were arranged so the windows were at the students' left when they faced the front of the classroom. The door was in the front right corner of the room, and my desk was located in the back of the room. Two chalkboards took up most of the front wall, and two more were located to the students' right. The desks were arranged in a unique configuration. They were arranged in pairs, so each student sat right next to one other student. The pairs were then placed in three different rows of five

pairs. Three additional desks were lined up in single file on the right wall.

The Winder School District junior high social studies curriculum does not currently contain economics. The required seventh grade course covers the history and geography of the Eastern Hemisphere. In theory, the class is supposed to provide an overview of the histories and geography of Asia, Europe and Africa. In reality, this seemed to be too much to cover in the classed I observed, and most of the classes spent little time on African history or recent Asian history. The ancient world consumed more than half of the year, while the rest was spent on the history of Europe through World War II. One of the two primary seventh grade teachers also dedicated a large amount of time to geography. Her students learned the name and capital of every country in Europe, Asia and Africa, and practiced labeling these on maps. The required eighth grade class focused on US History, geography and government from exploration of North America through the Civil War. Several different

teachers taught sections of this course at Allen, and each had a slightly different focus in their class. In general, the teachers all focused on history, providing some geography. They also dedicate three-to-five weeks to teaching the Constitution in order to give the students a foundation in government. Ninth graders are required to take a one-semester course in Washington State History in the Winder District, but they do not have to take a second semester of social studies unless they choose to do so. Allen offers a course called Pacific Rim Studies, which many ninth grade students take. This course covers the history and culture of Japan, China and other East Asian cultures.

The Winder school district is currently revising its social studies curriculum to better address the new Washington State Essential Academic Learning Requirements (1998). The district is currently in the process of making several changes to its scope and sequence. The biggest change will be at the high school level, where the second American History course

will move from eleventh to tenth Grade so the students will have completed the US History sequence by the time they take the tenth grade Washington Assessment of Student Learning. There is some talk of moving the first American History course from eighth to ninth grade to create more continuity, but that discussion has been shelved for the time being. John Anderson, the Winder School District Social Studies Curriculum specialist told me that the district knows it will have to make more changes to the scope and sequence to make it correspond to the EALRs, but at this point they are not sure when or how this will happen. Economics still needs to be added. He just is not sure how it will be added (field notes, October 15, 1999).

Last year was a transitional year for the eighth grade United States History classes. It was the first year that a new textbook, The American Journey (1998), was used in the classroom. Most of the teachers used it as the main text, but my cooperating teacher, Mr. Johnson, chose to use the older textbook, The Story of America (1988), instead. He did this for two reasons.

First, he already had a large amount of curriculum material designed for the older book. Second, he thought the older book contained more thorough discussions of important topics in a more organized fashion than the newer book (field notes, December 1, 1999). The class used the textbook very little during the first few months of class, so they really did not start using the older book until December when Mr. Johnson began a colonial America unit. The first two months of the year were primarily composed of a Native American unit and a culture unit that did not rely on the textbook. The students also spent time learning the location and capitals of each of the fifty states. In November, I took over the class for about three weeks to teach a unit on the U.S. Constitution. Mr. Johnson suggested that I teach the unit because of my background in Political Science, and I agreed. It was a good chance to get to know the students better before I began full-time student teaching in the spring.

The Constitution unit was inserted into the curriculum in November, which meant the class learned about the Constitution before they studied colonial America and the Revolutionary War. Mr. Johnson made the decision to do this because he believes that one of his most important duties as a social studies teacher is to teach students about the responsibility that comes with freedom (field notes, November 4, 1999). He allows each of his U.S. History classes to develop a class Constitution to help his students develop an understanding of responsibility and freedom. In order to prepare the students to create their own Constitution, he wanted them to learn how the U.S. Constitution was created and how it is structured. The students did not seem to have a problem with the switch, although it did require some review in the second semester when I began a unit about the early challenges of the United States.

The Constitution unit provided a great opportunity for me to get to know my students better and to get comfortable in front of the class. I chose

to use The American Journey (1998) during the unit because it contained an excellent discussion of the Constitution. The three weeks I spent teaching the class also gave me a good chance to observe the reaction of the students to different lessons and teaching techniques. Although I have to admit, I did not get a chance to use as many different teaching styles as I had hoped. Still, it became apparent early on that students seemed to learn best when the period is divided up into several blocks, each containing a different activity. I also found that students need to be engaged with activities and discussions, not just lectures. Finally, I noticed that the students were not always that eager to respond to questions and talk in class about their opinions. They generally seemed more interested in being told answers that they could memorize and repeat.

I ended up spending a lot more time alone in the classroom during the Constitution unit than I ever expected. The original plan had been for Mr. Johnson to observe my teaching and help me develop my skills

in preparation for the spring. Unfortunately, an old injury flared up, and he ended up taking eight days of sick leave during the unit. He also took advantage of the period I was teaching to rest on some of the days that he was in school. This development was a mixed blessing. On one hand, it helped the students see me as their teacher and an authority figure right away because they could not bypass me in favor of Mr. Johnson with questions. On the other hand, I was still very inexperienced and could have used guidance from someone with more experience at times. In the end, I think the benefits outweighed the disadvantages because when I took over the class again in February, it was an incredibly smooth transition. In fact, first period was the only time of day I did not have to worry about being challenged by students during my first few weeks of teaching. They saw me as a teacher right away.

At Allen Junior High, first period is five minutes longer than the other periods because the student council reads the announcements over the

intercom after the Pledge of Allegiance at the beginning of each school day. The announcements provide a nice routine for the class and give the students a chance to get materials prepared for class. At times, though, the students get bored with the repetitive nature of the announcements and stop listening. How quiet the students remained during announcements also depended on the mood the students were in, the weather and the day of the week.

The class would have likely been labeled a "good" class by most teachers. Almost half the students in the class were members of the school's honor society and the students generally stayed on task and did what they were asked to do. The classroom climate was heavily influenced by the class Constitution, which the students created and approved in November. It contained a list of rules and regulation for the class and the penalties for breaking them. When the students designed the Constitution they were encouraged by Mr. Johnson to make them quite harsh (field notes, November 21, 1999). Since most of the students knew

they would never violate the classroom rules, they were not hard to convince. The most common rule violation was failure to do homework. Mr. Johnson's policy was to give homework only one day a week. In practice this meant that the students were assigned a one-night assignment on Tuesday night, or that a larger assignment that the class had been working on in class for several days was due on Wednesday morning. The first penalty for not turning work in was writing a 250-word letter of apology to the class. For each subsequent offense the penalty became harsher.

The Constitution also created several leadership positions, which were filled by class elections soon after the Constitution was approved. The two most important of these were the president and vice-president. The class president was Tom, a bright, athletic boy, who the rest of the students looked to for leadership. Tom generally received near perfect grades on most of his work, and rarely seemed challenged by course work. He contributed to class discussions when asked, but he usually preferred to

remain quiet during class. Despite his good quality work, he often did not seem particularly interested in course content.

In many ways, the vice-president had a larger role in the class than the president because he was responsible for managing the class discipline system. This made Nick an important figure in the day to day operation of the class. He seemed to enjoy his job and completed it diligently. In general, he was very fair and did not play favorites, which was important to the operation of the class. Like Tom, Nick is an excellent student and receives top grades. He was more outspoken than Tom and much more willing to participate in class discussion. He also had a good sense of humor, which made him fun to have in class.

There were also several girls who did very well in class, although in general they did not assume leadership roles as often as the boys did. Still, they played an important role in class discussion and the group dynamic of the class. Two key girls were Sarah and Kristy. Sarah was one of the more "popular" girls

in the eighth grade. She was involved with the leadership program and ran for student body vice-president during the year. Although she lost the election, other students in our class did look up to her. She was an excellent student and was always very helpful in class. Kristy was perhaps the best writer in the entire class, and she also offered excellent insights during discussion. Early in the year, I thought of her as being a "quiet" student, but as the year went on she became more vocal.

Peter was another key student in the class. His easy-going personality and sense of humor made him popular with the other students. He was one of the first students that I got to know during the fall during brief before and after class conversations, so I often would ask him questions about what the students were thinking or how he thought the class was going. He generally received B grades; it seemed like he did just enough to get by without exerting too much effort. During the spring, he ran for student body treasurer and won the election.

While most of the students in the class generally received A's and B's, there were a few students on the opposite end of the spectrum. Steven rarely paid attention in class and was often absent. Many times when he was absent from my class, I would see him at school later in the day. Steven usually did just enough work to keep his grade at the "D" level, but he rarely seemed interested in anything we worked on. Joe also had trouble earning passing grades, but for very different reasons. Joe did not get along well with Mr. Johnson, and it showed. Early in the year, Mr. Johnson got angry with Joe for laying his head down on the desk during class (field notes, September 15, 2000). After that, he was generally unresponsive and rarely turned his work in on time or at all. Still, Joe was very bright. During class discussion he contributed interesting ideas, and he usually scored well on in-class exams. In early February, he assured me that he would start doing his work when I took over the class because he "liked me better" than Mr. Johnson (field notes, February 3, 2000).

Curriculum Design

When I began the design process, I assumed that most of the students probably had little prior knowledge of economics. The district's social studies scope and sequence does not include it, and most of the teachers I talked to said that it is rarely taught. Still, I knew that the students would know more about economics than they realized, but I would have to dig deep to unlock the knowledge. The key would be to talk in the student's "language." Adolescents are egocentric, and as Dewey (1938) told us, they learn best when they can relate new information to their own experiences. So I knew that activities, discussions and lectures would need to focus on the experiences of the students. But before I could design specific lessons, I needed to settle on the information the curriculum would contain.

The starting point for the curriculum was the Washington State Essential Learning Goals for Economics. Like most of the Social Studies EALRs, the Economics benchmarks are not very specific. There is

actually only one EALR in Economics, "The student understands basic economic concepts and analyzes the effect of economic systems on individuals, groups, and society" (1998, p. 105). This is further broken down into five subtopics (see Appendix A). I focused on 1.1, comprehend key economic concepts and economic systems, 1.3 understand the monetary system of the U.S. and how individuals' economic choices involve costs and consequences, and included some mention of 1.4, examine how government policies influence the economy and understand the theoretical background of taxes. The other two subtopics deal with business careers and international trade. Career education is generally part of the business and vocational curriculum in schools, and although I would have like to include a lesson on trade, two weeks was just not enough time to cover everything. I decided the best use of the time would be to focus in on 1.1, while covering a few topics related to 1.3 and 1.4.

The next step was to look at the specific benchmarks for guidance. Since I was operating under

the assumption that the students probably had little or no previous exposure to economics, I looked at both the elementary and middle school benchmarks. One of the benchmarks for middle school is, "describe the role that supply, demand, prices, incentives, and profits play in determining what is produced and distributed in a competitive market system" (p. 105). I knew that I wanted supply and demand to be one of the main topics of the unit, so I focused on this benchmark. But teaching supply and demand would also mean at least reviewing the corresponding elementary benchmark: "distinguish between needs and wants" (p. 105). This was also true for "give and explain examples of ways that economic systems structure choices about how goods and services are to be produced and distributed" (p. 105). I also planned to at least touch on the different types of economic systems, which is the third benchmark.

My students had shown interest in the stock market, so I knew I wanted to base several curriculum elements around the market. This related to Economics

1.3. I decided to only touch on 1.4 indirectly. I knew the role of the government would come up and that we would discuss taxes at least some, but my specific plans did not include any lessons on government policy, at least not in any real detail. The students' interest in the stock market was always interesting to me, and I thought it was very important that I take advantage of it. This led me to put more emphasis on stocks in the unit than I might have if I had not already known about the students' interests.

