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Curriculum Improvement: The Teacher Perspective on Change in the Classroom

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CURRICULUM IMPROVEMENT:

THE TEACHER PERSPECTIVE ON CHANGE IN THE CLASSROOM

By

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This study explored the curriculum change experiences of five social studies teachers, from three high schools within one school district located in a western Montana city, integrating an economics curriculum in their eleventh grade U.S. history classrooms for the first time. A review of the related literature on this topic revealed several areas of consideration regarding teachers' curriculum change experiences which guided the data collection and analysis process: commitment, workload, capacity, collaboration, and perception of the teaching profession. This qualitative, within case study was designed to add to the body of quantitative research on curriculum change. Data collection sources include: pre and post interviews, observations, electronic journals, field notes, and document analysis. Five themes emerged from the data analysis of the participants' curriculum change experiences: support, time, motivation, adaptation, and student learning. A skyscraper depicts a visual model of the complex and inter-dependent relationship of themes in the curriculum change process as determined in this study. Each of the themes is presented in narrative format as a vignette giving voice to the teachers' curriculum change experiences. Overall, teachers are positive about curriculum change and look at it as an on-going process to improve curriculum in an effort to increase student learning. The conclusion offers several suggestions to ease the curriculum change process for teachers. Teachers need the support of the community, administrators, colleagues, and outside agencies for continued, successful curriculum change. Teachers need time and space for collaboration, planning, curriculum development, and knowledge building. Teachers need to be able to easily adapt curriculum materials to their own teaching styles and district curriculum guidelines. Teachers are motivated by what interests them and so are students. Curriculum developers and planners need to keep the interests of teachers and students in mind when creating curriculum materials and professional development. Students and teachers demand relevant, current, local examples to increase their understanding and reach the ultimate goal of curriculum change in the classroom: curriculum improvement and increased student learning.

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CHAPTER 1:

INTRODUCTION AND STATEMENT OF THE PROBLEM

Curriculum change is a long and arduous process. Administrators and teachers begin by consulting the national and state standards written for the various content disciplines that establish what should be taught at each grade level. Curriculum developers sometimes suggest how the content should be taught, but rarely do they guide educators as to how to implement the curriculum itself.

Other challenges exist in the curriculum change process. Not only do teachers lack direction regarding curriculum change, they lack the time to learn the new curriculum. Insufficient knowledge in a given discipline tempts a teacher to skim topics, regardless of the district's curriculum document. Experienced, but unmotivated, teachers can fall back on past teaching habits, teaching the new content in a lack-luster way so as to render the content of new curriculum meaningless (Orrill & Anthony, 2003). These obstacles to successful implementation of a new curriculum in the classroom can result in that curriculum having little chance of accomplishing the desired result.

The field of economics education has been a particularly difficult part of the secondary curriculum in which to effect significant change. Inadequate college-level preparation in economics by high school teachers is a major reason (Siegfried & Meszaros, 1998). Nationally and in Montana, licensed social studies teachers have minimal coursework and training, if any, in the field of economics. Teachers find themselves overwhelmed if they are asked to teach subjects in which they have little background or experience (Siegfried & Meszaros, 1998). The very mention of economics

can evoke images of complex mathematical equations and fears about what economics is, making implementation of new economics curricula even more challenging than other types of curriculum (Allgood & Walstad, 1999).

Despite problems with curriculum implementation, economics education curriculum materials have been developed by professional organizations such as the National Council for Economic Education (NCEE), the Foundation for Teaching Economics (FTE) and the Global Association of Teachers of Economics (GATE). According to the National Assessment for Educational Progress (NAEP), which measured economic literacy for the first time in 2006, economic literacy among high school students in the United States is low despite the availability of economics education curriculum materials. This is particularly the case in advanced economics concepts and those usually associated with macroeconomics (Buckles & Walstad, 2008). Implementation of new curricula in economics education is challenging at best; at worst, it does not happen.

In an effort to improve student understanding of economics, the Montana Council on Economic Education (MCEE), the state affiliate of NCEE, has developed sixteen Economic Learning Modules (ELMs). The ELMs are complete lesson plans in advanced economics topics at the high school level. MCEE, under the leadership of Norm Millikin, Myles Watts, Vince Smith, and Holly Fretwell, all of Montana State University – Bozeman, have led in the development of this economics curriculum. The complete curriculum was first available to high school social studies teachers throughout Montana in fall 2008. The goal is increased economic literacy among Montana's high school graduates (Millikin, 2008).

Purpose of the Study

The purpose of this single, within case study was to explore the curriculum change experiences of five high school social studies teachers in a western Montana city. These teachers are integrating a new curriculum produced by the Montana Council on Economic Education, known as Economic Learning Modules (ELMs). This study considered curriculum change from the teachers' perspective. It was an attempt to gain insight into what works, what the barriers are to curriculum change, and what steps can be taken to improve the curriculum change process for experienced teachers.

Research Questions

Central Question

What are the curriculum change experiences of five high school social studies teachers in a western Montana city who are integrating a newly-released economics education curriculum into their U.S. History curriculum for the first time?

Sub Questions

The following specific research questions were used to guide the study:

1. What factors contribute to, or stand in the way of, success for participants making curriculum change?
2. In what ways do the participants demonstrate commitment to curriculum change and the teaching profession?
3. How do the participants' teaching and extracurricular duties affect curriculum change?
4. In what ways are the participants prepared to teach the new curriculum content?

5. How do the participants collaborate with and perceive their colleagues when making curriculum change?
6. How do outside influences affect participants in the curriculum change process?
7. What strengths and suggestions for improvement are evident in the application of the ELMs?

Definition of Terms

The following definitions help to clarify the meaning of terms used in this study. The origins of the terms within the literature are provided. For the purposes of this study, the following definitions were used:

Curriculum change is defined as a new course or program offering, or changes in program goals related to the teacher's role in curriculum change at the classroom level (Berman, 1980).

Economic literacy is defined as the ability to identify, analyze, and evaluate the consequences of individual decisions and public policy. Economic literacy includes:

- an understanding of the fundamental constraints imposed by limited resources, the resulting choices people have to make, and the trade-offs they face;
- how economies and markets work and how people function within them;
- and the benefits and costs of economic interaction and interdependence among people and nations.

Economic literacy also includes having the skills that allow people to function effectively in their roles as consumers, producers, savers, investors, and responsible citizens. These skills include economic reasoning, problem solving, decision making, and

the ability to analyze realistic situations (American Institutes for Research, National Council on Economic Education, and Council of Chief State School Officers, 2002, p. ii).

Educational change is defined as educational theories, ideas, and innovations including development, design, implementation, and evaluation of programs at the district, state, and national level (Berman, 1980).

General education is defined as education provided at public expense, under public supervision and direction, and without charge in a regular education setting (Individuals with Disabilities Education Improvement Act, 2004).

High school is defined as a school serving students in grades 9-12 (Mont. Admin. R. 10.55.713, 2001).

Metropolitan area is defined as a geographic area with a population nucleus (city) with 50,000 or more inhabitants and a total population of at least 100,000 (U.S. Census Bureau, 2007).

Delimitations

The participants of this study were five 11th grade U.S. history teachers in a school district located in a western Montana city. The school district has three urban, general education high schools. One to two teacher participants were selected from each of the three urban high schools.

A second delimitation is the amount of teaching experience of the teacher participants. The teacher participants have at least 5 years of classroom teaching experience in the social studies curriculum area.

A third delimitation is the teaching endorsement that the teacher participants hold. The teacher participants hold a Class 1, professional teaching license, or a Class 2,

standard teaching license issued by the state of Montana. Each is qualified in social studies broadfield or history, government, and economics.

Limitations

The purposeful selection of participants for this study was a limitation because the results are not generalizable to the larger population. However, qualitative research does not attempt to generalize results. Transferability is the goal, where the user of the research determines the usefulness of the research (Creswell, 2003). Lortie's (1975) sociological study of teachers revealed that teachers were annoyed by unwanted innovations. Therefore, only participants interested in integrating the Economic Learning Modules (ELMs) in their U.S. history curriculum were included, a limitation to the study. Additionally, only teacher participants with whom the researcher has a professional relationship were used in the study to meet the goals of Eisner's (1991) connoisseurship model, creating another limitation to the study. The teacher participants' ability to deliver the ELMs in a meaningful way was an additional limitation to this study. The study was also limited by the program used to gather data on the change experiences of the participants, the Economic Learning Modules published by the Montana Council on Economic Education.

Significance of the Study

This study of teachers' perspectives on the curriculum change process will help educational policy makers, reformers, and leaders view curriculum change from the teachers' perspective and help discern how best to prepare and assist teachers for the curriculum change process. Qualitative research specific to teachers' perspectives on curriculum change further develops the results of quantitative studies. Identifying

curriculum change barriers through this study leads to better methods of curriculum change and ultimately, to improved student learning and achievement. Additionally, identifying traits of successful curriculum change allows states, districts, schools, and education organizations to improve and expand professional development opportunities and encourages their willingness to fund curriculum change opportunities.

Summary

Curriculum change is widely debated by educators, reformers, and the community; at no time in the history of American education has everyone agreed on what to teach and how best to go about it. In the work of accomplishing curriculum change, the teachers' perspective is often overlooked, but is essential to successful change and, ultimately, student achievement.

Economics education is an area of particular difficulty related to curriculum change. In order to motivate high school teachers throughout Montana to make curriculum change and implement new economics curriculum materials, the Montana Council on Economic Education (MCEE) has developed 16 Economic Learning Modules (ELMs). This curriculum was designed using the *National Voluntary Economic Content Standards.* The Montana Council on Economic Education hopes more economics curriculum content will be taught through integration into other subjects or as stand-alone economics classes with the help of the ELMs.

Five teacher participants from high schools in a western Montana school district each implemented two or three ELMs in their U.S. history classrooms. The researcher explored the curriculum change experiences of these five participants. Roadblocks to curriculum change from the teachers' perspective were identified, particularly in

economics education, providing change, dissemination, and implementation ideas for the future.

CHAPTER 2: REVIEW OF THE LITERATURE

Introduction

This study focused on curriculum change in high school social studies from the teachers' perspective using a newly developed economics education curriculum. A thorough review of the literature requires consideration of the historical foundations of curriculum change and an understanding of the meaning of curriculum change from the teachers' perspective. In addition, a current view of economics education and an analysis of the Economic Learning Modules (ELMs) puts curriculum change in a specific, meaningful context.

Educational change is a broad topic that includes curriculum change, theory, development, innovation, and evaluation at all levels of education (Doll, 1996; Marsh & Willis, 2005; Posner, 2004; Sowell, 2005). Curriculum change itself encompasses a spectrum of ideas. Berman (1978; 1980) researched curriculum change and distinguished between the teachers' role at the classroom level and the broader view of curriculum change at the district, state, or national levels. He defined these two levels by units of analysis using the terms "micro-implementation," the narrower focus of analysis, and "macro-implementation," the broader view of curriculum change (p. 29).

Micro-implementation plays a significant role in the research on educational change. Fullan (2007), internationally recognized for his expertise in educational change, pointed to the major failure of educational change as "the inability to get inside the classroom" (p. xii). Allen, Ostoff, White, and Swanson's (2005) study of three major

urban areas' reform efforts, conducted by the Cross City Campaign for Urban School Reform, illustrated Fullan's argument. Throughout the study, researchers found a failure to focus on changes in instructional practices at the classroom level. For Fullan, systemic educational change is required and needs on-going, data-driven, formative assessment that will focus on individual instructional practices and routines (Fullan, Hill, & Crevola, 2006).

Hargreaves, another internationally recognized educational change scholar, and Goodson (2006) indicated a similar need for further study at the classroom level. Hargreaves and Fink (2003) argued that high-stakes testing pushes teachers to improve test results, but does not improve learning. They suggested that a more complete view of what goes on in the classroom and teachers' perspectives on curriculum change will better prepare educators to actually improve learning.

Many factors inside the classroom affect student learning. The literature points to several areas of consideration specific to the teacher: commitment, workload, capacity, collaboration, and the erosion of the profession (Bennett, 2002; Berman & McLaughlin, 1978; Fullan, 2007; Hargreaves & Goodson, 2006; Swanson, Hightower, Lloyd, Mitani, Wittenstein, & Reed, 2008). Much research has already been completed in these areas, but gaps exist at the high school level (Elmore, 2004; Fullan, Hill, & Crevola, 2006) and little is available on teachers' perspectives regarding economics education.

Economics education is a particularly difficult part of the secondary curriculum in which to effect significant change, one major reason is inadequate college-level preparation in economics by high school teachers (Siegfried & Meszaros, 1998). Nationally and in Montana, licensed social studies teachers have minimal coursework and

training, if any, in the field of economics. Teachers responsible for economics instruction find themselves overwhelmed when asked to teach a subject in which they have little background or experience (Siegfried & Meszaros, 1998). For many teachers, integrating economics concepts into existing curricula is more challenging than other subject areas because economics often evokes images of complex mathematical equations and fear of the unknown.

To help counter these problems, the Montana Council on Economic Education (MCEE) designed curriculum materials to assist the classroom teacher in teaching economics concepts to high school students throughout Montana. Over a five year period, 2003 to 2008, MCEE developed sixteen Economic Learning Modules (ELMs). Several curriculum evaluation models (Doll, 1996; Marsh & Willis, 2005; Posner, 2004; Sowell, 2005) provide a framework for analyzing the ELM curriculum.

Curriculum change in high school economics education from the teachers' perspective must be put into context within the existing literature. First, a look at the historical foundations of curriculum change will help determine what has already been studied and create a better understanding of the meaning of curriculum change. A historical examination will also help relate the process of educational change to the larger political, economic, and demographic forces that shape society in general (Hargreaves & Goodson, 2006; Sahlberg, 2006). Second, a close examination of curriculum change from the teachers' perspective provides insight into the process, especially obstacles, to curriculum change. Third, a current perspective on economics education provides an overall picture of what is currently being taught and how teachers are prepared to teach

economics content. Finally, an evaluation of the newly-developed ELM curriculum places the curriculum in the broader context of the literature on curriculum change.

Historical Foundations of Curriculum Change

Examining the historical purposes of American education provides a starting point for understanding curriculum change over time. Thomas Jefferson wrote one of the first documents addressing the purpose of American education. Jefferson, instrumental in the establishment of democratic practices in the United States, viewed free, public education as essential to the continuation of democracy and the new nation. His *Bill for the More General Diffusion of Knowledg*e, submitted in 1779 to the Virginia legislature, outlined the importance and specific details of public education in a democratic society. Although this proposal did not become law, Jefferson's vision was implemented in the centuries that followed by means of a massive network of public elementary and secondary schools.

Four periods of educational change reflect the major changes in purpose in American schools and are recognized in the literature (Clandinin & Connelly, 1992; Cho, 1998; Fullan, 2007). The first major period of educational change occurred during the Progressive era (Bennett, 2002; Cremin, 1961; Fullan, 2007; Peltier, 1967; Posner, 2004). The Progressives emphasized changing the environment, in this case schools, to improve society. A second major period of educational change, referred to as Research, Development and Diffusion (RD&D), occurred during the Cold War following World War II. Education policy makers at this time focused on technology, science, and math for the purpose of competing with the Soviet Union for world power (Berman, 1980; Cho, 1998; Snyder, Bolin, & Zumwalt, 1992). The third educational change period, referred to as Collaboration, was a reaction to the technical nature of the Cold War era when

curricula returned to many of the ideals of the Progressive era (Cho, 1998; Fullan, 2007; Snyder et al., 1992). The most recent educational change period recognized is referred to as the Standards and Accountability movement, occurring since the 1990s (Fullan, 2007; Hargreaves & Goodson, 2006).

Progressive Education

The Progressive movement swept the United States during the late 19th and early 20th centuries and affected many aspects of American life, including education. In response to significant social, political, and economic changes, the fundamental idea that united Progressives was that the environment could be systematically changed to improve society. National education commissions published policy recommendations, including the *Cardinal Principles of Secondary Education* (Commission on the Reorganization of Secondary Education, 1928). Model programs associated with universities established laboratory schools and "administrators turned reformers" revamped school systems (Posner, 2004, p. 217). As attitudes about teaching shifted, educators themselves created new approaches to curriculum.

John Dewey's laboratory school at the University of Chicago was one of the best known centers of curriculum change during the Progressive era. In a study of Dewey's laboratory school, Mayhew & Edwards (1936) noted that teachers reflected, collaborated, and supported one another in weekly teachers' meetings. Teacher participation in curriculum change was evident in records of these meetings. "Cooperative social organization" (Mayhew & Edwards, 1936, p. 371) of the teachers was the fundamental principle guiding the Dewey School and this philosophy led to more fluid improvement of curriculum and instruction, as well as professionalization of the teaching staff.

The Denver Curriculum-Revision Program (Newlon & Threlkeld, 1926) noted that teachers needed an "intelligent understanding of their work" (Bennett, 2002, p. 573). The easiest way to accomplish such an understanding was to have teachers cooperatively involved in the creation of curriculum. Jesse Newlon, Superintendent of Denver Public Schools from 1920 to 1927, believed that teachers needed to be key participants in all curriculum decisions (Newlon, 1923).

Aikin (1942) published the results of a multi-year study of thirty students attending experimental high schools in the U.S. throughout the 1930s. Commonly known as the Eight Year Study, one of its aims was to determine how to serve students more effectively. Findings from the study indicated that all teachers should be involved in change decisions, and not just at the classroom level. Collaboration was essential for collegiality and improvement.

Cremin (1961), a leading authority on the history of education during the Progressive era, traced the historical roots of teacher involvement in the curriculum process as far back as 1893, with the publication of *The Public-School System of the United States* by Joseph Rice. In addition to identifying problem schools, Rice identified schools with exemplary practices. One reason for their success was the involvement of teachers in curriculum work (Rice, 1893). Cremin (1961) also wrote about exemplary curriculum work by teachers at the Cook County Normal School in the 1890s, but it was Herbert Spencer that Cremin credited with pedagogical reform at the turn of the 20th century that became known as Progressive education. Curriculum development became a major focus of the reform. Up to this time, school administrators and curriculum specialists had taken responsibility for curriculum development. However, during the

Progressive era, the administrators' role became that of facilitator. Progressive educators argued that no change could be made without teacher involvement (Cremin, 1961).

More recently, Bennett (2002) provided a thorough description of teacher participation in curriculum development during the Progressive era. Bennett's analysis led to four themes of consideration regarding curriculum change at the classroom level. These themes include time, support, reflection, and knowledge. Time refers to release time to develop knowledge, often referred to as professional development, and classroom materials. Support refers to the collaborative nature of the curriculum change process. Newlon and Threlkeld (1926) argued that the change process must be voluntary with democratic participation of all involved including the administration, teacher organizations, universities, and classroom teachers. Reflection refers to the process of experimentation, reevaluation, and adaptation. Finally, knowledge refers to teachers' capacity for teaching the content and professional development opportunities made available to them.

Research, Development, and Diffusion

Just as massive immigration to the U.S. led to the Progressive reform movement in education, the emergence of the Soviet Union and the United States as world powers at the end of World War II had a major impact on education. Competition created by the Cold War added a sense of urgency for new technology and scientific development in the interest of national security. The Soviet Union's launch of *Sputnik* in 1957 did more than create the race to space. National leaders began to focus on math and science as competition for world power increased. During this time, it was believed that teaching practices and the process of curriculum change could be improved through the careful

application of technologies. The Research, Development and Diffusion model (RD&D) of curriculum change was an effort to "technicize" the curriculum change process (Posner, 2004, p. 227).

Authors of the RD&D model of curriculum change described a linear series of steps including research, development, diffusion, and adoption (Posner, 2004). Research determined the principles of curriculum and instruction. Development applied research to the creation of new curricular materials. Diffusion "systematic[ally]" (Posner, 2004, p. 218) disseminated new curricular materials to classroom teachers and adoption represented the use of new curricular materials in the classroom.

The Guba-Clark model is the most influential version of the RD&D model (Berman, 1980; Cho, 1998; Fullan, 2007; Posner, 2004). Clark & Guba (1967) noted that research on educational change had little effect on practitioners, but argued that the purpose of research was to advance knowledge, not to influence practice directly. According to Clark & Guba (1967), research needed to be left to the researchers and practice left to the teachers. What was missing was a clear link between researchers and teachers. Glaser (1969), of the University of Pittsburgh Learning Research and Development Center, developed another curriculum using the principles of RD&D and called it Individually Prescribed Instruction (IPI). IPI's aim was to apply RD&D principles to the entire primary and secondary curriculum (Posner, 2004).

The technical development process of the RD&D model was intended to create "teacher proof" (Posner, 2004, p. 227) curricular materials on a national scale. Perhaps predictably, the materials were misused, if used at all (Posner, 2004). The teacher was viewed as a passive recipient (Berman, 1980; Fullan, 2007; Posner, 2004) and was

assumed to have the same goals as the curriculum developers (Posner, 2004). This model also assumed the teaching content was transferable from one situation to the next. Fullan (2007) considered the RD&D era of curriculum change a failure and blamed it on the "absence of change at the classroom level" (p. 5). He pointed out that the teacher controls what happens in the classroom. Thornton (2005) added that because teachers make daily instructional decisions they have a great deal of flexibility in interpreting a prescribed curriculum, making the RD&D model of curriculum change impractical.

According to Atkin & House (1981), RD&D specialists blamed the failure of curriculum change on state, district, and school level administrators and other change agents that were supposed to guide teachers in using materials. Practitioners blamed the failure on poor dissemination efforts and inadequate materials. However, throughout the 1970s the RD&D approach remained the dominant model for the educational change process at the federal level (Atkin & House, 1981). Fullan (2007) and Fullan et al. (2006) argued that little has changed in the half century since the inception of the researcher-directed, linear, and technical RD&D model of curriculum change. As the Cold War era came to an end, however, education returned to Progressive era thinking and a more collaborative approach to curriculum change.

Collaboration

The "collaborative" approach to curriculum change developed in response to the shortcomings of the RD&D model (Atkin & House, 1981). The collaborative approach has several names in the literature, including adaptation (Berman, 1976; Cho, 1998), mutual adaptation (Berman, 1980), and enactment (Clandinin & Connelly, 1992; Snyder et al., 1992). The collaborative approach was founded on the belief that good teaching

develops through experience and teachers' knowledge in the art of teaching (House, 1979). It was believed that teachers learn best through observing other teachers and discussing ideas (Posner, 2004). Unlike the linear and scientific RD&D approach, the collaborative approach was guided by beliefs about teachers, students, content, and schooling in a broad social perspective.

Developers using the collaborative approach believe that curriculum development efforts should be focused locally. Teachers as well as students should participate in making curriculum decisions (Fullan et al., 2006; Posner, 2004). Curriculum change is not a matter of measuring outcomes, it is a process of understanding how curriculum is "enacted and experienced" in the context of the classroom (Snyder et al., 1992, p. 402). Functions of the curriculum change process do not occur in a linear fashion, but are continually readdressed throughout the process. Using the collaborative approach, administrators, teachers, content area specialists, students, parents, and other community members are included in the development and change process (Posner, 2004). As noted above, the Denver Curriculum-Revision Program (Newlon & Threlkeld, 1926) and the Eight Year Study (Aikin, 1942) may be considered Progressive-era examples of the collaborative approach (Cho, 1998; Snyder et al., 1992).

For Snyder et al. (1992) studying teachers from an enactment, or collaborative, perspective involves describing and understanding the meaning teachers give an externally developed curriculum within the context of their own classrooms. Case studies of effective classrooms and teachers, they suggested, are needed so that the experience and knowledge of talented teachers can be shared for the benefit of others.

Standards and Accountability

Several studies focusing on educational change since the mid-1990s have shown increases in high-stakes testing and accountability in education systems worldwide (Hargreaves & Goodson, 2006; Sahlberg, 2006; Yucel, 2008). The result is the current curriculum model that involves centrally prescribed curriculum and assessment focusing on numeracy and literacy (Sahlberg, 2006). Teacher accountability programs have been established in the United States and abroad, including *No Child Left Behind* (NCLB) in the U.S., *Raising Achievement Transforming Learning* (RATL) in England, *Millenium Development Goals and Education for All* by the World Bank, and an international change effort Sahlberg (2006) called the *Global Education Reform Movement* (GERM) (p. 263).

For Sahlberg, GERM changed the focus of "education from what teachers should teach to what students should do and learn" (p. 264), shifting the focus on content to a focus on student outcomes. In this new era of curriculum change, education is viewed as a process with an emphasis on basic skills of reading, writing, and mathematical literacy. Specific learning targets are defined for both teachers and students in the form of standards and assessments. One goal is that all students will receive basic skills regardless of the school attended or the teacher who taught them. Sahlberg noted that another goal is the creation of learning environments that foster problem solving, critical thinking, and decision making. Hargreaves (2007) argued that teachers are being told that only results matter; they spend numerous hours finding and applying instant solutions to targeted students rather than teaching critical thinking, problem solving, and decision making.

Hargreaves and Goodson (2006) presented a detailed analysis of educational change within the standards and accountability movement. Using eight high schools in the United States and Canada, the *Change Over Time?* study team interviewed over 200 teachers and administrators. In addition, they examined documents and conducted supplementary observations to reach their conclusions (Baker & Foote, 2006; Giles & Hargreaves, 2006; Goodson, More & Hargreaves, 2006; Hargreaves & Goodson, 2006). Teachers in the *Change Over Time?* (2006) study connected the mid-1990s to more recent times with the "standardization and marketization" of education (Sahlberg, 2006, p. 260). More recently the current era of education has become commonly known in the literature as the standards and accountability movement. Hargreaves & Goodson (2006) found that less-experienced teachers were more accepting of mandated curriculum content and standardized assessments than more experienced teachers. However, even the newer teachers resented the standardization and accountability measures when they felt it undermined working conditions and professional image.

Curriculum Change in Social Studies

The curriculum change argument of the 20th century was not simply a general curriculum disagreement. The Progressive era brought a disagreement over how to teach the social studies disciplines of history, civics, geography, and economics. The debate continues today. It centers around whether the focus of what is often referred to as social science education should reflect discipline-specific content, such as history, geography, civics and economics, or a multi-disciplinary, integrated approach sometimes known as social education. This debate is essential to curriculum change in economics education because the integrated approach of social education may be the only hope for economics

to survive in the curriculum (Walstad & Rebeck, 2000). The current standards and accountability movement favoring numeracy and literacy skills demonstrates the importance of integration with other content areas (Sahlberg, 2006).

Social Education vs. Social Science Education

Dewey and his followers, such as Counts, Rugg, and Kilpatrick, argued early in the 20th century that students need to practice the skills necessary to participate in a democratic society (Bennett, 2002; Cremin, 1961; Neumann, 2008). Progressive educators believed that students gain a sense of their place in society through first-hand experiences. The goal of education is for students to solve real problems with real solutions (Neumann, 2008). An integrated approach, Progressives believed, could do this. As early as 1893, a report to the U.S. Commissioner of Higher Education on Secondary School Studies, commonly referred to as the Report of the Committee of Ten, advocated an interdisciplinary approach to education (Committee of Ten, 1893). In 1916, the National Education Association (NEA) promoted an interdisciplinary course of instruction based on the disciplines of the social sciences. In 1928, *The Cardinal Principles of Secondary Education* advocated an interdisciplinary approach that included developing democratic dispositions and good judgment in students (Commission on the Reorganization of Secondary Education, 1928).

Such democratic dispositions, Rugg maintained, could be developed if students engaged directly with issues, problems, and potential reforms (Neumann, 2008). Such activity would “advance the social transformational mission of schools” (Neumann, 2008, p. 336). Thus, education as the great social equalizer became the mission of Progressive education and more specifically, social education.

By the 1950s, the purpose of social studies shifted with the change in overall purpose of American education. Just as education policy makers focused on more rigorous approaches to mathematics and science, content experts in history and the social sciences, not classroom teachers, assumed more control over the curriculum. Discrete, subject-centered study became more common (Bennett, 1980; Cho, 1998).

As part of this shift to more discipline-focused curriculum, economics was introduced as an important content area for inclusion (Thornton, 2003). Economists and educators created the Joint Council on Economic Education, now known as the National Council on Economic Education (NCEE), and released the *Report of the National Task Force on Economics* in 1961. NCEE published guidelines for teaching economics concepts in 1977 (Saunders & Gilliard, 1995). The purpose of high school economics education at that time was to prepare students to make reasoned personal economic decisions and judge public economic policies. NCEE's goals included helping students become productive members of the workforce, knowledgeable consumers, savers and investors, and participants in the global economy (Saunders & Gilliard, 1995).

Despite the post-Cold War shift to an emphasis on social sciences, the debate over the degree of integration of the curriculum continued. Some scholars argued for a multidisciplinary approach to social education, while others continued to argue for a focus on content from each of the major social science disciplines. *Man: A Course of Study*, or M:ACOS (Curriculum Development Associates, 1972), is a well-known social studies curriculum developed during the RD&D period of the 1960s under Bruner's leadership (Posner, 2004). Federally funded through a National Science Foundation grant, M:ACOS focused on inquiry and process rather than content. Controversial content and

instructional materials led to its eventual removal from schools and added fuel to the overall curriculum argument as well as the more specific social studies curriculum debate (Posner, 2004). With the failure of M:ACOS, the federal government distanced itself from curriculum development for several years (Posner, 2004) as policy experts recommended a move back to a more collaborative approach to curriculum.

Throughout the debate over social education versus social science, the emphasis on social studies for citizenship education has held firm. The National Council for the Social Studies (NCSS) defines the purpose of social studies education: "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" (NCSS, 1994, p. vii). But Ross (2001) cautioned: "while nearly all social studies educators agree that the purpose of social studies is to prepare young people so that they possess the knowledge, values, and skills needed for active participation in society, the devil is in the details" (p. 313). Both sides agree on the value of citizenship education, but there remains a gap between those groups who believe in an integrated curriculum and those who believe in discrete, discipline-based curriculum.

Curriculum Change from the Teachers' Perspective

Over the last few decades, globalization and international economic competition have contributed to increases in high-stakes testing and accountability in education systems worldwide (Sahlberg, 2006). Fullan et al. (2006) argued that "personalized," "data-driven" assessment is the most effective way to improve student achievement, but what is missing from the standards and accountability reform movement is a lack of "focus on what needs to change in instructional practice" (p. 4). Sahlberg (2006) and

Hargreaves & Fink (2003) found that high-stakes testing may result in improved student test scores but is not improving student learning. In fact, they argued that the era of high-stakes testing and accountability has a negative effect on the teaching profession and student learning in general. These two opposing viewpoints suggest that more studies on the teachers' role in curriculum change are needed.

As previously indicated, teachers have much latitude in determining what is actually taught in the classroom, regardless of the prescribed curriculum content, standards, and methods (Thornton S. J., 2005). While Elmore (2004) believed that instructional practice in the classroom is largely unstudied, teachers' instructional practice in the classroom is more important to student learning than any other school-related indicator. Despite this contention, curriculum researchers and developers who have contributed to curriculum change in the U.S. public education system over the last two centuries have failed to take into account the central role teachers play in delivering curriculum, and ultimately, student achievement. Therefore, more studies are needed to focus on the teachers' perspective to determine how to best support instructional practices in the classroom in efforts to improve student learning during the curriculum change process. Historical themes related to teachers' aptitude for curriculum change include time, support, reflection, and knowledge (Bennett, 2002; Cremin, 1961; Lortie, 1975; Peltier, 1967). Time includes professional development release time to develop teacher content knowledge and classroom materials (Lortie, 1975; Newlon & Threlkeld, 1926; Peltier, 1967). Support refers to assistance needed from administration, teacher organizations, universities, and colleagues in collaborative, voluntary, and democratic change efforts (Mayhew & Edwards, 1936). Reflection in the curriculum change process

includes experimentation, sharing, reevaluation, and adaptation (Mayhew & Edwards, 1926; Newlon & Threlkeld, 1926). Finally, knowledge includes academic background and the availability of professional development opportunities in specific content areas (Newlon & Threlkeld, 1926).

While teacher perspectives on curriculum change have long been the subject of research, they have not changed radically over time. Current literature includes five areas of consideration for curriculum change from the teachers' perspective: commitment, workload, capacity, collaboration, and the perception of the teaching profession (Fullan, 2007; Leithwood & McAdie, 2007; Swanson et al., 2008). What is clear in the literature on curriculum change is that each of these themes is interrelated, with each having a direct effect on the others.

Commitment

Fullan (2007) defined commitment as moral purpose, noting that highly successful change involves not only finding solutions to problems, but finding solutions in ways that influence the emotions of those involved in change. Fullan et al. (2006) also argued that moral purpose is one of the most important elements of high quality instructional practice in the classroom.

Lortie (1975) and Scott, Stone & Dinham (2001) used the phrase "psychic rewards" to describe commitment in teaching. In Lortie's *Five Town Teachers,* a sociological study of teachers and their work, he described a significant difference between psychic rewards and extrinsic rewards, noting that the culture of teaching "favors emphasis on psychic rewards" (p. 103). Work gratification was directly connected to achieving desirable results with students in the classroom. From the *Five*

Town Teachers interviews and an evaluation of other studies and data compiled about teacher satisfaction in the 1960s, Lortie concluded that more than 75% of "teachers consider psychic rewards their major source of work satisfaction" (p. 104).