The week before I began the unit, I gave the students a pre-test to see how much the students already knew about economics and to see if there were any specific questions they wanted answered. The pre-test was simple; it included only four questions. (a) What does the word economics mean to you? (b) When you buy a candy bar at the store. Why does it cost what it does? (c) Why does money have value? (d) What do you not understand about money and the economy that you wish you did? The questions were meant to be open ended enough to allow the students to write creative

answers, but they still allowed the students to let me know if they have previous knowledge of economics.

The first question was the most difficult for the students to answer. Apparently, they have not had a lot of exposure to the term economics. A few students showed some idea of the definition. Mark, who consistently received top grades, wrote, "the business of making and spending money." A few other students gave similar answers. "I'm not really sure what economics means, but if I had to guess, I'd say it had to deal with money." "It's the world of trading and buying." "The word economics means companies and business." And my favorite answer: "To me it means either money or cooking class." Most students, however, either admitted that they did not know what the word meant or left the question blank.

The students were more willing to answer the second question, although answers varied widely. Mark again gave a short, yet reasonable answer: "supply and demand. Tax." Only one other student mentioned anything about demand. "Because some taste better than

the other ones do, when that happens more people buy it so the cost changes." More students focused on the supply side, writing about the cost of the ingredients to make the candy bar. "They charge what it costs to make it plus tax. Then to make a profit they add a little more," was a typical answer, although some students talked about the costs of specific inputs. The most surprising was the frequent mention of sales tax as the reason the candy bar costs what it does. Almost half of the students mentioned taxes, and five only mentioned taxes as the cause for the price of the candy bar.

The most common answer to question three was "So we can buy stuff" or a derivative of that answer. In general, the students used a type of circular reasoning to explain why money has value. Essentially, they said that money has value because it needs to have value so we can buy stuff. In a sense, this is true. One of the reasons that money has value is because we have agreed as a society that it does to make buying stuff easier, but the answer is

incomplete. One student wrote that money is a "trading tool." This answer is a bit more specific, but it still does not explain why someone is willing to provide goods and services for money. The most interesting answer came from Nick, a high achiever in the class. "Money doesn't really have value anymore," he wrote. "Originally it represented the amount of gold the country had in storage, but they really broke that idea a long time ago." I did not expect any of the students to answer the question by talking about the break down of the gold standard. The answers in general made it pretty clear that one topic that needed discussion was money and its value.

The final question, as I expected, received the widest range of answers. Some students said they wanted to know just about everything about the economy. Others did not want to learn anything, or at least did not indicate that they had any specific questions. Some students were philosophical. One girl wanted to know, "Why people want so much when they don't even need it in the first place." Another boy

asked, "Why everyone has so little money (besides Bill Gates)," and "Why they don't give everyone a million dollars?" Other students were more practical. They wanted to know where tax money goes? Why goods cost so much? And why money has value? Overall, I was encouraged by the responses because more students wrote specific questions or just said that they wanted to know how the economy works in general than said they did not want to know anything. In fact, the pre-tests indicated a general interest in the subject. I had hoped the students would be excited to learn new ideas, but I was not really sure until I gave them the pre-test. I was anxious to begin helping them answer their questions.

Classroom Conversations

Day One. Choices are economics. Economics attempts to explain how resources are allocated through the rational decisions that all human beings make on a daily basis. The purpose of the first lesson was for students to consider the choices they make, how they make them, and how the choices are "economic"

decisions. Many of the choices we all make are based on a much more complex decision making calculus than we realize. I thought students might be surprised to learn all the factors they really consider when they make a decision as basic as "should I go to school today?"

I opened the class by asking, "What are some choices that you make everyday?" The students seemed surprised that I would ask a question that seemed so basic, but after some hesitation, they began to respond.

"What should I eat for lunch," one boy volunteered.

"What should I wear to school," another followed.

"Good, what else."

"What I should spend my money on?" one girl answered. A short lull followed, so I tried to get them thinking along some other lines.

"How can we get more specific about what we spend money on?" I asked, hoping the students would think about what types of things they buy. "Also, where does

money come from?" I continued. More hands went up. We were making progress.

"Should I work?"

"What clothes should I buy?"

"Should I get up and go to school or stay in bed?" asked Brian, a student who did not participate in class that often. This question has a surprising amount of economic relevance.

"Yes," I said. "That is a great one! Why is that an economic question? What are the considerations you have to make when you answer that question?" The students seemed hesitant to respond, so I tried to help them. "Ok, what are the consequences of not going to school?" The immediate response from several students was that they would get in trouble with their parents. That was a good start, but I wanted them to consider both the short and long-term consequences. "Why would you want to go to school?"

"To get an education," was the initial answer from most of the students.

"Why do you want an education?" I asked.

"So we can go to college or get a job," several students ventured. They had hit on what I wanted to talk about. Most students go to school each day without ever thinking about why they are there. They know they have to be there, and that is enough for them. I thought we should dig deeper.

"So the advantages of going to school are that you don't get in trouble, you get an education, and you will be able to get a job when you finish school," I continued. "What are the advantages of not going to school?"

"You get to sleep in," several students called out at one.

"You don't have to sit in class, and you can goof off all day," another added.

I posed another question, "Do you decide differently if you are sick? How would that change the advantages and disadvantages of staying home and going to school?" Most of us know that we should stay home when we are sick, but do we really know why? The

students seemed to struggle to verbalize what they already knew.

Finally, Sarah raised her hand. "I would stay home because I want to get better," she explained.

"Good, so you think it might take longer to get better if you go to school?"

"Yes, I need rest to get better."

"So if you went to school, you might stay sick longer and have an even tougher time getting to school?" I asked. There was general agreement. At this point, we had a pretty good list of decisions on the board. It was time to move to the second portion of the lesson. I circled about ten of the best questions on the board.

"Now, I want each of you to choose three of the circled questions and write a paragraph or two about how you would make that decision. You should include a discussion of the factors you would consider. You might also want to explain reasons that would lead you to make different choices," I explained, hoping I was clear enough. I doubted that the students had ever

done anything like this before; it turned out I was correct. "Any questions?"

The students did not respond, so I assumed that they understood the instructions. They began to write. I planned on providing ten to fifteen minutes for the students to write, but after only five minutes some of the students stopped writing and became restless. "When you finish, please choose two other questions off the list and explain how you would make that choice. Each answer should be about a paragraph," I added to keep the students who were finished on task. I moved casually through the room, and I could tell that the students were only writing a sentence or two for each question instead of a paragraph, but at this point I decided to just accept that. After about 10 minutes, I gave more instructions, "Please meet with two or three other people and answer three questions: One, how do people make decisions; two, did all of the people in your group make decisions the same way, and three do you think everyone's reasons are valid?" The

questions were already written on the board for reference.

The students got into groups quickly, but did not seem very willing to discuss the questions. Most of them quickly wrote down answers after only brief discussions of their own answers. I thought we might be better off discussing the questions in a large group format, so I called the class back to attention.

"Did you all answer the questions the same way?" I asked. No hands were raised; a few students muttered no. "Did you find any cases where two of you came to the same answer through a different thought process?" Joe raised his hand.

"In our group, we all answered different questions so it was hard to make a comparison," he said.

"Did other groups have that problem?" I queried. Heads nodded in agreement. "Okay, than I'll ask another question. "You have said that you all used different thought processes. Do you think everyone's methods of making decisions are valid?" Blank stares

greeted me. "Let's be more specific. Joe, do you think Bobby's reasoning was the right thinking for him to use?"

"Sure."

"Why?"

"Because he made the decision he wanted to make," he said with a matter of fact tone.

I needed to wrap up the lesson, and I was trying to make a point. "So did anyone seem to be using a completely crazy way to make decisions?" Many of the students seemed confused, but most shook their heads no.

"Exactly, that is one of the key principles of economic behavior. People make rational decisions that are right for them." I wrote the word rational on the board. "You will need to remember this as we move forward in our exploration of economics."

Day Two. In many ways, scarcity is the most important concept of economics. Scarcity is "The concept that resources are limited. People desire more products and services than can be produced from a

nation's limited resource pool" (Wentworth & Brue, 1990, p. 14). Most of us first realize that we cannot have everything we want when we are quite young, but many need help taking the next step to understand the universal significance of this fact. Scarcity is the underlying principle of economics, so I wanted to make sure that students understood it well before we moved on to more advanced concepts.

After the announcements, I got the class moving quickly. "What is something you would like to have, but you do not have?" I wanted to see what kind of answers the students would give before I made the question more specific. I moved to the chalkboard and looked for raised hands. "Billy."

"An island."

"Ok good, Peter."

"Nike Enforcers. They are really expensive shoes."

"Sarah, what do you want?"

"More nice expensive clothes."

I started pointing to students to speed the process up. By this time at least half the class had a hand raised.

"An elephant."

"A llama."

"A Tiger."

"Okay, anything besides animals?" I asked.

"A new skateboard," Steven said. I let the students brainstorm for a little while longer, but then I cut them off. They probably could have listed wants for half the period if I had let them.

"Take a look at the items you have listed. What is it that makes these things difficult for you to acquire even though you want them?" I was not sure how this question would be answered, but I was committed to not telling the students the answer. Only a few hands raised. "Jessica, what do you think?"

"All those things are expensive?" her voice lacked confidence.

"Good, that is true," I assured her. "Most of the items on the list would cost a lot of money if you

tried to buy them. But what about the tiger, is there somewhere you can buy that if you have enough money?"

"Yes," several boys shouted out.

"Where would you go to buy a tiger Billy?" I was curious.

"I know you could get one somewhere if you really wanted one," he said confidently.

"Well, that's probably true," I agreed. "But is a Tiger something you can just go to the store and buy?"

"No," most of the students said.

"Right, why is that?" I was hoping this question would get us closer to constructing the principle of scarcity. The student's seemed unsure. Finally, Sarah raised her hand. I nodded at her.

"Because there are not many tigers in the world anywhere. At least not enough to keep sitting around in stores for people to buy," she smiled.

"Exactly!" This was what I wanted the student's to realize. It was the first key understanding we needed. "Can anyone take what Sarah said and apply it

more generally?" There was little response. "Does what Sarah said apply to the other items in our list too?"

"Yeah, all of those things are pretty rare," Billy replied before I could look for raised hands.

I nodded. "Joe, how do you think the fact that they are rare affects how much money they cost to buy?"

He thought for a moment. "The less there is of something, the more money it will cost." I asked him why. "Because it makes sense." It does make sense, but I needed more.

"Joe's right. It makes a lot of sense, but why does it make sense?" I hoped someone could answer. I was already worried I was giving too many answers away.

Nick raised his hand. "When there are only a few of something, it will be expensive because not everyone can have it." I nodded happily.

"Good, so everyone agrees that the less there is of something, the more likely it is to cost a lot of money?" The students nodded. "Good, but there is still

something missing. What else has to happen for something to cost a lot of money?" At this point, I wanted the students to recognize that people have to want something for it to have value, no matter how rare it is. No one raised his or her hand. "What else do all the items on the board have in common? They are relatively rare, and there is something else."

A few students appeared to be deep in thought. A few others looked to be deep in space. I tried a third approach. "Why did you list the things you did?"

"Because we wanted them," a few of the more vocal students called out. I smiled.

"That's it!" I decided they had come far enough. "What would happen if no one wanted those things, Tara?"

"Stores wouldn't be able to sell them," she responded quickly.

"Yep, so what would they do?"

"Lower the price?" she asked back.

"Yes, they would lower the price, but we are getting ahead of ourselves a little bit." At this

point we had derived the entire definition of scarcity. We just had to put it all together. "We have determined that you all want a lot of things that you can't easily get, right?" The students nodded. "And we've seen that the reason you can't always get the stuff you want is because there is not enough of it?" They nodded again.