The results of Scott, Stone & Dinham's (2001) study of over 3,000 teachers and administrators in four countries (Australia, United States, New Zealand, and England) indicated that teachers have maintained similar motivations for going into and remaining in the teaching profession as they did in the 1960s. For the majority of survey participants in all four countries, work satisfaction was rated high in the area of helping and experiencing success with students. However, the study indicated several areas of dissatisfaction which affected participants' overall commitment to the teaching profession. These were a decrease in status and recognition, outside interference in teaching practices (external accountability measures), and increased workload.

Hargreaves and Goodson (2006) noted an interesting change in teacher commitment between 1960 and 2006 in *Change Over Time?, their* study of longitudinal data of programs in eight U.S. and Canadian secondary schools over a 5-year period. Goodson et al. (2006) refer to teacher commitment in the series of publications on the *Change Over Time?* study as "teachers' mission" (p. 42) and noted that this change in mission has an important impact on resistance to change. In the 1960s and 1970s teachers tended to have grand social and political motivations for their commitment to the teaching profession, related to the larger social and political changes of the time period. The authors note that younger teachers of today tend to have aspirations that are less grand than their more experienced colleagues and their commitment is demonstrated by more personal quests to make a difference in individual lives (Hargreaves & Goodson,

2006). In his response to the series of articles on the *Change Over Time?* study, Labaree (2006) reminded readers that thinking about change requires thinking about the purpose of education. This change in commitment over the last four decades may also indicate a change in thinking about the purpose of education among classroom teachers.

Leithwood and McAdie (2007) described organizational commitment as one of eight "internal states" related to what teachers do in the classroom (p. 42). Results of their study indicated that supportive school structures and principal leadership play a key role in teachers' commitment. Another area influencing job satisfaction and the likelihood of teachers remaining in the profession is community relations. Finally, clear communication within the school organization, school improvement plans that match teachers' own sense of priority, and regular feedback on their teaching progress are all components affecting teacher commitment.

Yucel (2008) examined individual teachers in Turkish Elementary Schools to determine what causes some teachers to burnout and some teachers to have *organizational citizenship behaviors* and if a relationship exists between these two variables. Burnout is defined as "physical, emotional and mental exhaustion" which leads to isolation, decreased job involvement and feelings of reduced personal involvement (p. 27). Organizational citizenship behaviors are defined as employee behaviors that go beyond the official duties in the job description. In other words, what causes some teachers to be and stay committed to teaching and not others?

The results of Yucel's quantitative study indicate that support is an important quality in creating organizational citizenship behaviors (i.e., commitment) because teachers feel they have more control and their contributions are valued. Additionally, he

noted that curriculum change may be made easier by training administrators in understanding teacher behaviors. Yucel recommended that his research be combined with qualitative research in the form of interviews and other anecdotal materials for a more complete picture of teacher commitment.

Moral purpose is also closely related to teacher morale. Morale is an important element of how the public views the teaching profession (Everton, Turner, Hargreaves, & Pell, 2007). As a result, commitment is tied to other areas of teacher considerations in curriculum change.

Workload

Wigginton (1985) described his personal experience of daily demands as a high school English teacher in Georgia in a biography that resonates among teachers everywhere. He described the large numbers of students he teaches daily, along with the required administrative duties of paperwork, meetings, teacher collaboration, and student supervision. He added to the list extracurricular activities involving sports, college preparation, social activities, and parent collaboration. He ended by noting that most students would rather be somewhere else, which has a direct effect on teacher morale and commitment.

Scott et al. (2001) noted an increase in teacher workloads related to high-stakes testing and accountability measures, cutting more time out of the instructional process. Teachers in the study (Scott et al., 2001) felt these tasks were time consuming and useless. Hargreaves (2007) noted that external accountability measures require teachers to spend hours poring over data in after-school meetings adding even more to teachers' daily

workloads. Fullan (2007) added that teachers face increasing language and ethnic diversity and children with special needs, creating more intense demands.

Workload as an area of teacher dissatisfaction is not a new phenomenon. Newlon & Threlkeld (1926) reported dissatisfaction with the curriculum change in the Denver Curriculum Revision Program because over-tired teachers put in extra hours after school (Peltier, 1967). A theme throughout Bennett's (2002) overview of Progressive era education was teachers' desire for release time to develop professional knowledge and curriculum materials.

Most teachers in Lortie's (1975) sociological study of teachers said that if they were given the opportunity, they would use extra time outside of teaching for preparation of teaching materials, teaching with groups of students, and counseling students. He further noted that 62 of 98 teacher complaints in his study dealt with time erosion or disruption of work flow. Unwanted innovations were listed as another source of annoyance.

Hargreaves (2007) noted that teachers' work is becoming more intense. This leads to reduced time for relaxation during the work day, reduced time to retool one's skills to keep up with one's field, and reductions in the quality of service as teachers are forced to cut corners to save time. He continued by adding that our current push for high-stakes testing and accountability is making teachers "victims of change-related chaos" (p. 16), giving teachers less time to plan, build community relationships, work with their colleagues, and reflect on their teaching practices. Using an economic example of the law of supply and demand, Hargreaves argued that building capacity among teachers is not

only accomplished by increasing the supply of teaching resources and training, but also by reducing the demand on teachers' workload.

Sahlberg (2006) provided a positive example of Finland's educational system changes, noting how Finland has addressed the problem of increased workloads for teachers. Hargreaves (2007) credited Finland's increased economic competitiveness to changes in its educational system since the mid-1990s. Sahlberg (2006) conducted an analysis of the relationship between economic competitiveness and the quality of education using international studies and surveys. He found no significant correlation between the two variables. However, Hargreaves (2007) noted that teaching is the most highly desired profession in Finland. Sahlberg (2006) attributed several factors to this view of teaching, including more reasonable workloads. Teachers in Finland only teach four class periods per day, whereas U.S. teachers teach an average of five periods per day. In addition, Finland does not have a system of high-stakes testing and teacher accountability, which further limits teachers' workloads (Sahlberg, 2006).

Capacity

Capacity is given a variety of names and meanings in the literature. Overall, capacity is teachers' ability to deliver content in a manner leading to student learning (Fullan, 2007; Lortie, 1975). Developing capacity occurs in the form of teacher preparation at the college and university level, on-going professional development, and experience in the classroom. The recent standards movement has also played a large role in capacity building and alleviating teacher uncertainty (Fullan et al., 2006; Fullan, 2007; Glidden, 2008).

The *Quality Counts 2008* report graded states on their efforts and ability to build and support teacher capacity, along with incentives to attract and keep talented teachers and allocate talent equitably across districts (Swanson et al., 2008). Montana ranked 11th lowest in the nation with a grade of D+. According to the report, only four states have accountability measures in place that link student achievement outcomes to teacher data on capacity, such as professional development and college and university level teacher preparation. Montana is not among them (Swanson et al., 2008).

College and University Level Preparation

As part of the *Quality Counts 2008* report, researchers looked at states' ability to link student achievement data to teacher capacity. Fullan et al. (2006) asserted data-driven, formative assessments are the only reliable measure of student learning inside the classroom. However, Hargreaves (2007) and Sahlberg (2006) argued against high-stakes testing and teacher accountability measures because although teachers work harder to ensure improved student test scores, the tests do not improve student learning. According to the *Quality Counts 2008* report, only four states have data collection systems in place to link student achievement and teacher capacity, based on college and university level preparation (Harris & Sass, 2007). One of these states is Florida. Harris and Sass (2007) found minimal relationship between undergraduate teacher preparation and student achievement outcomes. However, the researchers found that content-focused professional development had an impact on student achievement at middle and high school levels (Harris & Sass, 2007).

On the other hand, research does present a compelling argument to increase economics course requirements in teacher education programs at the undergraduate level.

Dumas, Evans, and Weible (1997) examined teacher licensure requirements and found that only half of the state licensing agencies require any economics courses for secondary social studies licensure. Kourilsky, Walstad, and Thomas (2007) found, on average, high school social studies teachers have taken two to three economics courses at the undergraduate level. Teachers who took only two to three courses in economics were below average at improving student test scores in economics, while teachers who had taken six courses in economics were above average in improving student test scores (Bosshardt & Watts, 1990). Teacher understanding of economics concepts improved most after six courses in undergraduate economics, according to Allgood and Walstad (1999).

Allgood and Walstad (1999) also found a positive correlation between increased teacher understanding of economics and increased student test scores on the *Test of Economic Literacy* (Walstad & Rebeck, 2001a). Allgood and Walstad (1999) further noted that teachers need at least six semester courses in economics for "substantial positive effects" on their students' understanding of economics (p. 100). It is clear more teacher coursework in economics will improve student understanding in economics, but many content areas vie for their place in the curriculum. Buckles & Watts (1998) contend that significant infusion of economics content into other social studies content areas is the only viable solution to the problem, but also expressed concern for the ability of teachers with little background in economics to do so successfully.

Currently, teachers holding a broadfield social studies endorsement in Montana are required to take a concentration of coursework in history and political science with additional coursework chosen from the fields of economics, geography, sociology, and/or

psychology (Mont. Admin. R. 10.58.523, 2007). Reflecting a reduction in requirements made in 2005, social studies teachers in Montana are no longer required to take any specific coursework in economics content; economics is now an elective within the social studies endorsement.

Teacher education programs in Montana offering a comprehensive social science or social studies broadfield option for secondary licensure include The University of Montana-Missoula, The University of Montana - Western, Montana State University-Bozeman, Montana State University-Northern, the University of Great Falls and Carroll College. As required by the state, all programs require coursework in history and political science with additional coursework in sociology, geography, psychology, and/or economics. All programs require a minimum of 10 credits in one of the four areas with the exception of MSU-Bozeman, which requires three credits of economics for all students earning the social studies broadfield option and an additional 9 credits in economics for students choosing that area.

Economics is not alone in its push for increased teacher content preparation. Brown (2006) conducted an in-depth study of history licensure requirements and found several inconsistencies nationally. While all states have some history requirements, universities are given so much flexibility it is possible for teachers in some states to be licensed as secondary social studies teachers without any college level coursework in history (Brown, 2006). Fortunately, it is not possible for a secondary social studies teacher in Montana to be licensed without history coursework. It should be noted, however that it is possible to earn a social studies broadfield license in Montana without having taken any coursework in economics.

On-going Professional Growth

Workload, commitment, and administrative support are closely connected to successful professional learning, a theme throughout Bennett's (2002) analysis of Progressive era education and the more recent literature. Teachers need release time for on-going learning and administrative support to provide relevant professional development opportunities at both the school and district levels (Bennett, 2002; Burch & Spillane, 2005). Colleges and universities, teacher organizations and other external agencies also provide important on-going professional learning opportunities for classroom teachers (Clandinin & Connelly, 1992; Fullan, 2007; Snyder et al., 1992). Sahlberg (2006) also encouraged fostering relationships with private business.

As explained previously, Harris & Sass (2007) conducted research on student achievement as it relates to teacher characteristics in Florida. The Florida data allowed the researchers to "connect student performance to the identity of the classroom teacher, and then in turn link teachers to their in-service training, college coursework and pre-college entrance exam scores" (Harris & Sass, 2007, p. 4). Harris & Sass (2007) concluded that undergraduate teacher preparation has little effect on student achievement, but content-focused professional development has a positive impact on student achievement at the middle and high school levels. Walstad (2001) agreed with Harris & Sass's findings; he suggested that teachers inadequately prepared in economics can be developed through a progressive series of professional growth courses in economics (Walstad, 2001; Walstad & Rebeck, 2000).

Nationally, professional development opportunities in economics are available online through NCEE, University of Wisconsin (in partnership with their state NCEE

affiliate – Economics Wisconsin), The Economics Classroom (funded by the Annenberg Foundation with graduate credit available through Colorado State University) and Massachusetts Institute of Technology through open courseware. New online and face-to-face opportunities in economics education continue to be added regularly.

The Montana Council on Economic Education (MCEE) provides the only economics content-specific professional growth opportunities for teachers in Montana, directed at high school teachers of social studies, mathematics, business, and family and consumer sciences. Some Montana school districts have partnered with MCEE to offer professional development directed to specific district needs. As the state affiliate of NCEE, MCEE has been offering on-going learning opportunities in economics for over 30 years. MCEE was founded by business leaders in Montana who recognized the importance of students' understanding the free enterprise system and the economic environment. MCEE partners with banks, credit unions, small and large businesses, the Montana Chamber of Commerce, the Helena branch of the Federal Reserve Bank, and colleges and universities throughout Montana to deliver professional development to teachers. Locations of workshops and seminars are frequently changed to allow for maximum teacher participation due to the large geographic area of the state.

Standards and Uncertainty

Lortie (1975) devoted an entire chapter to "endemic uncertainties" in teaching based on the unusual nature of the job. He recognized that most new teachers have doubts about their capacity, but found the comments of experienced teachers most relevant. Tenure, argued Lortie, provides job security, but does nothing to publicly recognize the achievements of an individual teacher and no other career steps are available in the

teaching profession to provide recognition. Therefore, teachers rely on subjective, intangible, and complex relationships with students who do not have a choice in attending school to alleviate feelings of uncertainty. This often causes more self-doubt than certainty. Lortie concluded that these factors have the effect of reducing the psychic rewards of teaching, eroding morale, and decreasing commitment.

Rosenholtz (1989) studied 78 schools in Tennessee, identifying schools that she considered "learning impoverished" (p. 203). These "stuck" schools (p. 208), as she called them, were characterized by teacher uncertainty about what and how to teach, in other words, low sense of efficacy. This added to a low sense of commitment to teaching. Additional concerns included isolation among teachers and limited ongoing teacher learning which Rosenholtz argued are linked to uncertainty. Scott, Stone, & Dinham (2001) associated feelings of uncertainty among teachers with an increase in outside interference and a decrease in professionalization resulting from the standards and accountability movement.

Part of the teacher accountability movement of the 1990s resulted in the introduction of education standards in many countries worldwide (Sahlberg, 2006). The *Goals 2000: Educate America Act* (1994) initiated the development of national content standards in the United States and included student achievement goals of demonstrating citizenship and personal responsibility and an understanding of the diverse cultural heritage of the U.S.

Glidden (2008) used standards to address the uncertainty of teachers. She argued that clear, specific content standards give teachers greater confidence in their instruction. In her analysis of state standards across the U.S., she found that only Massachusetts and

Virginia have created strong content standards in social studies across all grade levels and areas, and only Virginia has created strong standards in all four core content areas: English, math, science and social studies.

Montana, described as having "a lot of work ahead of them" (Glidden, 2008, p. 16), met none of the criteria for having strong standards in all content areas and was used as an example of weak social studies standards. Glidden argued that standards are the common ground in the debate about the purpose of American education, specifically social studies: "[standards] define our expectations for what's important for children to learn, serve as guideposts for curriculum and instruction, and should be the basis of all assessments, whether formal, informal, state-developed, or teacher-created" (p. 14).

Montana content standards are addressed in the *Montana School Accreditation Standards and Procedures Manual* (Montana Board of Public Education, 2001). In addition to many other accreditation standards, high schools seeking accreditation by the State of Montana must show evidence of meeting six social studies content standards, one of which is specific to economics content (Mont. Admin. R. 10.54.6050, 2000). High school graduates are expected reach six specific economics content benchmarks (Mont. Admin. R. 10.54.6053, 2000). Additionally, the *Montana Standards of Accreditation* list three conditions and 5 practices required of a basic program in social studies as shown in Table 1.

Currently, teachers holding a broadfield social studies endorsement in Montana are required to take a concentration of coursework in history and political science with additional coursework chosen from the fields of economics, geography, sociology, and/or psychology (Mont. Admin. R. 10.58.523, 2007). The social studies broadfield teaching

endorsement also requires that teachers be able to plan instruction based on state and national social studies curriculum standards (Mont. Admin. R. 10.58.523, 2007). Table 2 shows the 6 Montana standards for social studies with content standard 5, in bold, indicating the standard specific to economics content.