"What you have been describing to me is a phenomenon that economists call scarcity," I wrote the word on the board. "Basically all it means is that people want more than they can have. This is because there is a limited amount of stuff in the world, but our wants are unlimited." I wrote this definition down next to the word on the board. I was not interested in whether the students could memorize a textbook definition. I wanted to keep the concepts simple, which in my opinion they are to begin with.

The discussion had taken up half the class; the students needed a change. Tuesday was the class' homework night so I had a writing assignment planned (see Appendix C). "Please take out two or three pieces

of paper and a pencil or pen. You are going to answer an essay questions tonight for homework, but I will give you the rest of the class to work too." I placed the questions on the overhead. "First, please explain how you think the prices of goods are determined. Second, explain whether you think this is a fair method and why you do or do not think it is fair. Does anyone have questions?" The students began writing, so I assumed they understood the assignment. This writing assignment was important because it was a chance to see if the quieter students were really paying attention during discussion. This assignment was designed to be predicative. Scarcity is a building block concept for understanding how prices are determined. I planned on moving to supply and demand next, but first I wanted the students to think about price determination on their own.

Day Three. The third day of the two-week unit was essentially washed out. When I was doing my preliminary planning, the district calendar I had did not show the half-day that was planned for the third

day, but that did stop it from taking place. At Allen, half-days are handled by shortening all six classes. The nice thing about this system is that the students still attend each class. The downside is that it leaves little time to develop lessons. I decided quickly that 25 minutes was not enough to complete the planned supply and demand lesson. Instead, I collected homework assignments and spent the day reviewing the concepts we had already covered.

The half-day led to the first of several necessary revisions to the original unit. In many respects, the first three lessons were the keys to the unit. They introduced the idea of economic thinking, scarcity and supply and demand. These were the three topics I most wanted the students to understand. I decided I would move the third lesson to Thursday and then revise the scope and sequence further.

I spent that evening reading the student responses to the two essay questions. The answers to the first question proved that most students had at least some understanding of how prices are determined,

but it was the answers to the second question that really surprised me. Most of the students expressed at least some discontent with the way sellers make profits off of products. One student wrote, "I just don't think it is fair because the product is only expensive so the makers can get more money, even though they are already making plenty off it" (see Appendix C). While some of the complaints arose from misunderstandings of what determines price, many seemed to illustrate socialistic tendencies. I thought this was especially interesting since most of the students favored conservative policies and candidates during discussion about current events and the presidential primaries.

Day Four. On Thursday, it was time to help students understand why goods cost what they do. This meant helping them understand the basics of supply and demand. In college level principles courses, instructors tend to focus on the supply and demand graphs and a variety of manipulations that can be performed on the graphs. I had little interest in

this, but I did want to expose students to a supply and demand graph so they could see how simple it really is. I also thought it was a great opportunity to show that basic math skills have uses outside of the math classroom.

As the students listened to the announcements, I passed back the assignments from the previous day. The extra day threw off my schedule a little bit because I had intended to have the students share their answers during the class before ever turning the assignments in. I handed back the assignments so we could still start the class in this fashion.

"I really enjoyed reading your theories about how prices are determined. You had a lot of really good ideas. I'd like to start class today by having a few of you read or explain what you wrote." As I looked across the class, unsure faces greeted me and many students avoided eye contact. I could tell they did not really want to share. I decided to call on a few students who had written excellent answers. "Kristy, can you tell us how you think prices are determined?"

She looked reluctant, but she answered, "I think the price depends on how many of something are made and how much it costs to make them. The scarcity of the product is what makes things expensive." She looked like she needed reassurance.

"Good," I said, "that seems logical. Amanda, what do you think?" Amanda had mentioned demand, so I was hoping she would bring up that side of the equation.

Amanda did not volunteer to talk very often, and she did not look like she was happy that I called on her. "I think the government affects the price."

"Good," I said, "that is usually true. But what else did you write?"

"The demand for the good, the amount of people that want it?" she seemed to be questioning more than answering, so I let her know she did great.

"Yes, that is a key part of it."

I had originally intended to list a variety of student theories on the board, but the class seemed like they wanted answers. They often seemed uncomfortable when I did not just come out and tell

them what I wanted them to remember. Still, in this case I decided I would adjust the lesson plan and skip to the main lesson.

"If you want to buy a new Nintendo game and the price drops $10, are you more or less likely to buy it?" The answer seemed obvious to the students and me. Several of the boys called out yes without raising their hands. "Good, now for a trickier question. Why are you more likely to buy it?"

Billy raised his hand quickly. "Because I can afford it now, and I might not have been able to before."

"Good, why couldn't you afford it before?"

"Because it might have cost $50, and I only had $45. When the price dropped $10, I had enough money to buy it," he explained confidently.

"Good Billy, that is one reason why someone might buy the video game when it becomes cheaper. They can now afford to buy it because they have enough income to buy it." I wrote "income effect" on the chalkboard. "This is called the income effect. It is very simple;

it just means that when the price of something drops, people can afford to buy more of it then they could before. I'm curious though, would anyone be more likely to buy the game for a different reason than Billy?"

I did not really expect to get an answer. I had decided to discuss the income and substitution effect as part of this lesson because I thought the students could easily understand them without going into great detail, but I did not really think they would think of the substitution effect all on their own.

"Ok, maybe this will help. If you didn't buy the game, what do you think you might spend the money on?" Only Billy raised his hand. "Okay, Billy, what would you spend it on?"

"I'd buy another game that cost less money."

"Yes! That's what I was looking for. If the game costs less Billy will buy the game instead of another game. What he is doing is substituting the game for something else he might have bought. This is called

the substitution effect." I wrote substitution effect on the board.

"You guys have just told me the two reasons that more of something will be sold if the price drops. What would happen if the price goes up?" Nick raised his hand quickly.

"I'd be less likely to buy the game because I might not be able to afford it, or I might buy something else that is cheaper. It's exactly the opposite of when the price drops," he explained.

"Yep, that's it. You've got it now," I was now ready to introduce them to the demand curve. The reason we talked about the two effects first was so the students would understand why the demand curve is upward sloping. I passed out a blank graph to each student (Appendix C) and put a set of price and quantity data on the overhead. "The information on the overhead shows how many footballs company X can sell at five different prices. I want you to find the point on your graph that corresponds to each combination. Make a dot on each point that fits this description."

The students busily got to work. "Let me know if you have questions."

I really was not sure how much experience the students had with plotting points on graphs, but they did not seem to be having much difficulty with the task. In fact, they finished more quickly than I anticipated.

"Who wants to come up and show what they did on the overhead? How about you Peter?" Peter was not shy about this sort of thing. He walked up to the front of the room with usual casualness and explained what he had done.

"First I found $50 on the vertical axis. Then I moved over to the 5 on the horizontal and found the point where they intersect." He made a mark on the right point and proceeded to explain the rest of the points until he was left with an upward sloping line.

"Great job, we now know how many footballs people are willing to buy at various prices, but does that tell us how many will be sold, Tom?"

"No."

"Why not?" I followed up.

"Because we don't know how many footballs there are," he answered quickly.

"Exactly, so the next thing we need to do is look at how many footballs manufacturers will want to make." It was time to use some more logical reasoning.

"Now, assume you are in charge of a factory that makes footballs and baseballs and you want to make as much money as possible. You can only make a total of 100 balls. When you start both types of balls sell for $20, then the price of footballs goes up to $30. What would you do?" I tried to be as clear as possible. I pointed at Ryan, a bright but often quiet student.

"I would make more footballs because I'd make more money off footballs than baseballs now," he said.

"Good, does that make sense to everyone? Sarah, what do you think?" I wanted to make sure everyone was following along.

She nodded. "Yeah, that makes sense."

"Ok, good, so everyone agrees that if you have a factory that makes footballs you would want to make

more when the price goes up?" This was the basis of the law of supply. The students nodded. "Okay, now you need to graph the data from this chart. It shows how many footballs a factory would be willing to produce at various football prices. Put the data on the same graph you used for the demand before."

The students worked busily for a few minutes and then looked like they were done. "What do you think the point where the two graphs cross, is Janelle?"

She looked at her graph and answered, "I don't really know, it seems important though."

I nodded, "Yes it is important. Can someone help her out?" Joe raised his hand; I nodded at him.

"It's the price of the footballs I think," he said quietly.

"Yes! Why is that the price?" I hoped he could explain a little more.

"It seems like that is the only place where the factory makes as many footballs as the people want to buy," he said a little louder than before.

"Great, and that is what this point means. It seems like the price has to be $30. What would happen if the price was $40?" We were running out of time. "Tom, what do you think?"

"If the price was $40, then a lot of the footballs would not sell," he hit it right on.

"So, what would the store have to do to sell the extra footballs?" I hoped they would see that the price would move back to $30.

Tom gave me a blank stare so I turned to Kristy. "They might lower the price to sell the left over footballs," she said.

I nodded, "Yes, that is what I would expect. Ok, what would happen if the price of footballs was $20?"

"Then people would want footballs and not be able to get them," she said.

"Yes, what Kristy has just told is the basis of the law of supply and demand. I wrote supply and demand on the board. It tells us that the price of an item will tend to be the price where sellers produce the amount of the product that people want to buy."

The bell rang. "Good job today, hang on to your graphs." I hoped the students would remember what we had done.

Day Five. I was encouraged by the first four days of the unit. The students participated in discussions and generally seemed interested in what we were doing. But I was not convinced that they had a strong enough grasp of the topics to move onto new topics. Several students missed at least one of the first two days and needed a chance to catch up, and I thought all the students could benefit from some time to review. So at this point I made serious revisions to the scope and sequence of the unit (see Appendix B) and began to create new revised lessons plans. On that Friday I had two objectives. First, I wanted students to review the concepts of the first four days. Second, I wanted them to think critically about the concepts. With these two goals in mind, I created a team review quiz that I hoped would be exciting while forcing the students to think about what they have learned (see Appendix C). The quiz asked a few questions with one definite

answer, but most of them required the students to consider a hypothetical situation and list as many effects of the situation as possible. Some of the questions dealt with topics we had discussed explicitly in class, while others forced the students to make connections on their own.

I opened the class by giving the students a chance to ask questions about anything they had learned that week, and then we had some fun. I divided the class into five teams. I tried to assign each team one or two students who I thought had a strong grasp of the content, while also breaking up cliques. I told the students the quiz would count for extra credit points.

"Now you will have about 30 minutes to complete the quiz. Most of the questions ask you to think of as many answers as you can, and you will not be penalized for wrong answers. Feel free to guess, the key is to be as creative and innovative as you can," this was not a multiple choice quiz, so I wanted to make sure

the students knew it was alright for them to guess. "Does anyone have any questions before we start?"

"Do we have to keep these teams?" Billy asked.

"Yes, I set up these teams carefully," I had anticipated that question. "Any other questions?"

The students ignored me and began to work. Most of the students seemed excited for the chance to compete with one another and busily began devising a strategy. Some teams worked through the quiz as a large group; others divided the questions up among pairs of students. I was disappointed to see that a few students sat and listened while the rest of their group worked. There were two or three students in each group doing most of the work. A few others at least appeared interested; others completely tuned out. As time began to run out, some teams had already stopped working, while others raced to write down a few last answers. The competition seemed exciting for some, but not all, students. I had to wait until later that day to see how much the students really understood after one week.

All the groups knew that one of the reasons that diamonds are expensive is because they are rare, but only one team mentioned that high demand also created high prices. All of the groups also knew that the discovery of new oil reserves should lead to lower gas prices. Questions that required more creativity yielded a wider range of answers. The winning team listed eight possible effects of rising gas prices. Two other groups only listed two. All the students struggled with question six, which dealt with a new sales tax, but I expected this because we had only touched on taxation issues briefly.

The competition was useful because it helped me see what concepts the students had down, and which ones they needed more help with. It also gave students who were struggling a chance to work with those who knew the concepts well. The only problem was that the group format allowed some students to hide in the background.