Table 1. K-12 social studies program delivery standards

Social Studies Program Delivery Standards: In general, a basic program in social studies shall: (Mont. Admin. R. 10.55.1601)		
(a) meet the following conditions:	(i)	use strategies and methods that incorporate multiple perspectives as a basic component of social studies instruction;
	(ii)	support the democratic process to promote a learning environment to foster individual civic competence; and
	(iii)	integrate knowledge, skills, beliefs, values, and attitudes within and across disciplines to promote active citizenship.
(b) Include the following practices:	(i)	Incorporate inquiry skills and strategies using both primary and secondary resources;
	(ii)	Promote social criticism and socialization as a commitment to social responsibility;
	(iii)	Analyze ethical dilemmas and social policy implications of issues to provide an arena for reflective development of concern for individual needs and the common good;
	(iv)	promote decision-making skills and civic responsibilities through active participation (e.g. service learning projects); and
	(v)	nurture an understanding of the contemporary and historical traditions and values of American Indian cultures and other cultural groups of significance to Montana and to society.

Table 2. K-12 social studies content standards

Montana Content Standards for Social Studies Social studies is an integrated study of the social sciences and humanities designed to foster citizenship in an interdependent world. Social studies provides coordinated, systematic study of such disciplines as economics, history, geography, government, sociology, anthropology, psychology and elements of the humanities. Social studies addresses political, economic, geographic, and social processes that allow students to make informed decisions for personal and public good. Social studies develops the knowledge, skills, and processes necessary to understand historical and present day connections among diverse individuals and groups. A study of Montana's rich past and geographic diversity includes the distinct cultural heritage and contemporary perspectives of Montana's American Indians and other cultural groups**.**	
1	Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.
2	Students analyze how people create and change structures of power, authority, and governance to understand the operation of government and to demonstrate civic responsibility.
3	Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions).
4	Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.
5	**Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.** [emphasis added]
6	Students demonstrate an understanding of the impact of human interaction and cultural diversity on societies.

Montana social studies content standard 5 is the only social studies standard that addresses economics content. The other five Montana social studies standards address other content disciplines within the social sciences, such as history, civics, and geography. In addition to the broad coverage of economics content described in standard 5, specific benchmarks are presented in Table 3. While economics concepts are expected to be taught as one of six major areas of the social studies curriculum according to Montana Social Studies Content Standards, the social studies broadfield endorsement does not require any undergraduate or graduate level coursework in economics principles. Walstad

(2001) and Siegfried & Meszaros (1998) indicated that coursework in economics principles are helpful to teaching economics concepts at the high school level.

Table 3. K-12 social studies content standard 5, economics benchmarks

Montana Social Studies Content Standard 5: a student must make informed decisions based on economic principles of production, distribution, exchange, and consumption (Mont. Admin. R. 10.54.6050, 2000).	
BENCHMARKS (Mont. Admin. R. 10.54.6053, 2000)	
(a)	analyze the impact that supply and demand, scarcity, prices, incentives, competition, and profits influence what is produced and distributed in various economic systems;
(b)	use basic economics concepts (e.g., production, distribution, consumption, market economy, command economy) to compare and contrast local, regional, national, and global economies across time and at the present time;
(c)	assess the costs and benefits to society of allocating goods and services through private and public sectors;
(d)	compare and contrast how values and beliefs influence economic decisions in different economic systems;
(e)	explain the operations, rules, and procedures of common financial instruments (e.g., stocks and bonds, retirement funds, IRAs) and financial institutions (credit companies, banks, insurance companies) ; and
(f)	explain and evaluate the effects of new technology, global economic interdependence, and competition on the development of national policies (e.g., social security system, Medicare, other entitlement programs) and on the lives of the individuals and families in Montana, the United States, and the world (e.g., international trade, space exploration, national defense) .

The Montana Council on Economic Education (MCEE) is the state-level affiliate of the National Council for Economic Education (NCEE). No economics content standards have been developed specifically for Montana, but MCEE recommends using the *National Voluntary Economic Content Standards* developed primarily by NCEE (Siegfried & Meszaros, 1998) for further clarification of economics content, which are represented in Table 4.

Siegfried & Meszaros (1998) pointed out that, as with all subject-specific curriculum, these standards are not federal mandates, but a resource for teachers, administrators, schools, districts, and states. The national standards indicate generic principles of economics and application of these principles can vary across states.

Designed by a professional organization, they are intended to assist teachers who are responsible for economics instruction but have little background or experience and perhaps are overwhelmed by the task (Siegfried & Meszaros, 1998).

Table 4. National Voluntary Economic Content Standards (NCEE)

Standard 1: Scarcity	**DESCRIPTION** Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.	**RELATED CONCEPTS** Capital Resources, Choice, Consumer Economics, Consumers, Goods, Human Resources, Natural Resources, Opportunity Cost, Producers, Production, Productive Resources, Scarcity, Services, Wants, Entrepreneurship, Inventors, Entrepreneur, Factors of Production
Standard 2: Marginal Cost/Benefit	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.	Decision Making, Profit Motive, Benefit, Costs, Marginal Analysis, Profit, Profit Maximization, Cost/Benefit Analysis
Standard 3: Allocation of Goods and Services	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.	Economic Systems, Market Structure, Supply, Command Economy, Market Economy, Traditional Economy
Standard 4: Role of Incentives	People respond predictably to positive and negative incentives.	Choice, Incentive
Standard 5: Gain from Trade	Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.	Barriers to Trade, Barter, Exports, Imports, Voluntary Exchange, Exchange, Exchange Rate

Table 4.*(continued)* National Voluntary Economic Content Standards (NCEE)

Standard 6: Specialization and Trade	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.	Division of Labor, Production, Productive Resources, Specialization, Factor Endowments, Gains from Trade, Relative Price, Transaction Costs, Factors of Production, Full Employment
Standard 7: Markets – Price and Quantity Determination	Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.	Market Structure, Markets, Price Floor, Price Stability, Quantity Demanded, Quantity Supplied, Relative Price, Exchange Rate
Standard 8: Role of Price in Market System	Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.	Non-price Determinants, Price Floor, Price Stability, Supply, Determinants of Demand, Determinants of Supply, Law of Demand, Law of Supply, Price Ceiling, Substitute Good, Price
Standard 9: Role of Competition	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	Market Structure, Non-price Competition, Levels of Competition
Standard 10: Role of Economic Institutions	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.	Legal and Social Framework, Mortgage, Borrower, Interest, Labor Union, Legal Forms of Business, Legal Foundations of a Market Economy, Nonprofit Organization, Property Rights, Banking
Standard 11: Role of Money	Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.	Exchange, Money Management, Money Supply, Currency, Definition of Money, Money, Characteristics of Money, Functions of Money

Table 4.*(continued)* National Voluntary Economic Content Standards (NCEE)

Standard 12: Role of Interest Rates	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.	Interest Rate, Monetary Policy, Real vs. Nominal, Risk, Investing, Savers, Savings
Standard 13: Role of Resources in Determining Income	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.	Human Resources, Derived Demand, Functional Distribution of Income, Labor, Labor Market, Marginal Resource Product, Personal Distribution of Income, Wage, Aggregate Demand (AD), Aggregate Supply (AS), Demand, Prices of Inputs, Functional Distribution
Standard 14: Profit and the Entrepreneur	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.	Taxation, Costs, Costs of Production, Entrepreneur, Risk, Taxes, Cost/Benefit Analysis, Innovation, Entrepreneurship, Inventors
Standard 15: Growth	Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.	Incentive, Interest Rate, Opportunity Cost, Production, Technological Changes, Trade-off, Trade-offs among goals, Human Capital, Intensive Growth, Investment, Physical Capital, Productivity, Risk, Standard of Living, Economic Efficiency, Economic Equity, Economic Freedom, Economic Growth, Economic Security, Investing, Business, Businesses and Households, Factors of Production, Health and Nutrition, Savers, Savings, Stock Market

Table 4.*(continued)* National Voluntary Economic Content Standards (NCEE)

Standard 16: Role of Government	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.	Externalities, Income, Natural Monopoly, Redistribution of Income, Role of Government, Taxation, Transfer Payments, Bonds, Distribution of Income, Income Tax, Maintaining Competition, Monopolies, Negative Externality, Non-clearing Markets, Positive Externality, Property Rights, Public Goods, Maintaining Regulation, Taxes, Regulation, Government Expenditures, Government Revenues
Standard 17: Using Cost/Benefit Analysis to Evaluate Government Programs	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.	Cost/Benefit Analysis, Benefit, Costs, Special Interest Group, Barriers to Trade
Standard 18: Macroeconomy-Income/Employment, Prices	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.	Gross Domestic Product (GDP), Macroeconomic Indicators, Nominal Gross Domestic Product (GDP), Per Capita Gross Domestic Product (GDP), Potential Gross Domestic Product (GDP), Real Gross Domestic Product (GDP), Circular Flow
Standard 19: Unemployment and Inflation	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.	Types of Unemployment, Causes of inflation, Consumer Price Index (CPI), Deflation, Labor Force, Unemployment, Unemployment Rate, Inflation

Table 4.*(continued)* National Voluntary Economic Content Standards (NCEE)

Standard 20: Monetary and Fiscal Policy	Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.	Money and Inflation, Monetary Policies, Fiscal Policies, Crowding-out and Crowding-in, Budget Deficits and Surpluses, National Debt

Walstad (2001) indicated concern for the large number of economics concepts included in the *National Voluntary Content Standards in Economics*. He believed meeting these standards is not feasible for teachers struggling to find time to include economics content at all. Buckles & Watts (1998) contended that the standards are cumbersome and provide few suggestions as to how to implement them even in a stand-alone economics course. They argued it will take more than a one-semester course specific to economics to present all of the topics included in the national standards and pointed out that less than half of high school students take any type of stand-alone economics course at all.

MCEE's publication of Economic Learning Modules (ELMs) provided an application of the economics principles described in the national standards, specific to Montana. The ELMs are intended to alleviate the uncertainty Montana teachers face in teaching economics principles. MCEE also provides ongoing professional learning opportunities throughout the state to help teachers understand economics concepts and provide ideas for incorporating economics into other curriculum areas, such as history and government.

Collaboration

Collaboration is often associated with collegiality (Bennett, 2002; Fullan, 2007; Mayhew & Edwards, 1936). Fullan (2007) measured collegiality by frequency of communication, mutual support, and help among teachers and described it as a strong

indicator of curriculum change success. Dewey (as cited in Mayhew & Edwards, 1936), Newlon and Threlkeld (1926) and many other Progressive era educators noted the importance of teacher collaboration and included leadership support, collegiality, and democratic participation of teachers in school-wide decisions as elements of collaboration necessary to successful educational change (Bennett, 2002).

As noted previously, curriculum change at the classroom level is ultimately in the hands of individual teachers (Berman, 1978; Thornton, 2005). Lortie (1975) noted that colleagues do not see themselves as sharing a body of knowledge and practice. Good colleagues are willing to share tips, but not the underlying principles of teaching. Goodlad (1984) found that teachers develop autonomy out of isolation rather than professionalism, and that teacher-to-teacher links are either missing or weak. This is true across schools, between schools, and among individuals in the same school. In addition, teachers have little influence or involvement school-wide due to the individualistic nature of the job (Goodlad, 1984).

Fullan (2007) asserted that the cellular nature of classrooms results in physical isolation from colleagues. This causes teachers to struggle with problems privately rather than collectively. Professional learning communities (Fullan et al., 2006; Fullan, 2007) are suggested as a way to improve collegiality, collaboration, and capacity. However, Yucel (2008) found isolation played only a small role in teachers' organizational citizenship behavior and instead teachers are more likely to feel diminished self-accomplishment due to lack of self-development.

Lack of support from principals and district-level administrative staff was frequently cited in the literature as problematic to successful curriculum change (Allen et

al., 2005; Burch & Spillane, 2005; Fullan et al., 2006; Leithwood & McAdie, 2007; Mayhew & Edwards, 1936; Newlon & Threlkeld, 1926). In particular, successful curriculum change requires principals to have more background in curriculum and instruction practices. But, principals and mid-level administrators often know little about what is actually occurring in the classroom (Fullan et al., 2006). Administrative support and other types of collaboration tie directly to teacher commitment (Fullan, 2007). Researchers have cited school level leadership as the single most important issue regarding teacher working conditions (Fullan, 2007; Hargreaves & Fink, 2003) making effective, supportive leadership essential to attracting and retaining talented teachers.

Technology can be a useful tool for collaboration and support (Fullan et al., 2006). The creation of a knowledge base by experts for teacher use is also closely linked to capacity and workload, since it will allow for more in-depth and correct content with less research required by the individual classroom teacher. Curriculum coaches and teacher leaders, along with outside agencies including universities and educational organizations, can build the knowledge base for others to access (Fullan et al., 2006).

Perception of the Teaching Profession

The most important school-related factor affecting student learning is teaching quality and a single good teacher can make a significant impact on students' learning (Elmore, 2004; Fullan et al., 2006). Darling-Hammond's (1999) review of education policy throughout the 50 states found that investments in teaching quality led to improvements in student achievement. Public perceptions, as well as teachers' own perceptions of the teaching profession, have a significant impact on attracting and retaining talented teachers (Everton et al., 2008; Leithwood & McAdie, 2007; Sahlberg,

2006). High-stakes testing and accountability measures create negative perceptions of the teaching profession (Hargreaves, 2007; Leithwood & McAdie, 2007) and may make it harder to attract and retain teachers. Public opinion, status, pay, and morale are used to measure the perception of teaching as a profession.

Scott, Stone, and Dinham (2001) noted a decrease in status in the teaching profession and related the change to an increase in outside interference largely in the form of high-stakes testing and accountability requirements. A study conducted by *Recruiting New Teachers* found Americans view teaching as the profession providing the greatest benefit to society (Rustique-Forrester & Haselkorn, 2002). American teachers are held in high regard by the public and seen as well-qualified, committed, and caring (Johnson & Duffett, 2003). More recently, a study found the general public's perception of teachers is higher than teachers' own perceptions of their profession (Everton et al., 2008).

One way the perception of teaching as a profession is quantified is by comparing teaching salaries to other professions such as accounting, architecture, computer programming, and others (Swanson et al., 2008). Determining whether to use hourly, weekly or annual salaries, whether to include fringe benefits, whether salaries for teachers should be calculated in 9-month or 12-month periods has complicated the comparison. Using data from the U.S. Census Bureau's American Community Survey, the *Quality Counts 2008* report found on average, nation-wide teachers earn 88 cents on every dollar that workers in comparable occupations earn. It is interesting to note that Montana teachers earn $1.10 on every dollar that workers in comparable occupations earn, second in the nation only to Rhode Island (Swanson et al., 2008).

Overall, the literature reveals several areas of consideration to keep in mind when asking educators to implement a new curriculum or change existing curriculum structures. The Progressive era, RD&D, collaborative approach, and recent standards and accountability movements, combined with perspectives specific to teachers, provide key points to consider. Participation in curriculum change projects needs to be democratic and voluntary, recognizing that not every teacher will embrace each new change in the same way. Teachers should collaborate with administrators, colleges and universities, teacher and education organizations, private sector businesses, community members, parents, and students to develop and implement a curriculum that best meets the local needs of the community and the individual needs of the classroom teacher. Educational leaders need to provide support at the school and district levels while recognizing the added workload and increased preparation time to allow teachers' release time for development and professional learning opportunities that will help make the change successful. Situating this curriculum change literature within a content area, specifically high school economics, will provide insight into how economics educators in Montana can best meet the educational needs of Montana's students.

Current Perspective on Economics Education

A study by Walstad & Rebeck (2000) indicated overall enrollments in high school economics courses increased throughout the 1980s from approximately 27% in 1982 to 44% in 1994 as a result of newly created state mandates. According to the same study, enrollments have peaked at 44% with no new state mandates or plans to increase economics in the high school curriculum. Economics is taken most often by 45% of

students in an “academic-oriented” class progression (Walstad & Rebeck, 2000, p. 99). Only about 30% of students in a vocational class progression took an economics course.

According to the National Center for Education Statistics (2006), only 66% of high school graduates enroll in colleges and universities. Using 1998 data, Siegfried (2000) estimated that only 40% of those who enroll in college take even a single course in economics. Therefore, only about one-quarter of the U.S. population receives a formal economics course at the college level. The opportunity to teach and learn economics concepts for three-quarters of the U.S. population occurs in a required social studies course during high school. Hence, the significance of Walstad’s conclusion: “The best and perhaps only opportunity for improving the economic understanding of all youth occurs in high school” (Walstad, 2001, p. 195).

By contrast, the most common high school social studies course requirement throughout the U.S. is a one year course in American history. In their analysis of 1994 high school transcripts, Walstad and Rebeck (2000) found that 95% of high school graduates took a one-year required course in American history. Infusing economics content into American history courses may be the most effective means of teaching economics content because it will reach the most high school graduates. The most plausible way to teach economics content may be in an integrative or infused approach, but further study on this approach is necessary to determine effectiveness for learning basic economics concepts (Walstad, 2001; Walstad & Rebeck, 2000).