Day Six. My new scope and sequence for the unit meant that the second week would be considerably

different than originally planned. Monday and Tuesday were going to be taken up by a two-day lesson dealing with environmental economics. I really like the lessons, and I thought the students would enjoy them. But the truth was that they were not crucial to developing an understanding of basic concepts. I was also worried that the new ideas might just be confusing to the students. Once I decided to leave out the two environmental lessons, I had two days to fill with existing or new lessons. I still had not taught the comparative economics and scavenger hunt lessons from the previous week. I thought it was important to at least talk about alternatives to capitalism since so many of the students had indicated suspicion of the system the week before, so I decided to move that lesson to Monday, although I modified it to include more discussion. I hoped that the students would be willing to express their opinions about fairness and the economy. Scheduling difficulties made it impossible for me to conduct the Internet scavenger hunt with the students, so I decided to substitute a

stock market simulation designed to teach students about supply and demand. It also stuck closer to my overriding objectives because it dealt with supply and demand.

Monday began with a brief brainstorming session. "What do you know about Communism?" I asked. Answers rang out.

"It was in Russia."

"No freedom."

"The people did not work very hard."

"It isn't popular anymore."

"Good, those characteristics can all be attributed to Communism," the main point of this activity was to see what they already knew. "How is a Communist system different than the United States?"

"People don't have the same freedom."

"It wasn't as successful."

"People don't like Communism as much."

"Good, today we are going to talk about the main alternative to the economic system we have in the

United States." We needed to establish some vocabulary, "What sets prices in the U.S. Nick?"

"Supply and demand?" he questioned back.

"Right, the name economists use to describe this system is market economy." I wrote Market on the board. "We say that markets determine the price, and who has what."

"Can anyone tell me who determines how much things cost and who gets what under a communist system?" I was greeted by blank stares, so I decided to just tell them the answer. "The government controls the economy in a Communist system. It determines who should get what and how much they should get." I wrote government on the other side of the board. "Now the truth is that no economy is completely controlled by the government, and our market economy is often affected by government, but for our purposes we can think of the two systems as opposites." I hated it when I had to make the world seem simpler than it really is, but I did not feel like I had much choice for the purpose of this lesson.

"How does the government affect the economy in the United States?" I asked.

Joe raised his hand and I pointed to him, "Taxes."

"Good, that is one of the main ways," I could have gone further with this, but I wanted to compare the two economic systems. "When you wrote about the ways prices are determined last week, a lot of you expressed reservations about the way prices are determined, and I was happy to see that because it shows that you are thinking. What I want to do today is discuss the advantages and disadvantages of the U.S. market system and the Communist system where government controls the economy," I really wanted to get the students to express opinions. "Okay, what are some of the advantages of the market system? In other words, what are good things about the economy in the United States?" I wrote answers on the board and encouraged the students to brainstorm quickly.

"Freedom, we have freedom to do what we want."

"People can make money!"

"Choices, we can buy lots of different stuff."

"Stores sell the stuff people want to buy."

The students compiled a long list of advantages. Some of them were completely new ideas, others were based on previous class discussions. The students had a tougher time with my next question. "Okay, what are the disadvantages of our system?" Hands remained down, and the students looked reluctant to talk. "I know you guys know what they are because a lot of you wrote about them last week." I thought I could help them by making the discussion more specific. "Why did you say last week that the way prices are determined is not always fair, Jenny?" Jenny was a quiet girl, but she had written a very good essay about why she did not think the market system is fair the previous week.

As usual, she was reluctant to talk. "Um, I guess because a lot of people can't afford to pay for stuff they need."

"Yes, that is a problem sometimes. Who can think of another one?" Again the students struggled. I ended up helping the students come up with a few more

disadvantages. Most of them focused on the inability of the poor to meet their basic needs. We also talked a little bit about the wastefulness that competition creates. When we moved onto discuss Government based command economies, the discussion did not really improve.

"We established earlier that the other basic way to run an economy is to let the government make the decision about how much goods will cost and how much people should get paid," it was time to see if the students could see the advantages of this system. "What do you think the advantages of this system would be?" The students did not respond. I was not that surprised because the main message students receive in school is that the American way is the best way. Still, I knew the students knew what the advantages were. "How would the government based system be different than the market system?"

Nick took a shot, "It would mean that people would be paid more equally."

"Good, usually that is true because the government in this type of society usually will make salaries more equal," I asked for more advantages and got little response. Eventually I was able to establish with the students that government based systems could set prices that everyone could afford, make sure everyone had a job and possibly eliminate the waste that sometimes results from competition.

The students had a much easier time pointing out the disadvantages of the command economy.

"There is less freedom to do what you want."

"It doesn't reward hard work."

"There are less products to choose from."

"People are lazy."

We compiled a pretty nice list. Finally, I asked, "Which system do you prefer?" The students overwhelmingly preferred the market system, although I suspected that if anyone disagreed they might have been afraid to speak up. This did not surprise me, but I was disappointed that the students did not seem to want to discuss the ideas they had written about the

week before. I had really hoped to facilitate an interesting philosophical discussion, but it did not happen.

Day Seven. The students knew that they were going to participate in a stock market simulation early in the year, and most of them were excited to begin learning about the stock market. I was excited to begin lessons about the market because the students were excited, and I was also relieved to have an information packet that the students could read to learn the basics of market. Monday's frustrating discussion had discouraged me a little, and I felt like the students needed something a little more concrete if they were going to really understand the market.

Class started with a simple question. "What do you already know about the stock market?" I asked. Hands shot up quickly; I acknowledged them non-verbally to facilitate fast brainstorming.

"It's a thing that makes people a lot of money."

"It's a way to get rich."

"You buy and sell stuff on it."

"I think Microsoft is on it."

"It's in New York."

After a few minutes, the students ran out of facts. "We hear a lot about the stock market in the media right now," I told them. "A lot of what we hear is true, but sometimes people tend to exaggerate. As you read today, I want to see how the real stock market compares to the one you have described on the board." I took out a worksheet that asked students to answer some basic questions about the market (see Appendix C). "As you are reading, I want you to find the answers to these questions."

"Why can't we just read?" one student asked.

"Because I need to make sure you all know the basic terminology of the market before you start picking stocks. If you don't understand how the market works, picking stocks will be tough," I replied quickly. I finished handing out the worksheets and packets, and the students got to work. The information packet was almost ten years old, but it did a good job

of explaining the workings of the market in very simple language. The worksheet was not difficult, but it forced the students to define some key terms and explain why companies issue stock and why individuals buy it. If they could show understanding of these two questions, I thought they would have a solid foundation to build a further understanding of the market upon.

Some students took almost the entire class to finish the reading, so the students who finished more quickly began working on some basic stock market math problems that the others completed for homework. I reserved the last ten minutes of class to review the basic facts of the stock market with the students.

"What did you find out about the stock market in your reading that surprised you?" I wanted to see how carefully they had read. "Yes, Billy."

"I didn't realize that people could lose money on stocks so easily. All I ever hear about is people making money," he offered. This was one of the answers I was looking for.

"Great point. One reason it seems that way is that the stock market has basically been going up for about seven years now," I wanted to minimize my talking without leaving out key details. "But in the past, the value of stocks usually increased much more slowly, and many stocks dropped in price frequently. Stocks are not a completely safe investment. "Sarah, what did you find?"

"I didn't realize the stock market was in New York," she said.

"Good, how about you, Joe?"

"I didn't really know how it all worked on the floor where the stocks are traded; it sounds really crazy."

"Good, that is true, and tomorrow you are going to learn more about that." The bell rang. "Have a good night."

Day Eight. During the month and half between the completion of the original unit and when I began to teach it, I discovered an excellent stock market simulation that did an excellent job of demonstrating

the way supply and demand effects the market. I thought it would provide an excellent review of supply and demand for the students, further familiarize them with the stock market and be a fun activity for one period.

For the purposes of the simulation, the students were divided into two groups, buyers and sellers. Each round the sellers were given a card they had to sell and a price that they should try to sell it for. If they collected less than the price, they lost money. If they received a higher price, they made money. The buyers were also given a card that told them the price they could pay to break even. If they paid more, they lost money. If they paid less, they made money. The goal of each student was to make as much money as possible in three rounds of trading. What the students did not know was that the prices on the cards were set strategically so the average price would gravitate toward a median price. The idea was that the first time, prices would vary quite a bit, but that in each

round they would move toward the median price, which would be the market price.

The first round began, and I passed out the cards. Chaos ensued. Students roamed the room looking for someone to make a deal with and were not afraid to call out the prices they were looking for. Each round lasted five minutes. After time was called on the first round, the students reported the prices they had sold their imaginary stock for. The median price of $15 occurred about the same number of times as $10 and $20. Prices had to be multiples of five. One student did not take the game seriously, which created some ridiculous prices, but most of the prices turned out as I expected them.

The second and third rounds continued as the excited students roamed the room trying to make as many trades as possible during the allotted time. The results of the second and third round showed that the students were learning. The $15 price became the normal price, although some students still managed to

make more or less money. When the game was over, we debriefed.

"What did you think about the game?" I asked the class. Several students called out.

"It was fun!"

"Let's play it again!"

"Why can't we do this every day?"

"Good, I'm glad you liked it, but let's see what you learned," I commented. "What did this game show you about the way stock prices are determined?" I was not encouraged by the blank stares that greeted this question. "How was the price determined in the game?"

Tom raised his hand. "It was determined by what one person was willing to pay to buy it and what other people were willing to sell it for."

"Good, why do you think the prices got more uniform as the game went on Tom?" I hoped this question would lead to a more general understanding.

"I think it was because by the end everyone knew that there would always be someone willing to sell for $15 so they didn't pay more, but the sellers knew

someone would always buy for $15, so they didn't take less as often. Although some people did still do that," he explained perfectly.

"Exactly, that is what happened. Who can explain the connection between the game and the real stock market?" This was a much tougher question.

"I think the real stock market must be crazy, just like this was," Billy volunteered.

I nodded, "That is true. Good point. What's another connection?"

Kristy raised her hand timidly. "Maybe the connection is that stock prices are also determined by how much people will pay for them?"

I smiled, "Yes, that is another great connection. A stock is really only worth the amount of money someone will pay for it." There was one more step, "What is the role of the seller?"

"The seller has to decide what price they will sell for?" she asked.

"Yes, that is why the stock market is such a good example of supply and demand. It operates almost

entirely on the idea that price is determined by how much people are willing to pay and how much others are willing to sell for," I knew that Kristy and a few others understood the simulation well, but I wasn't sure about everyone. Some students still appeared to be confused. But there was little time before the bell.

"We can talk more about this during review tomorrow. Have a good day," I dismissed the class.

Days nine and ten. The final two days of the unit were reserved for review and the final test. The final test (see Appendix C) contained six multiple choice questions, seven questions which asked students to examine hypothetical situations, a graph, five short answer and recall questions and one short essay question. It was worth half of the final unit grade. I wanted to review the main concepts of the unit on Thursday and give the students to practice the type of thinking they would have to do on the test. I chose a game of economics Jeopardy as a means to accomplish this end.

After a brief ten-minute review of basic concepts, I divided the class into three teams, which was easy since the desks were situated in three groups. The class was excited about the game; some students were very competitive. We got through most of the questions, and the students had fun. The nature of the game, however, meant that some students did not participate nearly as much as others participated. This made if difficult for me to assess how much the less vocal students knew and how prepared for the test they really were. I hoped that hearing the correct answers would help the quieter students review.

I did not think the test would take the whole class period to complete, so I reviewed briefly with the students again on Friday. They asked few questions though, so I hoped that meant they knew the concepts well. I passed out the test and waited anxiously to see how well the students would do. Some finished quite quickly, but others took almost the whole period to finish the test. I had hoped that there would be time left in the period for the students to begin

picking stocks for the stock market game, but we ran out of time.

The test yielded some intriguing results. From a grading perspective, most of the students received "Bs" and "As," and only two students received scores below 60 percent. But I was much more interested in evaluating student understanding than in assigning grades. The first thing I noticed was that there was no one question or concept that all or most of the students had difficulty with. Students who received similar total scores had difficulties with different questions or portions of the test. This surprised me because on other tests students tended to struggle with the same questions. Previous tests were poor predictors of student performance on the economics test. Some students who usually scored high on history tests struggled, while others who generally received lower scores did very well. The student who received the only perfect score on the test generally struggled to get his work in on time and did not always do well on tests. It seemed that success in history did not

correlate that strongly with success in economics. Although, the differences could have also been created by different teaching styles.

Since there were no questions that all the students missed and few that they all got right, it was difficult to pick out any one concept that was particularly troublesome. The questions that required critical thinking were missed more than the recall questions, but some students had the most success on the higher order questions.

The final test also included three survey questions designed to get student opinion about the unit. The first question asked, "Did you enjoy learning about the economy?" The responses were overwhelmingly positive, although a few students did indicate boredom with the unit. One student wrote she enjoyed the unit because "now I understand how (the economy) works better." One boy said, "It was interesting, and I found out information like how to find the price of a stock." Another wrote that he enjoyed it "cause it helps me." Many students

mentioned the stock market as their favorite topic. The second question asked, "What would you still like to learn." Many left this one blank, but a few students produced thoughtful answers. Some wanted more information about the stock market. Many suggested playing more games. The final question, "Do you have any suggestions for improving the unit," received similar answers to the second.

Overall, I was encouraged by the tests because the students demonstrated knowledge of the unit objectives, and I was very excited that the students said they enjoyed learning about the economy.

The Stock Market Game

The economics test was the end of the dedicated unit, but it was not the end of economics instruction in the classroom. The following week we began an Industrial Revolution unit that provided several opportunities to talk about the effect of economic principles on history, and I continued to look for chances to integrate the two subjects together through the rest of the semester. But the most obvious

continuation of the unit was the stock market game the students began one week after the final unit test. Each student was given $5000 fictional dollars to buy stocks. They had to purchase at least six stocks but no more than 10 with the money they had. It was technically a non-trading game, but I did let some students make changes to their portfolio about halfway through the game. The goal was to get the students to pick some stocks they were familiar with and follow them for two months. Along the way, there would be opportunities to talk about why stock prices went up and down and for the students to practice math skills.

The students enjoyed picking their stocks, although some of them ignored my advice and bought stocks they had never heard of. This sometimes made it difficult for them to find the new value of their portfolios from week to week. The basic procedure was that each week the students were required to bring the business section of Thursday's newspaper so they could calculate the new value of their portfolio. The students were excited for Fridays because we spent the

day checking stock prices and talking about the market. During the spring of 2000, the market was especially volatile. This made it a good time for a simulation, although at times the students became frustrated.

Most of the students bought Microsoft stock because they were familiar with it, and they knew that it had made a lot of people rich in the past. Naturally, the students were disappointed when Microsoft took a huge drop because of the anti-trust ruling against it. Other hi-tech stocks dropped as well, so most of the students ended up losing money for the semester. While they were disappointed, I was actually happy about this development. I thought it was important that students understand the potential to lose money on the stock market, and losing money during the game was the best way for them to learn this.

As the game went on, the students asked questions about why individual stocks were rising or falling. This gave me several opportunities to talk about

current events and their relationship to the economy. When Costco, another stock that many students owned, dropped in price, I brought in a news article that helped explain why the stock had dropped.

I had originally hoped that each Friday I would be able to spend part of the period teaching a short lesson on an economic topic after the students checked the prices of their stocks. Unfortunately, we rarely had time for this. It takes time to look up prices in the newspaper, and some students took a lot of time to do the necessary math. The time spent checking stocks and doing math was worth it though, and I hoped it would help show students the connections between math and social studies.

After eight weeks, the students sold their stocks, and we wrapped up the simulation. The final questionnaire about the game (see Appendix C) required students to answer a few questions about their portfolio, but the more important questions were the final four. Question five asked students what they learned about the stock market from the experience. "I

learned that you need to know what you are doing and how fast you can lose money," one student wrote. Another wrote, "It can change drastically in seconds." Most answers alluded to the idea that the market changes very quickly.

Question seven asked students what they enjoyed about the game. "I enjoyed competing with other people over who lost the most money," one girl wrote. Few students were specific, but at least three-quarters of the class said that they enjoyed something about the game. The students also had some helpful suggestions for improving the game in the future. Some suggested starting with more money, others wanted to be able to trade stocks each week, and another wanted to spend time tracking stocks before actually buying.

Answering the Research Questions

By nature, qualitative inquiry does not seek to provide definitive answers or conclusions. Instead, it seeks to provide a window to the classroom, which will allow others to learn from the experiences of the researcher. My goal, therefore, was not to create a

concrete course of study in middle school economics. I wanted to examine the way middle school students react to economics instruction and find out the best ways of teaching the subject. The experiences my students and I shared during the unit shed light on the three research questions that grew out of the literature.

What economics content should I teach? The unit I created in January was much more ambitious than the one I actually taught in March. I learned quickly that a two-week unit could not cover all of the Washington State Essential Learning benchmarks in economics (1998). It is better to be realistic about time and choose a few important topics that will help prepare students for future economics instruction. Building block concepts like scarcity and supply and demand should probably be the starting point for curriculum development. I also found that it was important to examine the grade school benchmarks in both the Washington State and National Voluntary Content Standards (1994) because most of the students had not had prior instruction in economics.

Despite their lack of experience, the students demonstrated an ability to understand economic topics. They did not have inherent difficulty understanding economics anymore than they did other social studies topics. If anything, they seemed more interested in economics than history, which helped them to learn. The benchmarks set by state and national standards seem realistic and attainable.

How should economics instruction be integrated into the curriculum? The first thing I learned from the students is that economics instruction should be integrated into the curriculum. The questions they asked and the interest they showed proved to me that economics is a subject that middle school aged student want and need to learn about. In my mind, the best way to teach economics is to integrate it into a broad social studies class along with history, geography and civics. The main advantage of this is that all the subjects are interrelated, and I think it is beneficial for students to see these connections. This does not mean that the curriculum should not include

some dedicated economics lessons. My unit included other subject matter, but economics was definitely the focus. When I asked students if they liked the unit and why on the final test, many students said they liked the unit because it related to their own lives. I believe the best way to teach the basic concepts of economics is to relate them directly to students. This structure, however, still provides opportunities to talk about current events, geography and civics, and leaves room for integrating math, writing and other disciplines as well. After the students master the basics, economics lessons can be integrated into the history curriculum. I attempted to do this over the months following the unit with some success.

The students' positive reaction to the stock market game was encouraging as well. The game integrated elements of economics, business, mathematics, civics, current events and language arts to simulate a real life situation. The students enjoyed the competition and showed interest in the financial world. The success of the simulation

suggests that ongoing simulations can be useful for developing thematic integration. In the future, I would like to create a much more detailed stock market simulation to combine with a variety of inter-disciplinary lessons.

What instructional methods should I use to teach economics? In my mind, this final question yielded the most definitive answers. The students told me during class and on their final test that they liked learning about economics because they saw the connection to their everyday life. The liveliest discussions were the ones that focused on the students; the least lively were those dealing with more abstract ideas. The students were interested in the stock market game because it simulated real life and dealt with making money, a topic most middle school students have a strong interest in. Dewey (1938) told us that the best curriculum will relate to the students' past experiences and my own observations confirmed this.

My second instructional goal was to allow students to construct their own knowledge. At times,

this worked well. The first two lessons of the unit, which dealt with making choices and scarcity, utilized discussion designed to help students think and worked well. More complex topics, however, were more difficult for students. At times, I ended up giving away more answers than I intended to and small group discussions yielded mixed results. I actually expected that students would have difficulty constructing their own knowledge because they lacked past practice. My experiences confirmed this, but the success the students experienced was enough to warrant using these methods in the future. The students' struggles did not seem to indicate that the methods are ineffective, only that the students need more practice constructing their own knowledge.

CHAPTER 6

FINAL THOUGHTS

As I sit to down to write a few final thoughts, the two men who want to be the next President of the United States are revealing their economic vision to the world. It is hard not to wonder if voters will be able to see through the layers of political rhetoric in order to understand the competing economic visions. I am not optimistic, but I am hopeful that future generations of voters will be better trained to understand the complex economic problems that they will face. I hope, in particular, that my own students have gained abilities that will help them to make sound economic choices in their own lives and, ultimately, to participate fully in the democratic process.

The truth is that two weeks was not enough time to teach all the concepts and ideas that students will need to learn about economics. My greatest frustration was the lack of time during the semester to really delve deeply into the subject. The students did learn

a lot during two weeks, but when I think about how much they could have learned during four weeks or an entire quarter, I cannot help but get excited. As a student teacher, I did not have the latitude to dedicate more time to economics because I only had one semester to work with and a lot of topics to cover. Next time, I should be able to teach economic concepts in my own classroom; this hopefully will provide more freedom to structure an integrated social studies curriculum for the entire school year.

The most important skill students need to participate in democracy is the ability to think, and I wanted to help student develop critical thinking skills during the unit. Time limitations again proved troublesome because the students did not have a lot of prior experience with economics or critical thinking. They seemed to be more comfortable with memorizing and reciting facts than really thinking about the world. I wish I had taken over the class more than three weeks before the beginning of the unit. This would have allowed me to work on critical thinking skils before

introducing economics. Even that, however, might not have been enough. Some students are just afraid to share their opinions. This is probably at least partly due to the social culture of middle schools and junior highs, but I cannot help but think that it is possible to create a climate where students will share.

The difficulty students had in expressing opinion and constructing their own knowledge often led me to tell them the answers in situations where I really did not want say anything. This was frustrating, and I wish that I had exercised more patience during discussions and brainstorming sessions. I realize now that this process was not just about investigating student reaction to economics curriculum, but also my own ability to convey it. While the students may need practice in constructivist learning, I need practice in constructivist teaching techniques. It is easy to just tell the students the answer when they are struggling, but the end result is much more rewarding when we allow students to struggle a little bit. They

will be much more satisfied when they find their own answers.

My inexperience as a teacher also contributed to my final frustration, an occasional lack of organization. When the original unit's scope and sequence proved to be too ambitious, I was forced to make a lot of changes quickly. I do not think that any of the new lessons were necessarily bad; they just could have been better. The uninspiring discussion about market and command economies might have been better if I had prepared more thoroughly, and I sometimes worried that connections from day-to-day were not strong enough because of the changes. I tend to think that I would have created a more reasonable unit in the beginning if I had had more prior experience teaching eighth graders.

Despite the frustrations, I enjoyed the project thoroughly. I am still excited about teaching economics, and I think that showed up in my instruction during the unit. When I first decided to create an economics unit, I had no idea how the

students would react. I knew what interested me, but I could only make an educated guess at what would interest them. The guess came pretty close to hitting the mark. The greatest reward was seeing the students get excited about economics and really trying to learn the subject. On the final test at least half the students said they still wanted to learn more about the economy and the stock market in particular. That is exciting! Even if I had learned nothing from creating and teaching the curriculum, it would have been worth it for this alone.

Luckily, I did learn something from the study, in fact I learned a lot about teaching economics and teaching in general. I have always believed that middle school students could learn and understand basic economics, and my experiences confirmed this. The students also told me through words and actions that they enjoy learning about economics when the subject matter was presented in the right way. This meant presenting the material in a way that related to the students' past experiences. When the study began I

already agreed with Dewey (1938) in principle, but the reaction of the students confirmed his ideas for me in practice. The confirmation of this idea will effect the way I teach all subjects in the future, not just economics.