Economics concepts at the high school level often apply to several academic fields including social studies, math, family and consumer sciences, and business. This study addressed only concepts associated with political economics. Personal finance and

other micro-economics concepts were not included. Sixteen curriculum modules based on political economics were developed to help Montana teachers teach basic economics concepts to Montana high school students. While teachers in other disciplines participated in the review and field testing of these modules and many of the modules meet curriculum standards in other disciplines, this study focused only on the use of the modules in social studies, specifically in U.S. history.

The research in economics education at the high school level is quite limited. What is available is not current and is dominated by a few researchers. The National Council for Economic Education and the state affiliates of NCEE are actively engaged in economics education and have produced some literature, mostly on the creation of the *Voluntary National Content Standards in Economics.*

The field of economics education is dominated by William Walstad, professor of economics at the University of Nebraska – Lincoln, editor of the *Journal of Economic Education*, chair of the Committee on Economic Education of the American Economic Association, chair of the Research Committee of the National Association of Economic Educators, and director of the National Center for Research in Economic Education (NCREE) housed at the University of Nebraska-Lincoln. Walstad is also the author of the *Test of Economic Literacy (TEL)* and other tests of economics concepts used to assess economic understanding. He served on the committee creating the *National Assessment of Educational Progress (*NAEP) *in Economics* (Buckles & Walstad, 2008), which uses the *Voluntary National Content Standards in Economics* for content validity.

The Research in Economic Education Database (REED) is also located within the NCREE department at the University of Nebraska-Lincoln. A complete search of the

REED database lists 1215 research articles related to economics education beginning in the 1960s, with 2003 being the most recent. Most of the research is focused on postsecondary education in economics and the recent trend is to focus on technology in teaching economics (Salemi, Siegfried, Sosin, Walstad, & Watts, 2001).

Buckles and Walstad (2008) provided the most up-to-date information regarding economics education in high schools in their report about the results of the first National Assessment of Educational Progress (NAEP) in economics. NAEP results were released in August 2007 and showed that 39% of high school seniors tested at the basic level, 39% tested at the proficient level, and 3% tested at the advanced level (Mead & Sandene, 2007). While it is alarming that only 42% of high school graduates tested at the proficient and higher levels in economic literacy, Buckles and Walstad did not address the shortcomings of student scores. Staying focused on the positive, the inclusion of economics on NAEP "represents a significant advancement for economics education..." because it "will likely encourage more teaching of economics in the schools" (p. 105).

Analysis of the Economic Learning Modules

The Montana Council for Economic Education (MCEE) developed Economic Learning Modules (ELMs) to meet the needs of Montana teachers faced with teaching economics concepts. MCEE created a teacher advisory council, Montana Economic Education Leaders (MEEL), to stay informed about teachers' needs and concerns. MEEL members provided feedback regarding the ELMs during the development and field testing process. MCEE enlisted the assistance of faculty in the Department of Agricultural Economics and Economics at Montana State University – Bozeman to create the ELMs. Vince Smith, Myles Watts, and Holly Fretwell developed Montana-specific

industry research data, wrote and tested the ELMs, and instructed Montana teachers in how to teach economics concepts in the ELMs beginning in 2003 and continue to work on improvements and training. Getting the ELM curriculum into the hands of Montana high school teachers and convincing teachers of their value is the next step. An analysis of the ELM curriculum will provide feedback for MCEE on the strengths and areas of improvement of the ELM curriculum.

Several curriculum analysis models are available in the literature. Doll (1996), Marsh & Willis (2005), Posner (2004), and Sowell (2005) provided guidelines for analyzing a curriculum. All of these evaluation models are based on historical curriculum evaluation models, including Tyler (1949), Stake (1967), and Eisner (1991).

Tyler's Objectives Model

Tyler (1949) provided the first widely used curriculum evaluation model and focused on the evaluation of learning experiences, which Marsh and Willis called the "objectives model" (2005, p. 277). Tyler's model focused on measuring outcomes based on changes in student behaviors. Posner (2004) referred to Tyler's model as "measurement-based evaluation" (p. 257) and equated it to the prescriptive RD&D period in curriculum change.

Tyler's model of curriculum evaluation is linear with six areas of consideration. First, a list of learning objectives are selected from students themselves, contemporary society, and content area specialists. Next, these objectives are screened by educational psychologists and philosophers. Third, the objectives that satisfy the screening process, including tests (but not limited to just paper and pencil) are moved forward into the next step. In the fourth step, evaluators examine the learning situations of students to

determine if the objectives created in steps one through three are met in classroom practice. Pre- and post-tests are used, along with formal and informal assessment instruments, in step five to further evaluate the effectiveness of the objectives in the classroom. Finally, all of the information gathered through the process is analyzed to see which objectives have been attained by the students and the process begins again at the very beginning as the curriculum continues to be further refined through evaluation.

Stake's Countenance Model

Stake (1967) created his model in response to what he viewed as weaknesses in Tyler's model of curriculum evaluation. Stake argued that Tyler's model lacked judgment and formal procedures in the evaluation process and integrated both to create his own evaluation model. Marsh and Willis referred to Stake's model as "countenance" (2005, p. 282). He advocated for more formal methods of curriculum evaluation (Stake, 1967). In other words, the goal was to determine what was actually happening with the curriculum, the difference between the planned curriculum and the enacted curriculum.

Going into more depth than Tyler, Stake looked at the curriculum from both a descriptive and judgmental perspective. The first step in Stake's countenance model of curriculum evaluation is to determine the intent of the curriculum. The second step is to collect observation data. Third, the evaluator analyzes the observation data for relationships and differences between the planned and enacted curriculums. The fourth step compares the analyzed-data with agreed-upon curriculum standards. Finally, the evaluator compares the observation analysis to the standards to judge the curriculum's strengths and weaknesses.

Posner's Integrated Evaluation Model

Posner (2004) described an "integrated evaluation" model (p. 261) to address the deficiencies of Tyler's evaluation model. Posner addressed additional areas of concern in the curriculum that may not be obvious using only Tyler's linear analysis model, in particular, "moral, political, cultural, social, and economic dimensions" (p. 18). Posner's (2004) curriculum analysis model breaks the areas of evaluation into four sets of questions based on curriculum documentation and origins, the curriculum proper, the curriculum in use, and critique. Within each set of analysis questions, Posner addressed the areas of moral, political, cultural, social, and economic dimensions of the curriculum. Posner's model contains many of the same components as the curriculum evaluation models described above and added important components, but is still not complete.

Eisner's Educational Connoisseurship Model

The "illuminative model" (Marsh & Willis, 2005, p. 287), created by Parlett and Hamilton in 1972, added informal and nonconventional methods of curriculum evaluation to the Tyler and Stake models, addressing the overall move away from traditional views of curriculum throughout education. Eisner's "educational connoisseurship model" (1991) adds a subjective component to curriculum evaluation, suggesting it is not only acceptable, but desirable for evaluators to become participants in the process.

Eisner's (1991) educational connoisseurship model allowed for a more in-depth analysis of the curriculum with a researcher who is thoroughly immersed in economics education in Montana. According to Eisner's model, only someone who is a "part of a system" (p. 2), who understands and can speak in the language of the system, is able to

interact within the organization in a meaningful way. This allows her to judge the curriculum subjectively as she interacts with the developers, teachers, and students, and then to write about the curriculum in an informed and critical manner. As a member of the Montana Economics Education Leadership Board of the Montana Council on Economic Education for over 5 years and a participant in multiple economics education opportunities in Montana for 7 years, the researcher is thoroughly immersed in economics education in Montana.

For this study, Posner's (2004) model was used for analysis because it includes the same components as the other models. Additionally, Eisner's (1991) connoisseurship model was employed to add voice and language only possible from one who is a part of economics education in Montana. This study addressed documentation, development, purpose and content, implementation, evaluation, and judgment following Posner's (2004) curriculum analysis model. He breaks these areas down into four sets of questions based on curriculum documentation and origins, the curriculum proper, the curriculum in use, and critique.

Curriculum Documentation and Origins

The *National Voluntary Economics Content Standards* (National Council on Economic Education, 1999), Montana Social Studies Content Standard 5 (Montana Board of Public Education, 2001), and the *National Assessment of Educational Progress in Economics: Test Framework, Content Specifications* (Buckles & Walstad, 2008) were used for analysis of the Economic Learning Module (ELM) curriculum. The analysis was confined by the limited research available in the area of economics education. Walstad, already identified as the most prolific researcher in economics education, has had some

level of involvement in most research in economics education, the writing of the national economics education standards, and the test framework used for the 2006 NAEP exam in economics.

The ELM development team consisted of Myles Watts, Vince Smith, and Holly Fretwell, members of the economics faculty of Montana State University-Bozeman, and Norm Millikin, Executive Director (retired) of the Montana Council on Economic Education. The review team was composed of John Feckanin, Park High School, Livingston, Montana, Sarah Zook, Great Falls Central Catholic High School, Great Falls, Montana and Laura Turner and Nancy Heggin, White Sulphur Springs High School, White Sulphur Springs, Montana. In addition to the review team, 150 Montana teachers, including the researcher, were involved in the classroom testing of the ELMs (Millikin, 2008).

The development of the ELMs was an attempt to respond to the perceived lack of economic literacy among high school graduates in Montana. Four questions dominated the development process of the ELMs (Millikin, 2008): What were the essential modules to be developed? What would be the sequence of the modules? How should teacher training on use of the modules be conducted? How should effectiveness of the modules be evaluated?

The Curriculum Proper

All modules of the ELMs are intended for training and educational contexts (Millikin, 2008). The purpose of this curriculum is to provide content knowledge and curriculum materials and activities on economics concepts specific to Montana to teachers of economics at the high school level. Economic data specific to Montana are

intended to make the curriculum activities more relevant to Montana students and teachers. Creating relevant teaching materials was a major goal of the project. The developers used research data specific to Montana that would allow Montana high school students to struggle with decision making and problem solving of actual economic issues. Varied assessments are included with each module to allow the teacher to meet individual student needs and provide multiple practices of the economics concepts. Training in the delivery of the ELM curriculum is provided at MCEE's annual Economic Education Summit. The 16 ELM topics are listed in Table 5.

The ELMs represent a cross-section of several curriculum perspectives as described by Posner (2004). The economics concepts that guide the ELMs provide ideas students should be able to understand and use for analysis of economic issues, an important qualification of the traditional and behavioral curriculum perspectives. In addition, each of the ELMs have multiple and varied activities which help students make informed decisions and solve economic problems which are important components of the experiential and constructivist curriculum perspectives.

The ELM content is organized and portrayed to students through major concepts or economic terms, using a top-down, structure of the disciplines organizing principle. However, a process approach recognizing the students as active participants in their learning is also used throughout the activities provided in the ELMs. Concepts are presented in terms of economics content and skills for understanding basic, proficient, and selected advanced economics concepts. The ELMs are closely aligned to the *Voluntary National Content Standards in Economics*. The national economics standards

and benchmarks for Montana Social Studies Content Standard 5 are specifically cited in each ELM.

Table 5. *Economics: The Study of Choices* (MCEE, 2008)

Module	**Title**
1	Scarcity: The Desire for Things is Greater than is Freely Available
2	Opportunity Cost: The Value of the Next Best Alternative Given Up
3	Exchange and Trade: The Voluntary Exchange of One Commodity for Another
4	Comparative Advantage: The Ability to Produce at the Lowest Opportunity Cost
5	Incentives Matter: Opportunity Cost Revisited
6	Prices: What are They?
7	Doing Well by Doing Good: Firm Behavior and Supply
8	Market Equilibrium: The Invisible Hand
9	Consumer Choice and Demand: Higher Price, Less Consumption
10	The Minimum Wage: Supply and Demand Analysis
11	China and Montana: The Economic Connection
12	Gas Prices: Supply and Demand Analysis
13	Property Rights: This Land is Whose Land?
14	Externalities: Impacts on a Third Party
15	The Economics of Poverty: American Indians Reservations in Montana
16	The Role of Business in the Economy: Markets and Commerce

Multicultural and international perspectives are also addressed through the ELMs. For example, Module 11 (China) demonstrates the global economic connection Montana has with China. In Module 16 (Role of Business) students apply economics principles specific to issues of poverty on American Indian reservations in Montana. Real data with a direct connection to Montana makes the curriculum relevant and allows students to address problems in a meaningful way.

The Curriculum in Use

Economics is not a required course for high school graduation in many states, including Montana. But 41 states currently require economic content standards to be implemented, up from 38 in 2004 and 28 in 1998 (National Council on Economic Education, 2007). Seventeen states now require an economics course for high school

graduation, up from 14 in 2004 and 13 in 1998 (National Council on Economic Education, 2007). Part of this is due to the realization among educational policy makers that graduating seniors have a lack of economic understanding and that high school is likely the last opportunity for the majority of adults (including those that attend and graduate from college) to learn economic content and skills (Siegfried & Meszaros, 1998).

The National Assessment for Educational Progress (NAEP) tested economics concepts among graduating seniors for the first time in 2006, largely in response to nation-wide concern about student knowledge of economics (Buckles & Walstad, 2008). Results indicate that eighty percent of students have a command of basic economics concepts, while only forty-seven percent are at the proficient level and three percent understand advanced economics concepts (Buckles & Walstad, 2008). It is clear that a national level political concern regarding economic knowledge among U.S. citizens will continue to drive curriculum and graduation requirements.

The ELM curriculum is specific to the field of economics, but its organization affects many different areas of a school's or district's curriculum, including social studies, math, business, and family and consumer sciences (Posner, 2004). Despite this breadth of applicability, few Montana teachers (approximately 150) have taken advantage of training available in the use of the ELMs (Millikin, 2008). MCEE offers funding for such training, including substitute teacher pay and lodging and food expenses for teachers. MCEE plans training in multiple locations to best meet the needs of Montana teachers and assure the greatest possible attendance.

While the ELM curriculum has a place in several curricular areas, social studies may be the best fit for inclusion of all the modules. A separate economics course provides

the greatest opportunity for the ELMs, but each of the ELMs can be easily integrated into the 11th grade U.S. history or 12th grade U.S. government curriculum as well. Advantages of teaching the full ELM curriculum include increased economic literacy among Montana's high school graduates and ultimately a better informed and capable citizenry for Montana. The biggest hurdle MCEE faces with regard to implementation of the ELMs is convincing teachers to include economics content in their curriculum. Fear of economics among teachers is wide spread and makes it difficult to attract teachers to training opportunities or convince them to implement new curricular materials (Siegfried & Meszaros, 1998).

Montana State University economists gathered data used in the ELM curriculum. Authentic data, much of it Montana-specific, makes the content of the curriculum relevant for students and teachers. Within each curriculum module, multiple assessments and activities are provided. Some of the assessments are measurement-based, including multiple-choice questions to assess general understanding of the economics concepts taught. Additionally, discussion and essay questions, along with hands-on problem-solving activities are provided with each module to assess analysis and critical thinking skills related to economics concepts taught.

Short-term evaluation outcomes from the ELM curriculum implementation should include increased scores on the NAEP in economics and improved economic literacy among Montana high school graduates. Long-term evaluation outcomes will include increased awareness of economics and improved economic decision-making which are both vital to the success of our democratic society. Neither the short-term or long-term

evaluation outcomes are easy to measure, but both meet important purposes of American education.

Critique

The ELM curriculum's greatest strength is its Montana specific data that makes the learning relevant to Montana students and teachers. Additional strengths include its consistent format, hands-on activities, multiple assessment ideas included with each module and relevance to the *National Voluntary Economic Content Standards*. Each module is complete with all data, visual aids, charts, graphs, handouts, discussion questions, and clear instructions for the teacher. Weaknesses include a lack of inclusion and sensitivity to American Indians, the largest minority population in Montana. Only one lesson addresses the American Indian population in Montana and it focuses specifically on the issue of poverty on Montana Indian reservations. All of the modules have a strong capitalist focus and do not account for the communal economic viewpoint of most American Indian tribal cultures. Module 9: Market Equilibrium, uses babysitting as a central example and activity. The developers felt high school students could easily relate to this example, but American Indian cultures do not relate well to this example and another example and activity need to be included to demonstrate the concept of market equilibrium.

Summary

Understanding curriculum change and its connection to the purpose of education in the United States from an historical perspective puts the current focus of education on standards and accountability into context. Four major approaches to curriculum change have been evident since the nineteenth century. These include Progressive education,

Research Development & Diffusion, the Collaborative model, and the Standards and Accountability Movement. The Progressive era presented an argument specific to social studies that is still heard today: should social science disciplines be taught separately with a distinct focus on the content of each discipline, or should the subjects be integrated to meet the needs of social education? Many classroom teachers are likely unaware of the broader picture of curriculum change and the continuing debate over that subject, but change directly affects teachers. In fact, teachers are the most important consideration in curriculum change because they have so much discretion about what and how to teach each day (Thornton, 2005).