The students were most excited about lessons that they perceived as fun. This often meant games and simulations that related to their own experiences and contained elements of competition. These lessons take work to prepare and administer, but the results are well worth it. While economics is better suited for this type of learning than some subjects, I am sure that this observation will also change my approach to teaching in general. There are ways to make learning fun, and when learning is fun the students learn better. Yes, academic objectives must be kept in mind, and I admit that my inexperience might have led me to lose this focus during the trading game we played on day eight of the unit. But I would rather try to create exciting activities and have some students not

learn than utilize techniques that fail to engage students at all.

I feel the same way about the difficulties I experienced when I tried to help students construct their own knowledge. Even though some students were troubled that I was not giving them the answers to memorize, many were able to see connections and derive economic principles from their own experiences. Students need more practice constructing their own knowledge in all disciplines, and I need more practice helping them do so. Next time I teach this unit I will remember the concepts students had the most trouble with and provide more time for them to think and discuss. More background information might also be helpful.

I am confident that this study will help me become a better teacher of economics and everything else. I am also confident that the students in my class will enter the ninth grade and eventually high school with a little more understanding of the economy than many of their classmates. Hopefully, the interest

that most of them showed in the stock market will lead to further explorations in and outside of school. But even if they do not learn anything new about the economy in the next few years, I would like to think that those who go on to take an economics course in high school or college will be a little bit better prepared than other students. More importantly, I would like to think that my students will continue to think about the choices they make about spending time and money as they move through the their teenage years. And when they turn eighteen and fill out a ballot for the first time, I hope they remember some of what they learned about the economy during a brief two-week unit.

NOTE TO USERS

Page(s) not included in the original manuscript are unavailable from the author or university. The manuscript was microfilmed as received.

176-184

This reproduction is the best copy available.

UMI

APPENDIX A

STANDARDS

WASHINGTON STATE ESSENTIAL LEARNING GOALS

The following is the one Washington State Essential Learning goal for economics (1998) including the middle level benchmarks.

1. The student understands basic economic concepts and analyzes the effect of economic systems on individuals, groups, and society.

To meet this standard, the student will:

1.1 comprehend key economic concepts and economic systems

- A. give and explain examples of ways that economic systems structure choices about how goods and services are to be produced and distributed
- B. describe the role that supply, demand, prices, incentives, and profits play in determining what is produced and distributed in a competitive market system

C. identify and analyze the three basic types of economic systems (traditional, command, and market)

1.2 observe major forms of business and related careers comparing requirements and benefits of various careers

A. identify the three major forms of business and the organization of each

B. compare the different roles and responsibilities people hold within a business organization

1.3 understand the monetary system of the U.S. and how individuals' economic choices involve costs and consequences

A. differentiate among various forms of exchange and money

B. given information about a particular investment, for example, buying a house or investing in stocks, determine the major costs and benefits

1.4 examine how government policies influence the economy and understand the theoretical background of taxes

A. identify ways to measure the local, state, or national economy such as GNP, inflation, or unemployment

B. explain the ways taxes are collected and how taxes are used

1.5 examine the importance of international trade

A. investigate and explain the economic advantages and disadvantages of Washington State's economy as it relates to international economic region

NCEE NATIONAL VOLUNTARY CONTENT STANDARDS

STANDARD 1

Description: Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others.

STANDARD 2

Description: Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something: few choices are "all or nothing" decisions.

STANDARD 3

Description: Different methods can be used to allocate goods and services. People acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.

STANDARD 4

Description: People respond predictably to positive and negative incentives.

STANDARD 5

Description: Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and usually among individuals or organizations in different nations.

STANDARD 6

Description: When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.

STANDARD 7

Description: Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

STANDARD 8

Description: Prices send signals and provide incentives to buyers and sellers. When supply or

demand changes, market prices adjust, affecting incentives.

STANDARD 9

Description: Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

STANDARD 10

Description: Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.

STANDARD 11

Description: Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.

STANDARD 12

Description: Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.

STANDARD 13

Description: Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.

STANDARD 14

Description: Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.

STANDARD 15

Description: Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.

STANDARD 16

Description: There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.

STANDARD 17

Description: Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued.

STANDARD 18

Description: A nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy.

STANDARD 19

Description: Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.

STANDARD 20

Description: Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.

APPENDIX B

LESSON PLANS

Initial Scope and Sequence

Day One: Making Choices: How does economics relate to the choices we make everyday in life

Day Two: You can't always get what you want: The problem of scarcity and how it effects our ability to get what we want

Day Three: That costs how much? The basics of supply and demand

Day Four: The U.S. economic system: What does the government have to do with the economy anyway?

Day Five: Scavenger hunt: What does GDP mean and where can we find out what it is?

Day Six: Nature and the economy: Why people use up natural resources and what can be done about it

Day Seven: Nature and the economy continued

Day Eight: Playing the Market: What is the stock market and why do people make so much money on it?

Day Nine: This is Jeopardy: Review for the final test

Day Ten: Final Unit Test

Revised Scope and Sequence

Day One: Making Choices: How does economics relate to the choices we make everyday in life

Day Two: You can't always get what you want: The problem of scarcity and how it effects our ability to get what we want

Day Three: Half Day: Review first two days

Day Four: That costs how much? The basics of supply and demand

Day Five: Team brainstorming: Group review quiz of basic concepts

Day Six: The U.S. economic system: What does the government have to do with the economy anyway?

Day Seven: Playing the Market: What is the stock market and why do people make so much money on it?

Day Eight: How are stock prices determined? Stock market trading simulation

Day Nine: This is Jeopardy: Review for the final test

Day Ten: Final Unit Test

Choices
Grade Level: 8
Lesson: Choices in Everyday Life

Goals/Aim Objective(s):	**Essential Academic Learnings:**
• Students will understand that the choices they make are based on "rational" thinking • Students will understand that individuals have different preferences • Students will think about their own decision making process and write about it. • Students will work in groups effectively • Students will see how economic choices effect their own lives, so they are prepared for the rest of the unit	• Comprehend key economic concepts • Writing 2.2, write for different purposes

How will the learning be assessed?

Students will write brief paragraphs explaining how they would make a choice in three different scenarios.
In groups, students will answer several questions about what they have written.
Students will hold class discussion about choices.

Resources & Materials

Worksheet with questions to answer in groups

Opening/Framing the Lesson/Introduction
5-10 minutes:
I will ask the students to brainstorm a list of choices that they make during life. At this point I am willing to accept anything, although when they hit upon "economic" type choices, I will encourage that line of thinking.

The Lesson Structure

At this point, we will take the list and choose several of the choices that students make. These will be economic choices. Possibilities include:

What should I buy for lunch?
Should I take a babysitting job for the night or hang out with my friends?
To save or spend a sudden windfall?
Whether to do homework or not?
And many more. What all these questions have in common is that they involve economic reasoning.
The students will then choose three of the choices and write a paragraph on each choice explaining how they would make that choice. This should take about 10-15 minutes. Next, they will get into groups of four and share what they have written. In the group they will answer the following three questions:

1. What similarities did you notice between your reasoning?
2. What difference did you notice?
3. If two or more people answered the same question, did they give the same answer?
4. If the answers were different, why do you think they were different?

Closing:
Last ten minutes:
At this point, we will come back to the group. I will ask, based on what you just discussed, what would you say is the most important factor in descion making?
I will then use this as a starting point to discuss the two conclusions that I want them to draw:
1. People make "rational" choices based on the information they have and their own preferences
2. Each individual has different preferences

Choices Unit
Grade Level: 8
Lesson: You can't always get what you want

Goals/Aim Objective(s):	**Essential Academic Learnings:**
• Students will understand that all resources are scarce. These include not only physical goods, but also time and human capital.	• Economics 1.1: Comprehend key economic concepts
• Students will understand that the most common choices they make are between two or more scarce resources.	• Economics 1.1: Comprehend key economic concepts
• Students will write an essay using information learned in class and their own reasoning and critical thinking skills.	• Writing 1, the student writes clearly and effectively.
• Students will develop reasoning and critical thinking abilities	

How will the learning be assessed?
Students will discuss issues related to scarcity in class.
Students will write a

Resources & Materials

none

Opening/Framing the Lesson/Introduction

1. Ask the students, "what is something you would like to have, but don't?" This is a pretty open ended question, and answers could be crazy. This should take 5-10 minutes.

The Lesson Structure

Look at the list the students have generated, and ask them why the things on the list are difficult to get. Encourage discussion about this.
Possible answers include: price is too high, not allowed to have them, no time. There are many others.

Now, tell the students that what they have discovered is the economic concept of scarcity. "The concept that resources are limited. People desire more products and services than can be produced from the nation's limited resource pool. This is the central problem underlying all economic decisions," as defined by Wentworth and Brue.

Ask the students if they agree that this is the underlying cause of economic decisions. If they don't, allow them to express their opinions, but try to come to a group conclusion about scarcity.

They will then be given the following question:

We have determined that the reason we cannot always get what we want is because the things we want are scarce. There are not enough of them to go around. With that in mind, please answer the following two questions. 1. How do you think the prices of good are determined? And 2) Do you think this is a fair way of determining prices?
You should write 1-2 pages for each question. As you write, justify our answer based on what you know about scarcity, and the choices people make. Also consider the things you already know about the economy. I am primarily looking for evidence of solid reasoning and thinking.

Homework:
Students will be asked to finish the assignment for the next day.

Rubric for essay assignment:
4: The essay demonstrates that the student thought about the problem of what determines price. Their explanation is supported by extensive logic and evidence. It is free from spelling and grammatical errors.
3: The essay demonstrates that the student thought about the problem. The explanation is supported by evidence. The essay has few spelling and grammatical errors.
2: The essay demonstrates some though about the problem. The explanation is supported by a little evidence. The essay demonstrates emerging command of grammar.
1. The essay does not address the question.

Lesson: That Cost's how much

Goals/Aim Objective(s):	Essential Academic Learnings:
• Students will understand the economic concept of supply and demand. • Students will practice plotting information on a graph and interpreting the graph. • •	• Economics 1.1 Comprehend key economic concepts • Math 3, 4, 5. The student uses mathematical reasoning, the student communicates understanding in everyday and mathematical language, and the student understands how mathematical ideas connect to other subject areas.

How will the learning be assessed?
Students will answer questions and discuss issues during class.

Resources & Materials

Supply and demand schedules for footballs from Wentworth and Brue, page 39.

Opening/Framing the Lesson/Introduction

5-10 minutes:
This lesson will be framed by the essays the students completed for homework at the end of yesterday's lesson.
Ask the students what they wrote about the night before. Why do goods cost what they do?
Make a list of the theories the students come up with on the board or overhead.

The Lesson Structure

The goal of this lesson is help the students construct the basic principle of supply and demand for themselves.

Ask, if you want to buy a new video game, and the price drops by $10 are you more or less likely to buy it?
(they should say more likely)

Ask why this is? There are two primary reasons that we are looking for and want to write on the board:
As the price comes down, people will substitute footballs for other things they might by. (this is called the substitute effect)

As the price drops, people can afford to buy more footballs with the money they have. (this is called the income effect)
Note: the terminology is much less important than the concepts.

Either pass out or put the following chart on the overhead.

Price of footballs	Quantity of footballs sold
$50	5
$40	8
$30	10
$20	13
$10	19

Ask the students to plot this data on a graph.. Tell them that this shows the demand for footballs at varying prices.

Now, ask the students to assume that they have a factory that they can use to make footballs or various other goods. Would they be more likely to make footballs if the price was high or low?

Present the following chart.