High-stakes testing and accountability are the current focus of education, in the U.S. and internationally (Fullan et al, 2006; Fullan, 2007; Hargreaves & Fink, 2003; Sahlberg, 2006). The impact on student learning is not yet clear, but the impact on teaching is becoming evident. Increases in daily demands on teachers and decreases in the status of the teaching profession (Scott, Stone, & Dinham, 2001) are already present in the literature. As the U.S. seeks to replace an aging generation of teachers, it is imperative that we attract young talent to the classroom. Qualitative research regarding the experiences of practicing teachers as they make changes in curriculum will help curriculum makers, education leaders, and policymakers address ongoing considerations related to teachers in the classroom, such as commitment, workload, capacity, collaboration, and the perception of the teaching profession (Fullan et al., 2006; Fullan, 2007; Hargreaves, 2007; Hargreaves & Goodson, 2006; Leithwood & McAdie, 2007; Sahlberg, 2006).

The literature review revealed a need for further study in two particular areas. First, there is a need for additional qualitative research specific to teachers' perspectives on curriculum change (Elmore, 2004; Fullan et al., 2006; Hargreaves & Goodson, 2006; Yucel, 2008). Second, further study in economics education is needed. Increasing economic literacy in the U.S. may most successfully be achieved through integration with a required course in U.S. history. Further study of this approach is necessary to determine effectiveness for learning basic economics concepts (Walstad, 2001; Walstad & Rebeck, 2000). This is particularly true for determining the effectiveness of integrating the ELMs in the U.S. history curriculum in Montana and helping MCEE in its efforts to disseminate and implement the Economic Learning Modules.

CHAPTER 3: METHODOLOGY

Introduction

Qualitative research has a distinctive purpose. As Eisner (1991) suggested, qualitative inquiry helps us "make sense" of the world around us (p. 21). Through the various qualitative research designs (Creswell, 2007), it is possible to develop a study that responds to different needs than quantitative research alone. Creswell (2007) referred to research design as the process by which a researcher determines a problem and research questions, collects data, analyzes and interprets data, and ultimately writes about the findings. It is through this process of inquiry that understanding and knowledge is advanced.

Qualitative research is distinct from quantitative research because of the "complex, holistic picture" of the research and participants in the study. This includes the "detailed views" of participants and research conducted in the participants' "natural setting" (Creswell, 2003, p. 15). With "rigorous and thorough data collection and analysis" (Creswell, 2007, p. 117) qualitative data can be used to further develop themes and theories which lead to improved understanding of humanity.

It is not the intent of the qualitative researcher to generalize the results of the research study as in quantitative research. Rather, the qualitative researcher attempts to make meaning out of an in-depth collection and interpretation of data. Creswell (2003) described this as a constructivist approach wherein the researcher establishes the "multiple meanings of individual experiences…with the intent of developing a theory or

pattern" (p. 18). Transferability, where the user of the research determines the usefulness of the research, is the aim of the qualitative researcher (Creswell, 2003).

Research Design

Careful construction of the research design provides organization that allows the research study to proceed smoothly. Merriam (1998) described research design as "similar to an architectural blueprint, it is a plan for assembling, organizing, and integrating information" (p. 6). Researchers must carefully consider several choices when selecting which research design best meets the needs of the study. Determining whether the research is experimental or non-experimental is the first choice that must be made. Once the researcher determines the research will be descriptive and explanatory in nature, rather than determining cause and effect, a qualitative design may be chosen for the study.

Theoretical Framework for Research

Eisner (1991) pointed out that qualitative researchers "do not search out data or evidence to prove or disprove hypotheses they hold before entering the study" (p. 31). However, he added that "all research is guided by some theoretical orientation" or "way of looking at the world" and "good researchers are aware of their theoretical base and use it to help collect and analyze data" (p. 33). By contrast, Creswell (2003) suggested that approaching qualitative research using a specific theoretical lens can "unnecessarily structure and constrain thought" (p. 141), but notes that "no qualitative study begins from pure observation and that prior conceptual structure composed of theory and method provides the starting point for all observations" (p. 133).

Social constructivism, sometimes combined with interpretivism, is a theoretical perspective in which the researcher attempts to develop meaning through the "specific contexts in which people live and work" (Creswell, 2003, p. 8). Through this lens, the researcher recognizes how her own background and personal experiences shape her interpretation and subjective meaning. Rather than "narrowing meanings into a few categories or ideas" the researcher "looks for the complexity of views" relying "as much as possible on the participants' view of the situation being studied" (p. 8).

For this study, the researcher recognized that her background and experience has an impact on her interpretation of the data. Her long-term professional relationship with the participants, eight years of work in the school district where the research is occurring, involvement with the Montana Council on Economic Education (MCEE) and the Economic Learning Modules (ELMs), and two years studying teacher perspectives on curriculum change have all shaped her interpretation of the data collected.

Case Study

Data collection in a case study has specific expectations for thorough research. According to Creswell (2007), a case study is an exploration of phenomena within a "bounded system," bounded by place and time with detailed, in-depth analysis of multiple sources "rich in context" (p. 75). Exploring multiple forms of data allows a researcher to gain an overall and detailed perspective of the experiences of a case. In a case study, the researcher collects data from many sources such as interviews, observations, documents, surveys, focus groups, and artifacts. The researcher then analyzes the data using strategies such as contextual description, "categorical aggregation," "direct interpretation" and "naturalistic generalizations" (Creswell, 2007,

pp. 156-157). Through this holistic view, the researcher develops themes and theories to advance the field of study.

The research design in this study was a qualitative approach using a single, within case study. The intent was to explore the curriculum change experiences of five high school social studies teachers integrating economics curriculum into their U.S. history classes. This case study took place over four months, with participants from three high schools. The research procedure for each case study was replicated and although this does not make the results generalizable, the user of the research will be able to determine transferability (Yin, 2003). The study was limited by the selection of participants, the researcher's professional relationship with each of the participants, the participants' ability to deliver the curriculum in a meaningful way, and the program used to gather data on the curriculum change experiences of the participants, the Economic Learning Modules published by the Montana Council on Economic Education.

Qualitative data was collected in the form of teacher interviews, observations, field notes, electronic journals, and document analysis. The analysis of the ELM curriculum used Posner's (2004) integrated curriculum analysis model and Eisner's (1991) educational connoisseurship model of curriculum analysis.

Participants

This study used purposeful selection of participants. Rather than the traditional quantitative method of sampling, where generalizability of results prescribes certain methodologies for determining study participants, the use of a qualitative case study allowed the researcher to select participants based on certain characteristics. Qualitative

case study research looks to transferability of research results. The user of the research can determine the usefulness of the research study.

Eisner (1991) suggested the research is enhanced if the researcher knows the participants and has expertise in the research topic. The participants of this study were five high school social studies teachers, all employed by the same school district as the researcher, located in a western Montana city. The researcher has worked as a high school social studies teacher in this school district for seven years and has a professional relationship with each participant.

Lortie (1975) cautioned against annoyance of the teacher participants from unwanted innovations, so only teachers who expressed interest in integrating economics concepts into the U.S. history curriculum were chosen as participants. One to two teacher participants were selected from each of the school district's urban, general education high schools.

Each teacher participant has at least five years of social studies teaching experience at the high school level. Additionally, the teacher participants hold a Class 1, professional teaching license, or a Class 2, standard teaching license issued by the state of Montana. Each is qualified in social studies broadfield or history, government and economics.

Data Collection Procedures

Creswell (2007) presented data collection as a "circle" (p. 117) and noted that each of these stages is common to all qualitative research designs. These steps include: "locating site/individual; gaining access and making rapport; purposefully sampling; collecting data; recording information; resolving field issues; storing data" (p. 118). Data

collection serves as a circle because each step is interrelated and used to respond to emerging research themes throughout the data collection process. Creswell (2007) suggested several strategies for data "validation" (p. 207), also referred to as credibility; through the use of these strategies, the user determines the transferability of the research. Each of these validation strategies requires multiple sources and long-term data collection in order for data to have meaning beyond the research study itself.

The researcher in this study used multiple sources during data collection to provide data necessary for rigorous analysis. First, the ELM curriculum documents were examined and analyzed as part of the literature review. Face-to-face, semi-structured interviews of the five participants were conducted before and after the implementation process (see Appendix C and D). Several observations of the teacher participants' classroom were conducted and teacher participants' responded to questions in an electronic journaling process throughout the implementation of the ELMs (see Appendix E).

Data Sources

Several data sources were used to create an in-depth description of the experiences of the participants used in this study. These data sources included interviews, observations, field notes, journals, and document analysis. The combination of these multiple sources gave the researcher a multi-faceted picture of the participants' curriculum change experiences as they implemented the ELM curriculum. Creswell (2007) suggested that an in-depth analysis of multiple data sources allows the researcher to create a rich contextual perspective of the case, preparing the research for validation strategies and transferability. The researcher used interviews, observations, field memos,

journals, and document analysis to provide a rich contextual perspective of the case study for purposes of validation and transferability.

Interviews

Fontana and Frey (2003) pointed out that "asking questions and getting answers is a much harder task than it may seem at first" (p. 645). However, interviews play a central role in qualitative data collection procedures because they help the researcher get an in-depth understanding of participants in a study. Several methods of interviewing exist, including electronic and face-to-face, individual and group, and structured, semi-structured, and unstructured. Choosing the interview style is an essential element of the research design. Careful formatting, grouping, and ordering of questions allow for a smooth interview process.

An initial semi-structured, face-to-face, individual interview of each of the five teacher participants was conducted (see Appendix C and D) as soon as possible after participant selection. Each interview took place at a mutually agreed upon time and location determined by the teacher participants and the researcher, without strict time constraints for completing the interview. Interview questions were formatted, ordered, and grouped to create a coherent questioning process and allow the interviewee to build upon ideas from one question to the next. The interview questions were piloted with an experienced social studies teacher who was not a participant in the study to ensure the questions met the goals of the research. The interviews were audio recorded and descriptive data was noted using the Interview/Observation Field Note Form (see Appendix A). Immediately following the interview, the researcher used the field memo (see Appendix B) to note emerging themes and reflections from the interview. The audio

recording was transcribed by a professional transcriptionist versed in confidentiality requirements, checked for accuracy by the researcher, and then destroyed.

Further qualitative data was collected through a second semi-structured, face-to-face, individual interview of the teacher participants (see Appendix C and D), conducted as soon as possible following the implementation of the ELM modules. The second interview took place at a mutually agreed upon time and location determined by the teacher participants and the researcher, without time constraints for completing the interview, with the exception of one interview. Again, the interviews were audio recorded and the researcher used the Field Memo (Appendix B) to note developing themes and reflections from the second interview. The audio recorded interviews were transcribed by a professional transcriptionist, checked for accuracy by the researcher, and destroyed.

Confidentiality of the teacher participants was maintained throughout the research process. A coding system using pseudonyms was created for the teacher participants and was stored in a locked file cabinet in the office of the researcher's faculty supervisor, along with the participants' signed consent forms, separate from the data. All identifying information was kept private and stored in a locked file cabinet in the researcher's office. Data will not be released without consent except as required by law. Only the researcher, her faculty supervisor, and The University of Montana Institutional Review Board have access to the data and locked file cabinets. The interview audiotapes were transcribed by a professional transcriptionist who has agreed to confidentiality. Transcription took place without any information that could identify the participant. The researcher listened to each audio recording to verify the accuracy of the transcript, after which each recording was destroyed.

Observations

According to Creswell (2003), part of the research design process includes determining which data collection methods will best meet the needs of the study. One important method of data collection is the observation. Creswell (2003) described this task as one in which "the researcher takes field notes on the behavior and activities of individuals at the research site" (p. 185). Observations can be semi-structured or unstructured.

Observations provide important advantages unavailable to the researcher with other data collection methods. These include the ability to record information that a participant may be uncomfortable revealing or discussing in an interview (Creswell, 2003). The researcher can play a variety of roles in the observation process, from completely uninvolved in the activity being observed to complete immersion in the observation process where the observer serves as participant while other participants in the research study are unaware of the researcher's role in the study (Creswell, 2003). However, observation as a data collection method has its own limitations as well, including the researcher's own ability to view and record data (Creswell, 2003).

For the purposes of this study, the researcher conducted face-to-face observations of the ELM implementation process. The teacher participants each selected 2 or 3 of the 16 ELMs for delivery in their 11th grade U.S. history class(es). The ELMs were presented to the students over a four month period, in the participants' classrooms.

Researcher influence is one of the biggest threats to successful research (Creswell, 2007). In order to minimize researcher influence in this study, the researcher participated in each participant's classroom multiple times. Prior to the ELM implementation, the

researcher participated as a guest at least two times within each teacher participants' classroom to minimize the disruption caused by having an outsider in the classroom. Observations that took place prior to the ELM implementation also provided the researcher with data about the teacher participants' classroom, setting, and teaching style.

During the ELM implementation, the researcher assumed the role of an outsider for the purposes of observation. Qualitative data was gathered through observations of the ELM curriculum implementation in each of the five teacher participant classrooms. Observations of complete ELM lessons were observed by the researcher during the implementation process for each of the five teacher participants during the data collection phase of the study. Some ELM lesson implementations took multiple class periods for delivery, depending on the schools' schedule and the lesson chosen for implementation. Due to personal issues and time constraints, only two ELM observations were completed for two of the participants. Two initial observations were completed for all five participants and three ELM observations were completed for the remaining three participants. Descriptive data was collected during the observations using the Interview/Observation Field Note Form (see Appendix A), which includes both "descriptive and reflective notes" (Creswell, 2007, p. 134).

Bogdan & Biklen (2003) and Creswell (2007) both recommended recording several aspects of the observation, including "portraits" (Creswell, 2007, p. 134) of the teacher participants, the physical setting, events and activities, and the researcher's own reactions. In addition to these aspects of the observation, the researcher also gathered qualitative data from students in the classroom to gain a richer context of the curriculum change process, but no individual student or identifying information was collected.

Observation of the students' response to the ELM curriculum implementation was collected on the same form, and at the same time, as the teacher observations. No specific data or identifying information related to individual students was collected. The same confidentiality procedures described above under interviews were used for observations. As soon as possible following the observations, the researcher used the Field Memo form (see Appendix B) to note emerging themes and make reflective notes.

Field Notes

Determining methods of data collection for interviews and observations are also an important aspect of the design of a research study. Written forms are commonly used to record data in both situations. Using field notes allows the researcher to record data beyond the verbal response of the participant in the interviews and observations. This includes such aspects as body language and facial expression. Creswell (2003) suggested using "descriptive notes (portraits of the participants)" during the interview and/or observation and "reflective notes (the researcher's personal thoughts)" (p. 189) following the interview and/or observation.

For this study, the researcher collected field notes during the pre- and post-interviews of the teacher participants and during the observation stages of the study. The researcher used the Interview/Observation Field Note Form (see Appendix A) to observe body language, gestures, voice inflection, and facial expression. During the interviews and observations, the Interview/Observation Field Note Form was also used to collect notes on the verbal responses of the participants. As soon as possible following each interview and observation, the researcher used the Field Memo (see Appendix B) to note emerging themes and make reflective notes.

Journals

Journal questions were sent to each participant electronically throughout the research process. Five separate journal requests were sent using email, with each journal request asking two questions (see Appendix E). The purpose in using electronic journals was to provide an additional data source where the participant had time to think about responses to questions. Some of the journal questions probed for information that was also gathered during the pre or post interviews, but this provided a different setting for participants to respond to the questions.

Participants responded to the journal questions using email and the researcher collected and organized the journal responses as soon as possible after receiving them, noting the date and time received. As soon as the journal responses were recorded removing any identifying information, they were permanently deleted.

During the journal collection process it became evident that this was a difficult additional expectation for the participants. The researcher sent several reminders to the participants in order to collect the data. After talking with the participants, the researcher found days and times to send the journal questions that better fit the individual needs of the participants.

Document Analysis

Using similar practices for notes on documents is an effective way to record data on document analysis including “information about the document or other material as well as key ideas” (Creswell, 2003, p. 190). As a part of this research study, each teacher participant was asked to respond to several journal prompts provided by the researcher via email. This was a non-intrusive way to gather additional data from teacher

participants. In addition to the teacher participants' journals, other documents that were analyzed include the school district's high school social studies curriculum, the MCEE ELMs, the teacher participants' lesson plans, and the researcher's field notes and reflections. An analysis of the ELM curriculum using the model created by Posner (2004) is included in the literature review. The *National Voluntary Economics Content Standards* were used in the evaluation of the ELMs.