Price of Footballs	Quantity
$50	20
$40	15
$30	10
$20	5
$10	2

This graph shows that makers of football will produce more footballs the more money they are paid.

Ask the students to plot this data on the same graph they plotted the first data on.

The students now have a market graph for footballs. Ask them what the intersection means? It shows the price of footballs, and the number of balls that will be bought by consumers.

Time permitting, present other data sets which students can use to construct graphs.

Closing:
Ask the students if the supply and demand curves we constructed today are similar to the way they thought prices were determined. How did your own preconceptions differ?

Lesson: The US economic system

Goals/Aim Objective(s):	Essential Academic Learnings:
• Students will understand the basic components of the US economic system. • Students will understand the definitions of capitalism, socialism and communism.	• Economics 1.1 comprehend key economic systems • Economics 1.1 comprehend key economic systems

How will the learning be assessed?
Students will demonstrate their understanding of three basic economic systems by identifying examples of each and explaining why they are examples in writing.

Resources & Materials

Handout explaining definition of the three economic systems
Worksheet

Opening/Framing the Lesson/Introduction

What do you think of when you hear the word capitalist? This will help students think about what they know before the lesson.

The Lesson Structure

After establishing what students think capitalist means, we will move on to talk about the three basic economic systems.

Give the students a handout containing the basic definition of capitalism, socialism and communism. Give them a few minutes to read them.

Have the class give examples of countries they think follow each of the three systems.

Most likely they will say that the US is a capitalist system. This is good, but next they need to see that the US system contains some elements of other systems.

Handout worksheet 4 (attached), and instruct the students to work on it in pairs. Each person must turn in his or her own worksheet though.

Closing:
After the students have finished the worksheet. Write all five numbers on the board and poll the students on their answers. Record them. Tell them that of these situations have and do happen in the United States. Some of them don't seem like capitalism. Does this mean that the US is not capitalist? The conclusion should be that the US has a modified capitalist system that includes socialist elements.

Lesson: The crystal ball (note this lesson may take two days)

Goals/Aim Objective(s):	Essential Academic Learnings:
• Students will understand the three basic economic indicators of the US economy • Students will understand where data on economic indicators can be found • Students will think critically about economic data and what it means to them • Students will interpret graphical information	• Economics 1.4: explain the different ways taxes are collected and how taxes are used. • Math 4: the student communicates knowledge and understanding in everyday and math language

How will the learning be assessed?
In teams of two students will define the three economic indicators.
They will also prepare a report summarizing the economic indicators for the past 12 months and make a prediction about the future.

Resources & Materials

Computers with Internet access.
Handout explaining the assignment

Opening/Framing the Lesson/Introduction

What have you heard on the news recently about the state of the economy? Is it good? Why? (5 minutes)

The Lesson Structure

Prepare the students by having them get into groups of two or three (determined by the number of computers available.) Explain expectations for behavior in the computer lab. Handout the student portion of the attached lesson. Explain to them that they will need to use the Internet to find definitions for Unemployment, Inflation and GDP and the recent numbers for all three statistics.
The rest of the assignment is attached.

Closing:
Ask the students how difficult it was to find the information they were searching for. Next, ask what they think will happen to the economy over the next year.

Lesson: Nature and the economy (two-day lesson)

Goals/Aim Objective(s):	Essential Academic Learnings:
• Students will understand the way private property rights effect behavior	• Comprehend key economic concepts
• Students will understand that natural resources are scarce, and that many people would like to use them	same
• Students will understand that governments must make difficult decisions about the way resources are utilized.	
• Students will demonstrate their ability to think about difficult questions through writing.	• Writing 2.2, write for different purposes

How will the learning be assessed?
Students will show understanding through discussion.
Students will complete written class work.
Students will write an essay making their own policy recommendation.

Resources & Materials

Handout based on article in Social Learning.

Opening/Framing the Lesson/Introduction

I will choose four students to participate in a demonstration. One pair will each be given a small cup of pop or juice to drink. The other pair will be given a larger cup filled with pop and two straws. The first pair will be told that they can drink the pop in their cups whenever they chose. The second will be told the same thing, but they must keep it in one cup.

At this point, I will not tell the students what the point of the simulation is.

The Lesson Structure

After the demonstration, I will ask the students for opinions on three questions:
1. Which is cleaner, the schools hall or your house?
2. What possessions are you the most careful to take care of? Which ones do you not take care of it?
3. If you clean your room, do you it differently than your mom or dad? Why?

This could create lively discussion, but there are two things that the students should conclude. (with help)

1. People tend to take care of private property they perceive as valuable (this often means that they paid a high price for it)
2. People tend to not take care of community property that they are not responsible for.

Write these two conclusions on the board or overhead.

At this point, check in with the students who are drinking the pop. Hopefully, the two who shared drank the pop quickly, while the others took longer to enjoy it.
Ask them why they think this happened?
They (hopefully) should say (among other things) that the two who were sharing drank fast to make sure they got their fair share, while the others knew they could take their time.
Add two more conclusions:

3. People can and often do conserve the resources that they own
4. People often tend to use shared resources quickly

Now, the class has established four basic ideas about private property.

Now, give the students the handout explaining the way water is priced in the United States for farmers and consumers. This handout also asks four questions. The students should take the rest of the period to write about the four questions.

Day 2:
Students will be asked what they know about current methods of protecting endangered species. Follow this up by discussing the endangered species act.

Next, Handout the attached handouts from Social learning (without the answers)

Closing:

Discuss the various ways that endangered species can be protected. Ask students whether they favor the current method or methods that "reward" people for not hurting protected animals.

Homework:

Night 1: The students will be asked to talk to their parents (or guardians) about how their household would use water differently if the price was raised to $10 per gallon.

Night 2: The students will be asked to write an essay making a policy recommendation for the following scenario: government biologists have discovered a rare bird that lives in certain types of trees in Washington. The government would like to protect the species.

Lesson: Playing the Market

Goals/Aim Objective(s):	Essential Academic Learnings:
• Students will understand the basic workings of the Stock Market • Students will understand the math involved with reading the stock pages and doing stock transactions.	• Economics 1.3: understand the basics of investment • Math 3, 4, 5. The student uses mathematical reasoning, the student communicates understanding in everyday and mathematical language, and the student understands how mathematical ideas connect to other subject areas.

How will the learning be assessed?
Students will complete a worksheet demonstrating understanding of the Stock Market.

Resources & Materials

Stock Market packet

Opening/Framing the Lesson/Introduction

What do you know about the stock market? We will brainstorm a list of things the students know.

The Lesson Structure

Handout the Stock Market made easy handout. Give the students time to read through it. As they read through it they will complete the following questions:

1. What is a stock?
2. What is a bond?
3. Why do companies issue stock?
4. Why do individuals buy stock?
5. What is the Dow Jones?
6. What is the NASDAQ?
7. If a stock price is 4 and ¼ how much would it cost to buy 1000 shares?
8. If 1500 shares of a stock cost 32,000, what is the stock price?
9. What factors will make a stock's price rise? What will make it drop?

Closing:
The students will turn in their worksheets and be given the chance to ask questions about the market.

Lesson: This is Jeopardy

Goals/Aim Objective(s):	Essential Academic Learnings:
• Students will understand all the economic concepts they have learned over the past two weeks.	• Economics 1.1

How will the learning be assessed?

Students will divide into teams to play jeopardy. They will also have the chance to discuss issues brought up during the unit.

Resources & Materials

Jeopardy questions

Opening/Framing the Lesson/Introduction

Start out by asking the students if they have any questions about material they have learned over the past two weeks.

The Lesson Structure

Divide the class into three teams. Put up an overhead transparency set up like a jeopardy board with various categories relating to the unit. The questions should have point values. Randomly chose one team to pick the first category. The first person to raise his or her hand after each question gets the first chance to answer each question.

Closing:
Pick out the subjects that the students struggled with and review them briefly.

Homework:
The students should review the material for the test the next day.

APPENDIX C

STUDENT WORK

Economics Pre-Test
(Don't worry, this is just to help me out)

1. **What does the word economics mean to you? (How would you define it?)**
I'm really not sure what economics means, but if I had to guess, I'd say it had to deal with money.

2. **When you buy a candy bar at the store. Why does it cost what it does?**
It costs money so that people cant go out and hoard supplies. It is cheap because it is easy to make, and is small.

3. **Why does money have value?**
Money doesn't really have value any more. Origanally, it represented the amount of gold the country had in storage, but they really broke that idea a long time ago.

4. **What do you not understand about money and the economy that you wish you did?**
I would have to say just about everything.

12 great!

[redacted]
Social Studies
March 13, 2000
decide paper

1. To spend my money I would weigh wether or not I could live without it. Also how much the item costs and how much I have to spend on it.

2. I Should get a job is a decision I make to get money and earn a living. When I get to meet new people at a job and make friends.

3. I should go to school so I can excell in life after my schooling. Also so I can get a good job that pays well. When I don't go to school it affects alot of people.

[redacted]

3-14-00
Social studies 1

I think that the prices of goods are determined by how many there actually are. What I mean by that is if there is less of the product people will spend a lot of money in order to get it. Also other reasons it is so expensive is because the manufacturers want to make more profit. I know that if there is something I want ~~all~~ I'll do almost anything in order to get it. So if there is only a few of that particular item the manufacturers can charge more because they know people will pay the money to get the product.

No, I do not think it is fair how they normally determine prices. I don't think it is fair because than the makers will only make a certain number to get more profit and then they could just make more. I just don't think it is fair because the product is only expensive so the makers can get more money, even though they are already making plenty of it. So no, I don't believe that is fair on how they determine prices.

20

[redacted]

3-14-00
S.S./P.1
Scarcity

I believe items are priced by how many are made, and how much it costs to make them. Say you buy a $20,000 car. It may cost that much because the parts that were used to make the car were expensive. The company totals up the amount by adding the price of each item used to make the car.

Now say you buy a diamond ring. Diamond ~~rief~~ rings may be small, but they are very expensive. The reason they are so expensive is because the diamond and the gold are rare. They aren't things you can'd lying around everyday. You have to search for them and so they are priced high due to the scarcity of the product.

[redacted]
3-14-00
S.S./P.1
Scarcity

2. Even though some objects may be expensive, I believe they are priced fairly. If people didn't charge a little more than the value nobody would make any money at all. In order to buy things, you need money. So although cars, rings, clothes, and other accessories are sometimes priced a little high, it is understandable. When the scarcity of objects and the amount of money it took to make it, all the money that you are spending on it is the same amount it was to make it. When the price of an object is being decided, people are choosing a fair price depending on the product.

1st

Economics Team Competition 2nd

In your group, discuss the following questions. In order to answer them, you will need to think about everything we have talked about this week as well as your own knowledge of the world. The winning team will be the one who comes up with the correct answer to the most questions.

1. Diamonds are one of the most expensive items in the world. Why are they so expensive?

They are rare.

+1

2. Gas prices are currently rising quickly. If they continue to rise, how will behavior change in the United States? 1 point for each correct answer.

+1 Ride more buses
+1 Carpool
+1 Ride Bikes
+1 Walk
+1 Train
+1 Less gas bought
Electric cars +1
Stealing gas +1

+8

3. We just learned today that a new source of oil has been discovered in Alaska. How might this affect gas prices?

It will go down since there is more gas.

+1

4. It was just discovered that taking huge quantities of vitamin C everyday prevents colds. How will this change people's buying habits? What will they buy more of? What might they buy less of? What goods will see prices rise? What goods might drop in price? (1 point for each correct answer)

Buy more Vitamin C +1
Eat things with Vitamin C +1
Less things without V.C. +1
Vitamin C will be more expensive. +1
Things w/o Vitamin C will be cheap +1

+5

5. A car company has just announced that they are putting an electric car on the market that will sell for $20 thousand dollars. This is more money than the average gasoline powered car costs, but it is still within the price range of many families. How will this affect the market for cars? How else will it effect the economy? (one point for each correct answer)

More electric cars will be purchased
Companies will try to make cheape elect. cars
Your electric car will cause a high bill
Gas prices will go down.