Process for Data Analysis

Merriam (1998) pointed out that the researcher must continually analyze data during data collection in order to determine which direction to pursue as the research study ensues. Eisner (1991) also suggested that data analysis is an ongoing and inductive process: "It is simply not possible to predict the flow of events as they unfold, so researchers must adjust their course of action based on emerging conditions that could not have been anticipated" (p. 170). Miles and Huberman (1994) provided a list of "common features that recur during any style of qualitative analysis" including: "affixing codes"; "noting reflections"; "sorting and sifting through data"; "isolating patterns and processes"; "elaborating a small set of generalizations"; and "confronting those generalizations" to make meaning of the data (p. 9). They further elaborated this as a process, or "flow", in which analysis occurs throughout data collection (p. 10).

Inductive Analysis

Creswell (2007) pointed out that qualitative researchers work inductively with the data as they are collected, building themes as they work with the data "from the bottom up" (p. 39). Qualitative researchers also collaborate with participants in this inductive process as they help shape themes. The researcher works throughout the data collection

and analysis process moving from “particulars to more general perspectives” and back (p. 43). This is not linear in nature and requires the researcher to remain flexible and open as new categories, codes, and themes emerge.

For this study, data analysis occurred inductively throughout data collection as well as after all data was gathered. During the interview process, the researcher revised the interview questions based on the interviewees’ responses and made note of instances in observations that indicated a certain theme, allowing the researcher to work with themes as they emerged during data collection. Interviews, observations, field notes, journals, and document analysis contributed to the data analysis and provided an in-depth, complete picture of the curriculum change experiences of teachers implementing the ELMs.

Several methods of interpretation were employed during the data analysis phase of the research. Observation data was collected using hand-written notes to avoid disturbing the participants and their students. As soon as possible after each interview and observation, the researcher wrote field memos, noting emerging themes and follow-up items. The hand-written field notes and field memos were typed, clarified, organized, and stored electronically. Interviews were transcribed by a professional transcriptionist, checked for accuracy, organized and stored electronically. Journal responses were received through email, organized, and stored electronically. Additional reflective notes and themes emerged during the organization phase of the analysis.

Coding

Creswell (2007) suggested a variety of data analysis and coding processes for case study research. In particular, with “categorical aggregation the researcher seeks a

collection of instances from the data, hoping that issue-relevant meanings will occur" (p. 163). The researcher can also use "naturalistic generalizations" to interpret the data and determine meaning in the form of generalizations that others can apply to their own situation (p. 163). Miles and Huberman (1994) recommended writing margin notes and writing the researcher's reflections in notes during the data collection process. Wolcott (1994) suggested using diagrams, charts, tables, and figures to graphically represent the complex relationship between and among categories, codes, and themes.

At the conclusion of the data collection phase of the research, all of the typed data were read in its entirety "to obtain a general sense of the information and to reflect on its overall meaning" (Creswell, 2003, p. 191) following Creswell's suggestion for case study data analysis using "naturalistic generalizations" (2007, p.163). Next, a list of initial codes and themes was determined. The researcher read all of the data a second time and used the initial coding categories to code the data line by line using Creswell's suggestion for "categorical aggregation" in case study data analysis (2007, p. 163). Additional margin notes and clarifications were included in the initial coding of the data as recommended by Miles and Huberman (1994). Data were de-contextualized using mental maps sketched by the researcher throughout the data analysis process moving from a macro to micro and back to macro perspectives of the data as suggested by Wolcott (1994).

Following qualitative methodology, data analysis occurred throughout the research process. Five themes emerged during the study: support, time, motivation, adaptation, and student learning. Themes emerged early in the data collection process that were later re-worded to fit the overall meaning of the data. For example, isolation

originally emerged as a coding category, but was later included as a part of the coding category collaboration within the theme of support. During the final phase of data analysis, the researcher worked with the coded data to find complex relationships among themes. For example, preparation emerged as a significant coding category within three themes: time, motivation, and adaptation. Overall, support emerged as the foundational element to all the other themes. Time, motivation, and adaptation emerged as building blocks essential to reaching the ultimate goal of student learning. (Figure 1 on p. 94 graphically represents this complex relationship.)

Creswell (2003) suggested using an *in vivo* term: "based in the actual language of the participant" (p. 192). During the study it became clear that curriculum change has a negative connotation among some teachers. Diane, one of the participants, continually used the phrase "curriculum improvement" throughout the study. Her phrase better describes the process the participants' found themselves engaged in during the study and is used in the study's final title. The original title of the study focused on curriculum change in Montana economics education, but ultimately the title of the study was changed to better reflect the results of the data collected.

Themes were also re-worded as the data analysis progressed and better descriptions emerged. The theme motivation began as self-interest, changed to motivation, then to personal interest, and finally back to motivation. The researcher perceived a negative connotation with the label self-interest and collaborated with her faculty supervisor to change the label to motivation.

Data Reporting

The Role of the Researcher

In any qualitative research study, the role of the researcher needs special consideration. It is important that the researcher remain receptive in order to collect and analyze data, yet in order to collect multiple, in-depth sources of data, the researcher must be knowledgeable about the data sources and participants. Bogdan and Biklen (2003) cautioned the researcher against changing data in any way through data collection and analysis practices. Using detailed field notes helps the researcher alleviate subjective bias, but cannot hope to remove bias completely from the research study (Bogdan & Biklen, 2003).

In this study, the researcher selected participants with whom she has a professional relationship, but no authority over, who are interested in integrating more economics concepts into the U.S. history curriculum they currently teach. This is important to avoid annoyance of the teacher participants from unwanted innovations (Lortie, 1975). The Economic Learning Modules are a voluntary curriculum that teachers can use as a tool to assist them in meeting the goals of the *National Voluntary Economic Content Standards*. It should not be forced upon teachers who are resistant to change (Newlon & Threlkeld, 1926). The researcher also has a strong connection to the Montana Council on Economic Education, serving as a member of the Montana Economic Education Leaders Board. The researcher is thoroughly immersed in economics education in Montana as suggested by Eisner's connoisseurship model (Eisner, 1991). Rather than biasing the researcher, this relationship allows the researcher to have a thorough understanding of economics education specific to Montana. Thus, she was able

to judge the curriculum subjectively as she interacted with the curriculum developers, teachers, and students throughout the study.

Bias

Qualitative research acknowledges the inherent bias of the researcher. It allows for empathetic understanding of the participants in the study. For this case study, qualitative data was collected in the form of interviews, observations, journals, and document analysis with five participants with whom the researcher has a professional relationship. She has known all of the participants for at least five years and continues to work in the same school district.

Creswell (2003) cautioned again "backyard research" noting that it "often leads to compromises in the researcher's ability to disclose information and raises difficult power issues" (p. 184) However, Eisner (1991) suggests that only someone who is "part of a system," who understands and can speak in the language of the system, is able to interact within the organization in a meaningful way (p. 2). Therefore this study was enhanced, rather than compromised, because of the trust that was established with each participant long before research began.

The interview process was constructed to minimize bias, with the interviewer maintaining a consistent and calm voice throughout each interview. The interviewer avoided adding personal perspective through encouragement or disapproval by using objectively-worded questions and prompts. Two observations were conducted prior to the implementation of the ELM curriculum to reduce researcher influence and minimize disruption caused by having an outsider in the classroom. Bogdan & Biklen (2003) suggested detailed field notes, including the researcher's subjective and reflective

thoughts, help protect against bias (Bogdan & Biklen, 2003) and the researcher made every effort to eliminate researcher bias by using detailed field notes (see Appendix A) throughout the data collection process.

The researcher has a close connection to economics education in Montana as a member of the Montana Economic Education Leader Board of the Montana Council on Economic Education. She has participated in the review process and several professional development opportunities pertaining to the ELM curriculum. She selected participants with whom she has a professional relationship and who are interested in integrating economics concepts into their U.S. history curriculum using the ELMs. However, she was careful not to bias the implementation process of the ELMs and the participants' curriculum change experiences and did not provide guidance to the teachers in the use of the ELMs. The research was enhanced because the researcher knows the participants and has expertise in the research topic as Eisner (1991) suggested in his connoisseurship model.

Validation

Creswell (2007) recommended using at least two of his eight "validation" strategies so that "these ideas [from the research study] are translated into practice" (p. 207). For this study, the researcher used "triangulation" of data through multiple and different sources, "peer review," "member checking," and "rich, thick description," and prolonged time in the field for purposes of data analysis, validation, and transferability (pp. 208-209). Triangulation allowed the researcher to "corroborate evidence from different sources to shed light on a theme or perspective" (p. 208). Peer review occurred throughout the process with the assistance of the dissertation chair and committee

members. Member checking was employed throughout the data collection process by continually confirming the accuracy of the data collected during interviews, journal responses, and observations with the participants. Finally, rich, thick description is the most applicable for the users of the research in determining transferability. With a complete, accurate, and detailed description of the curriculum change experiences of the five teacher participants, users of this research study will be able to determine if the findings have characteristics similar to their own scenarios.

Summary

This qualitative, single, within case research study on the curriculum change experiences of five Montana high school social studies teachers was designed to add to the body of quantitative research on curriculum change. Teachers experience curriculum change differently than others in the curriculum change process and much remains to be discovered about teacher perspectives in this area. The researcher's own involvement with economics education in Montana and already established professional relationship with each participant helped create a comfortable, amenable, and trusting research environment where the researcher explored the experiences of the teacher participants. The researcher selected teacher participants and conducted interviews and observations. Data analysis occurred throughout the research process, including noting reflections and emerging themes on field memos as soon as possible after each interview and observation. Additionally, the researcher analyzed documents to further describe the teachers' curriculum change experiences. Data analysis used Creswell (2007) "naturalistic generalizations," (p. 163) to get an overall sense of the data in its entirety. After initial coding categories were determined, "categorical aggregation" was employed to code the

data line by line. The researcher also used mental maps to de-contextualize the data during the data analysis phase of the research. Finally, the researcher used validation strategies to minimize bias and check the accuracy of the data collected.

CHAPTER 4: DATA ANALYSIS

Introduction

Research for this with-in case study was guided by a central question: What are the curriculum change experiences of five high school social studies teachers in a western Montana city who are integrating a newly-released economics education curriculum into their U.S. history curriculum for the first time? A review of the related literature on this topic revealed several areas of consideration regarding teachers' curriculum change experiences which guided the data collection and analysis: commitment, workload, capacity, collaboration, and perception of the teaching profession.

Five participants were selected by the researcher for the study which took place over a four month period. Data pertaining to the case is reported here in narrative form, beginning with a detailed description of the case and an overview of the participants. Five themes emerged from the data analysis: support, time, motivation, adaptation, and student understanding.

Stake (1995) recommended opening case study narratives with vignettes to develop reader's interest and personalize the case presentation. Creswell (2007) suggested "maximum flexibility in structure" for narrative reports and was "unwilling to prescribe a structure or specific writing strategies" (p.183). However, he pointed out that narratives contain certain "core elements," specifically they "reflect three-dimensional inquiry" that "looks backward and forward, looks inward and outward, and situates the experiences within place" (p. 183).

As a teacher who participates in the world in which the action of the participants' stories takes place I will narrate their stories from the first person point of view. Following Stake's recommendation, I will present the participants' stories as narrative vignettes. Each theme that emerged from the research is presented using the story, or vignette, of one of the participants.

I will describe the case, followed by an analysis of the themes that emerged from the study. The case includes a description of the community, the school district, and an overview of the three schools, and the five teacher participants. Two unanticipated factors that also impacted the study are described as emerging conditions: an economic recession and a local curriculum controversy. Next, a section titled "The Curriculum Improvement Structure" describes the five themes and their complex inter-relationships prior to presenting the detailed analysis of each theme and sub-themes using participant vignettes.

Community

This study took place in a western Montana city, with a 2007 U.S. Census Bureau estimated population of 67,715, making it one of the largest metropolitan areas in Montana. 96.1% of the city's population is white, with a small percentage of American Indians (2.3%). Education is highly valued in this community, as indicated by 2007 U.S. Census Bureau estimates. 91.7% of the city's population has earned a high school diploma or General Educational Development (GED) compared with 79.6% nationally. 25.5% of the population graduated from a 4 year college program, compared to 15.2% nationally. Additionally, 12.4% of the city's population has earned masters, Ph.D., or other advanced college degrees compared with 7.2% nationally.

School District

The study took place in a city with three public and two private, accredited, general education high schools. This study looked at the three public high schools. All three schools are part of the same school district, one of the largest public school districts in the state of Montana, with approximately 8500 students enrolled in both high school and elementary programs. The county superintendent of education reported the total enrollment of the three high schools at approximately 3500 pupils for 2008. Student populations are distributed relatively equally among the three schools.

Three Schools

Community perceptions of the three high schools are pervasive and had an overall effect on the participants' change experiences. One of the schools opened in 1908 and has distinctive architectural details including woodwork and artwork. The building is multi-level, located close to down town, and nestled in a neighborhood of homes built in the same period making parking difficult. The other two high schools were built in 1956 and 1980. Both of these high schools have expansive campuses, green space, and ample parking lots. They are surrounded by suburban homes built in the 1960s-80s. The school built in 1956 houses the district's teen parent program and is equipped with a nursery. This school's campus sits adjacent to the community's vocational technical school which offers two year associates degrees. The third school, built in 1980, is home to the district's vocational agriculture program, vocational preparation program, and a football and track stadium used by all of the high schools in the district.

Each of the urban high schools in the study follows a different bell schedule. One of the high schools follows a traditional schedule with 50 minute class periods. One of

the high schools follows a full block schedule, with 90 minute class periods meeting every other day. One of the high schools follows a modified block schedule with a traditional schedule on Mondays, Tuesdays, and Fridays with 50 minute class periods; Wednesdays and Thursdays follow a block schedule with 90 minute class periods, with half of the class periods meeting Wednesday and the other half of the class periods meeting on Thursday. The different schedules affected the curriculum change experiences of the participants.

The overall atmosphere of each school also impacted the participant's change experiences. One high school has a recently remodeled auditorium and the perception of this high school is that it focuses on the arts and is more accepting of a diverse student population, including a strong Native American Studies program. All three of the schools completed major renovation projects in 2003. One school received an upgraded auditorium, a gymnasium addition, and 20,000 square foot music and administrative office addition. Library, gymnasium, and administrative office additions were made at another one of the schools and the third school underwent a gymnasium and science classroom wing expansion.

Five Teacher Participants

All five teacher participants were selected from the city's public high schools based on their teaching experience, endorsements, and current teaching duties. Two are female and three are male, with teaching experience ranging from seven to 23 years. The participants' life and work experiences vary widely contributing to each one's unique perspectives on curriculum change. Each participant brings a set of personal interests,

commitment, teaching styles, and capacity which affect the way they respond to change in their classrooms.

One teacher has extensive international teaching experience. One of the participants has academic training in economics and is currently working toward a Ph.D. in an economics-related field. One of the participants is actively involved in a leadership position with the local education association. One of the participants serves as a department chair. Two of the participants coach high school sports. One participant spends half time as an administrative intern working with students and their families on student discipline and attendance issues. Two of the participants integrate the 11th grade U.S. history curriculum with the 11th grade English curriculum as part of a team-teaching model.

All of the participants have children; four of the participants have young children living at home. All of the participants are married, three are married to educators; one of those is married to an educator also employed in the district.

Researcher's Relationship to Participants

For this study, I selected participants with whom I have a professional relationship. I have known and worked in the same school district with all of the participants for at least 5 years and one of the participants for 8 years. I student taught with one of the participants during my own training and I am personal friends with another one of the participants outside of school. My child attends the same school, in the same grade, as another one of the participant's children.

During this study I worked in the same school with two of the participants where I was employed half time as an administrative intern responsible for student discipline and

attendance. I did not have authority over any of the participants. I reiterated this to the participants during the data collection process. Additionally, I met with each school principal at the beginning of the research and shared my research plans and goals. I explained to each principal my inability and unwillingness to discuss any observations, comments, or thoughts regarding any of the participants.

One of the participants initially seemed uncomfortable with my presence in the classroom. After additional observations and discussions with the participant, it became clear that the participant was not uncomfortable with me in the classroom; rather this participant likes to draw other perspectives into the classroom conversation and was simply attempting to do this. I clarified my role as an outside observer.

My long-term personal and professional relationship with the participants allowed them to trust me enough to share information that they might not have shared with a researcher that they did not know. During the interviews, participants repeatedly made comments such as “between you, me, and this mike,” “since you’re not using my name,” and “thank goodness this is a confidential interview” indicating their concern about some of the information they were sharing. This was most often related to administrative support, but occasionally regarded support from colleagues. For that reason, in the data analysis I chose not to address administrative support in any narrative vignettes. Instead, I wrote about administrative support from a broader perspective and did not include any details that might identify any individual participant or school.