1 R

6. You have just started a business selling Coke at Kalles sporting events. The government announces that they will now charge a 10-cent tax on every can of pop sold. You previously sold each can for 50 cents, how will this new tax effect your business? What changes will you make? (1 point for every correct answer)

You may not get as many customers.
~~Buy Cheaper~~
Raise price to 60¢

+1

7.

36/40

Economics Unit Test

Part I
Multiple Choice

1. When economist say that people make "rational" decisions, what do they mean?

A. People choose impulsively
B. People choose the best consequence for themselves
C. People choose the best consequence for the world
D. People make decisions based on calculus

2. Why do my brother and I spend our money differently?

A. We have different amounts of money
B. We shop at different stores
C. We have different preferences
D. We don't like each other

3. The income effect says that

A. If good x drops in price, people buy more because they can afford to buy more
B. If good x rises in price, people buy more because they can afford to buy more
C. If good x drops in price, people buy less because they can afford less
D. If good x drops in price, people buy more because they buy less of something else

4. All of the following are ways the government directly effects the economy except

A. Taxes
B. Tariffs
C. Subsidies
D. Supreme Court decisions

5. The law of supply says

A. Sellers will be willing to sell more of a good at higher prices
B. Sellers will be willing to sell more of a good at lower prices
C. Suppliers must always charge fair prices
D. Consumers supply more goods at higher prices

6. In economic terms, scarcity means

A. A good is rare
B. Goods are limited but wants are unlimited
C. The store is out of stuff
D. People make choices

Tell whether the following changes are due primarily to the income effect, the substitution effect or both equally. Explain your answer.

7. The price of CDs drop, you buy more because you can afford to buy more.
Income effect. Since the price dropped you can afford to buy a lot.

8. A new computer is put on the market that is cheaper and better than current computers, people buy less current PCs
Substitution effect. There is something cheaper and better than another so they buy more of that and less of the other.

9. Electric cars are put on the market, people buy less gasoline powered cars
Equal. This car is better than the gas cars because you don't have to buy gas, and it is cheaper because you won't have to pay for gas.

For the following, tell whether prices change due to a change in demand, supply or both. Explain your answer.

10. Microsoft's profits rise; its stock rises in price.
Demand. They are earning more money so the value goes up.

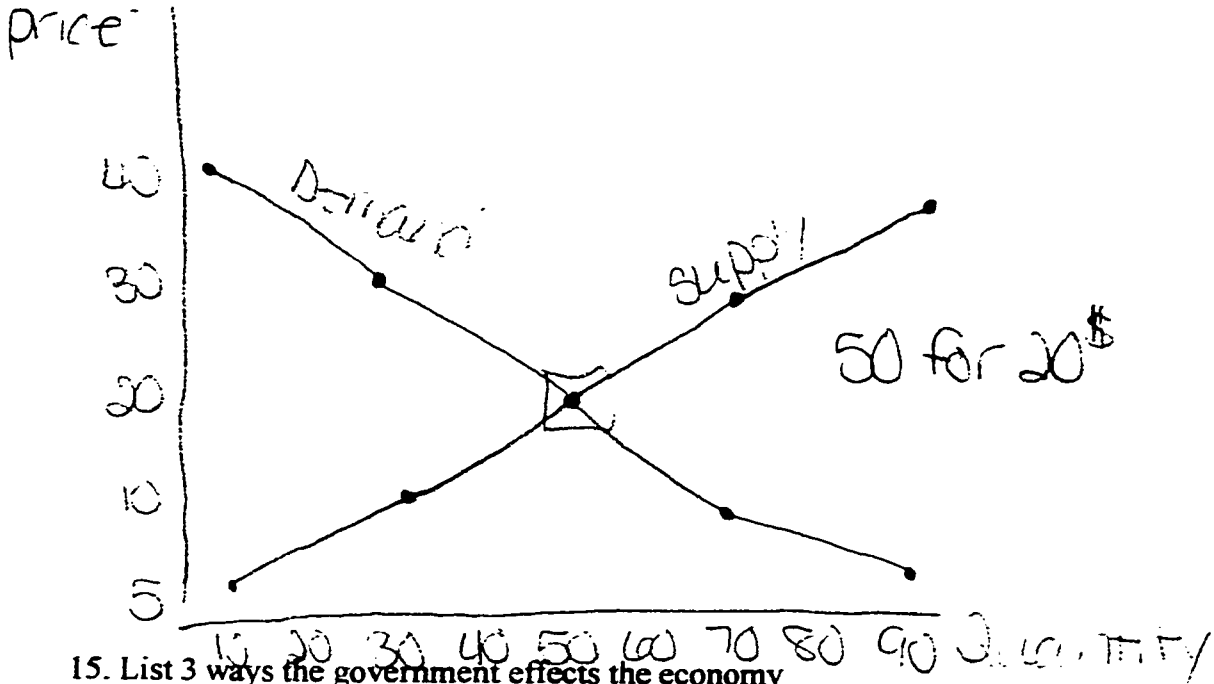
11. A drought leads to higher water prices.
Both.. The people demand more water but the price goes up to supply it.

12. There are less trees in the forest, the price of paper goes up.
Supply. Since there aren't many trees in the forest the price would go up because of the scarcity good

13. A woman is poisoned by a can of Coke, Pepsi prices rise.
Demand. People demand more Pepsi because they are afraid to drink Coca-Cola.

14. Please use the following data to create a supply and demand graph below.

Price	Quantity Supplied	Price	Quantity Demanded
$5	10	$5	90
$10	30	$10	70
$20	50	$20	50
$30	70	$30	30
$40	90	$40	10



15. List 3 ways the government effects the economy

tariffs, taxes and welfare

16. What is a stock?

ownership in a company

17. What is a bond?

a loan

18. List 3 reasons the price of stocks rise.

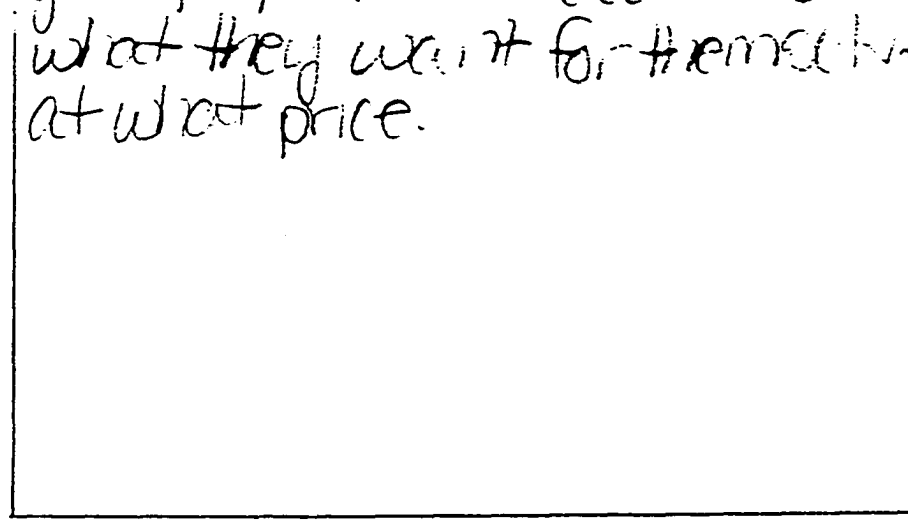
A [illegible] piece of news about the company and

19. List 3 reasons the price of stocks drop

war, bad news about the company and trade. Such as a Drout

20. Which do you prefer, the market economy or the government controlled economy and why?

price I prefer the market economy. It gives people more freedom to choose what they want for themselves and at what price.



quantity

Answer the following three questions for free points

21. Did you enjoy learning about the economy?

Yes.

Why or why not?

Now I understand how it works better.

22. What would you still like to learn?

I don't want to learn about work. — we will

23. Do you have any suggestions for improvements to the unit?

Have more activities instead of just notes

& good idea

STOCK MARKET

[redacted]

(YOUR NAME OR COMPANY NAME)

BUY DATE 4/3/00

CORPORATION	COST PER SHARE WEEK 1	NUMBER OF SHARES	TOTAL COST OF SHARES WEEK 1	COST PER SHARE WEEK 2	COST PER SHARE WEEK 3	COST PER SHARE WEEK 4	COST PER SHARE WEEK 5
Immunex (IMNX)	59 5/8 .63	9	536.67	62.56	51 459	41 1/8 370.13	42 1/8 379.17
Network Appliance (NTAP)	67 7/8 .88	9	610.92	69 9/16 [illegible]	63 5/8 572.67	74 1/16 [illegible]	71 1/16 645.21
Inf[illegible] (INTC)	145 1/16 .04	8	1,160.48	105 1/8 [illegible]	62 1/4 498	75 13/16 [illegible]	64 512
Cisco (CSCO)	72 3/4 .75	13	945.75	72 1/8 72.13	70 910	70 910	68 3/16 886.117
Harley Davidson (HDI)	79 1/2 .5	10	795.00	81 7/8 [illegible]	44 1/2 445	41 1/8 411.30	41 5/8 416.30
Microsoft (MSFT)	90 [illegible] .67	10	901.70	86 3/8 [illegible]	83 7/8 838.80	71 710	71 1/8 711.30

[illegible] -124.04

TOTAL INVESTMENT [redacted] [redacted] [illegible] 3[illegible]2.15

SELL DATE

COST PER SHARE WEEK 6	COST PER SHARE WEEK 7	COST PER SHARE WEEK 8	COST PER SHARE WEEK 9	COST PER SHARE WEEK 10	COST PER SHARE WEEK 11	COST PER SHARE WEEK 12	TOTAL VALUE OF SHARES WEEK 5	GAIN FROM WEEK 1	(LOSS) FROM WEEK 1
37 1/4 / 333.25	34 11/16 / 312.21						312.21		
62 1/2 / 860.50	71 / 639						639		
54 / 432	59 / 472						472		
60 / 819	55 1/10 / 722.80						722.80		
42 / 420	40 7/10 / 404.40						404.40		
69 3/4 / 697.50	66 1/10 / 660						660		
T. Richard Anderson	Melissa Anderson								

TOTAL INVESTMENT VALUE

Stock Wrap Up

Please answer the following questions and attach them to your stock buy and sell sheet.

1. **What was the final value of your portfolio?**

   $4,489.19

2. **Which stock that you bought increased in value the most?**

   none

3. **Which price dropped the most?**

   Amazon.com

4. **What factors do you think might have caused your stocks to rise/drop in price?** Because basically all the stocks went down

   why did they drop?

5. **What did you learn about the stock market from this experience?**

   that it is always up and down

6. **What do you still want to learn about the stock market?**

   I don't think there is anything else I need to know

7. **What did you enjoy about the stock market game?**

   I enjoyed finding out who lost the most money

8. **What could be improved to make the game even better?**

   I think before you should watch the stocks to see if they are stable before you buy them

   good idea

Stock Wrap Up

Please answer the following questions and attach them to your stock buy and sell sheet.

1. **What was the final value of your portfolio?**
   negative 237.79
2. **Which stock that you bought increased in value the most?**
   [illegible]
3. **Which price dropped the most?**
   Best Buy -12.15
4. **What factors do you ~~think~~ might have caused your stocks to rise/drop in price?** People [illegible] buy
5. **What did you learn about the stock market from this experience?**
   It can be up [illegible] really drop the [illegible]
6. **What do you still want to learn about the stock market?**
   More about [illegible] to buy
7. **What did you enjoy about the stock market game?**
   The math
8. **What could be improved to make the game even better?**
   make it easier to [illegible]