Emerging Conditions

Economic Recession

An important aspect of this case study research was an economic crisis in which the local community, state of Montana, the United States, and the world in general found themselves. The complex, interdependent relationship of the world's economy demonstrated itself in a multitude of ways in the months prior to and during the study and directly affected the lives of the students, parents, teachers, administrators, and community involved in the study. All of the participants integrated current economic developments into their U.S. history classes outside of the Economic Learning Modules (ELMs) in various ways throughout the observations.

Local Curriculum Controversy

Controversial issues played a unique and important role during this research study. Two teachers in the school district, not participants in the study, were accused by one parent of violating a school district policy regarding instructional materials. The complaint focused on the use of supplemental videos shown in class. This parent reportedly spent over 100 hours preparing his argument to the local school board after conversations with the teachers, the school principal, and the challenged materials committee did not yield the desired results.

One of the teachers sent a letter to the school board detailing his use of the video in his classroom. The other teacher, however, was told she did not need to provide a letter or speak at the board meeting. During the meeting she was "extremely upset with the tenor of the meeting" and gave an emotional response to the parent's complaints. In the

end the board approved (by a vote of 4-3) the first teacher's video use and disallowed (by a vote of 3-4) the second teacher's video use.

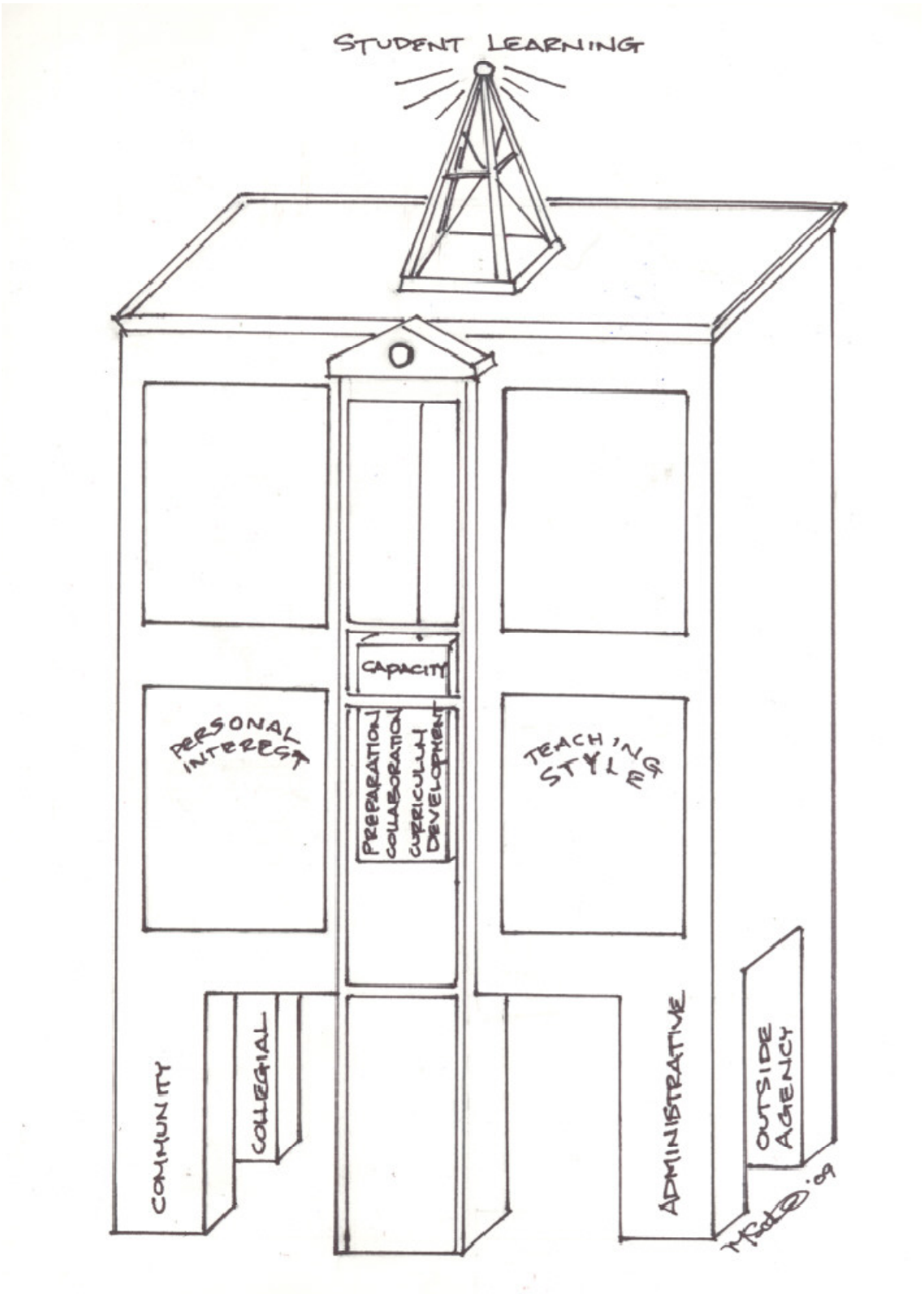
The community responded vigorously. More than 25 articles and letters to the editor about academic freedom and controversial issues were published by the local newspaper between February 8 and April 1, 2009. The recently-appointed district superintendent apologized to staff for his role in not addressing the problem before it went before the school board in after-school meetings at each of the three high schools. When questioned about repercussions for either teacher, the superintendent reassured the staff that "there would be none." He also formed a committee to revamp the district's policy by clarifying vague language. Participants made comments during the study about this controversy, suggesting that community trust and support impacts their ability to teach social studies effectively in the classroom.

The Curriculum Improvement Structure

The curriculum change process is visually represented by a skyscraper in Figure 1. I chose the title The Curriculum Improvement Structure to reflect the phrase "curriculum improvement" that was suggested by one of the participants. Each theme (support, time, motivation, adaptation, and student learning) is represented using various elements of a skyscraper: foundation, walls, windows, furnishings, and beacon.

The next section presents each theme in more detail, beginning with a vignette describing the workload, teaching style, classroom atmosphere, and capacity of each participant. A different participant's vignette is used to introduce each theme and each vignette is followed by an in-depth analysis of one of the themes and related sub-themes.

Figure 1. The curriculum improvement structure



The Foundation of Curriculum Improvement: Support

Vignette: Scott

> We can learn so much from each other. I think the knowledge is there [in the district] but [the district] wants to bring in these experts to tell us how to teach; we all know what we're doing, why don't we use each other. That's one of the reasons I loved teaching overseas. Learning from each other, that's what teaching is all about. Internationally that happens all the time.

This is Scott's fifth year teaching U.S. history and government in the district. Scott spent six years teaching internationally before moving to Montana, for a total of 11 years teaching experience. Scott's international experience involved teaching American citizens in private high schools, mostly in Latin America.

Out of the classroom Scott helps coach Model United Nations. He has served as a consultant to the American Council on Education on the 2011 GED test specifications committee, working on item writing and test review. Scott also plays on a local hockey team; he and his wife have a young son.

Scott is part of an integrated curriculum team. He teaches a combined 11th grade U.S. history and English class. He also teaches a combined 12th grade U.S. government and English class. Students who take Scott's U.S. history class in 11th grade generally take Scott's U.S. government class in 12th grade.

Scott's class schedule is also unique; he teaches on a block schedule, teaching three 90 minute classes per day, alternating days of U.S. history and U.S. government. Working in a team teaching model, Scott says, "students reading novels in English will be talking about the same subject in U.S. history. We just finished *Fools Crow*, so we were talking about Native American and U.S. government interactions."

Scott's classroom has two distinct "sides." One side has lots of student work hung on the walls and a comfortable blue couch where students can often be found relaxing. Motivational and inspiring quotes are also posted throughout the room. This is in stark comparison to the whiteness of the other half of the room which has a few student created posters from the most recent election project and a few motivational posters displayed. The room is expansive when it is open to both halves, but even when a sliding divider is moved in place both halves comfortably seat all of the students. Students sit at tables in groups of 3 to 5 which is helpful to Scott's teaching style because he often engages students in small group discussion.

Scott's teaching style is relaxed, patient, flexible, fast-paced, and rigorous. He gives students a lot of individual attention and treats students with mutual respect in a way that indicates his trust that they analyze and offer solutions for difficult problems. The expectations he sets are high. However, students are all engaged and work hard to keep up. Scott and his team teacher model collaboration for their students and the students follow suit as they help each other on projects.

Scott says he "attempt[s] to engage every student in the lesson." He adds, "I believe every student deserves and should demand my best, and vice versa." Scott prefers to use many primary and secondary sources that "challenge students to think more critically and deeply about history…and challenge[s] their preconceived notions." Scott also enjoys spending time getting to know his students outside of the classroom: "I have found that knowing what students are doing outside of class is of immeasurable benefit to what they accomplish inside the classroom."

Scott's motivation for curriculum change comes from "a desire to utilize the best [teaching] methods [for] students to become engaged, critical thinkers who can handle a multitude of divergent problems." He adds some of these problems "may be unrelated to the subject I teach" but he feels students need to be strong problem solvers regardless of the discipline.

Scott "is always talking about economics" in his classes. He took courses in macro and micro economics at the undergraduate level and feels comfortable teaching basic economics concepts. He likes to take a complicated concept and make it more understandable for his students; he likes to have his students come up with solutions to problems. Scott smiles as he says, "I like to make my students angry in a good way as they get passionate about a topic."

Scott feels he has a "solid, basic understanding of economics concepts and theories like supply and demand, the money supply, the stock market, and the government's role in the economy." Scott adds that he thinks economics fits best in the government curriculum where he believes teachers "should be presenting different economic theories and have students analyze how to solve problems using those various theories."

Analysis: Support

Scott's six years' international experience gives him a distinctive perspective on the important role support plays in curriculum change. All of the other participants have worked in this district their entire careers. Scott's story represents an important component in curriculum change. I will use his story, along with comments and the curriculum change experiences of the other participants, to analyze several aspects of

support. These include: the standards and accountability movement, outside agency support (universities and professional organizations), the community (specifically parental support), collegiality, and finally administrative support at both the district and school levels.

Standards and Accountability Movement

Scott regards "state mandates" as an institutional obstacle to change in his classroom: "It is difficult to be innovative…with state mandates." Generally, non-educators' views of curriculum change "have no bearing" on Scott's motivation to improve curriculum. However, Scott expressed: "if our elected officials, and by extension the electorate, demand that changes be made to the existing curricula then it would spark changes." Scott believes that "non-educators view the teaching profession with some skepticism," noting that he believes this "emanates from a lack of awareness regarding what teachers do on a daily, weekly, and monthly basis." He expressed concern with the standards and accountability movement by adding that non-educators he has spoken with tend to "only see what society focuses on, which in the current environment revolves around performance, or a perceived lack thereof, on standardized test scores." Two participants in addition to Scott commented on their concerns about the value of teaching social studies in the current standards and accountability environment.

Chris is most concerned by what he sees in his own children's experience in a different elementary district in the area. He is animated and demonstrates strong feelings about this subject. He is frustrated that little or no social studies is being taught in his children's classrooms because so much of the focus is on math: "I think we may see kids coming [to the high school] in a few years that don't have a sense of social studies. They

[don't] have an opportunity to develop some of the vocabulary…[and] the ability to perceive and understand the subject." He goes on to add that a "number of teachers [are] concerned that kids are coming in with fewer skills to fully embrace or participate in social studies, or just a lack of interest."

Diane sees the same emphasis on reading and math. She views it as "another obstacle to change" and harmful to students' knowledge of social studies. She goes on to say, "we measure what we treasure" and the apparent lack of interest in social studies education may mean we do not value it. She recently asked a state legislator and the Montana Superintendent of Public Instruction to carry a resolution to the legislature to make social studies a part of the core curriculum. She suggests that if "the free world is going to exist, we're going to have to not do less social studies we're going to have to do more" and she thinks that simply "passing a test" is not the way to accomplish this goal. For Diane: "If [my students] can think critically. If they ask questions that challenge the rules of the road then I think I'm successful. I tell [my students] that the hope of the free world depends on them and I'll know I'm a success if I die and the free world is in intact."

Outside Agencies

Outside agencies lend support to Scott in meaningful ways when they provide "actual material[s] we can use in the classroom. Lessons, like the ones provided [ELMs], give teachers something concrete to work with and use." Chris says, "the best motivator for curriculum change has been through formal and informal collaboration with other educators." He goes on to say that "workshops, [district professional development] opportunities, and seminars have often motivated me to change existing curriculum and create new curriculum." Universities and professional organizations, often in conjunction,

have contributed to participants' knowledge building, curriculum materials library, and curriculum development opportunities.

Chris appreciates "having the time to create or adapt lessons." He is particularly supportive of the Teaching American History grant program and the National Consortium for Teaching Asia which incorporate "the planning time to collaborate informally with other teachers" and have been beneficial in helping him "reflect and improve curriculum." He adds, "of significant note is that these programs offer stipends and very inexpensive credits." Both Scott and Laura appreciate the "cash" and "incentives" offered by the Montana Council for Economic Education. Laura says, "[I'm] treated like royalty. She continues: "it [is] nice to go and actually sit down...have a nice meal [and MCEE] pay[s] for your sub…I love it."

Diane feels, "teacher to teacher conversation proves to be the most valuable" tool in curriculum change. While lectures from scholars are "great at the time…material gets lost in the shuffle" of "beginning of the year preparations." Scott adds: "lectures from professors are beneficial, but I think they have little staying power."

All of the participants suggest ways outside agencies, including universities, and others, such as district professional development and curriculum planners, can provide ongoing support in the curriculum change process. Mark "need[s] ample curriculum material when first starting to teach new material" and prefers it "in both hard copy and electronic" formats, along with "hands-on workshops" for learning about the new materials and curriculum needs. Diane also appreciates having curriculum materials available in electronic format: "a cd travels so effortlessly." She adds, "I go over the material several times, but it is not the same as actually doing it with students" and finds

that “talking through the material with other teachers” is one of the best ways to prepare to teach new curriculum. Chris is specific to economics in his request for “more knowledge about the financial instruments that have contributed to our current economic melt-down.”

Community

Conversations about community support during the research study revolved mainly around the local curriculum controversy described earlier that unexpectedly played out during the study. Letters to the editor of the local paper gave the community discussion over academic freedom a full airing. Many letters offered support, like one signed by over 75 local area residents:

> Because of the No Child Left Behind Act and the deep financial cuts that are depleting public school resources nationwide, teachers have been constrained in their teaching and limited in their opportunities to be creative and experimental, both with respect to content and pedagogy. For that reason, we are joining the many students, parents and teachers who attended Tuesday night’s board meeting to support [this teacher] . We need more teachers like her, not fewer.

Other letters, critical of teachers who “indoctrinate” students were viewed by some teachers as lacking support for teachers. The following is an example:

> Teachers who are contracted by the public school system have never been given and never should be given the “right” or “nonrestrictive freedom” to purposely influence students, indoctrinate or manipulate intellectual material to promote their personally held ideologies…[the district teachers and administrators involved] are now in receivership of the consequences of fracturing this trust.

The American Civil Liberties Union of Montana offered their own opinion: “The board should reconsider its actions, clear [this teacher’s] name, and offer her an apology.”

Diane is directly affected by the negative experiences of her two colleagues who were the subject of this curriculum controversy. Because of the controversy and parents

of her own students voicing concerns, she reports giving careful consideration to how she specifically fit the ELMs into her U.S. history curriculum: “I have a student in my class that’s reporting the number of times [and number of minutes] that I’m not actually on the text and the curriculum. So I’m really self-conscious about staying as close to the curriculum as I possibly can.” Despite her concern about a particular student, Diane feels supported by the community every time a parent or student requests her as a teacher. She says that when she was a middle school teacher it was easier to read the community: “[I] don’t have that same connect in high school.”

Mark says, “I welcome change. If I had time to change, I would change. I would change all the time.” He goes on to say that he is encouraged to make curriculum changes when he feels the support of the community, the school board, his colleagues, and the administration, and when his students are interested. Mark feels non-educators view teaching as “a noble profession,” but adds, “there is a stigma attached that the profession is not sophisticated enough in intellect and pay.” He concludes that non-educators have an “appreciation but not [the] respect which is often given to other professions.” However, when Mark makes change in his classroom, non-educators’ view of the teaching profession is a “non-issue.”

Chris says, “when parents and school boards support my efforts I am encouraged to make functional changes in curriculum.” Chris perceives the standards and accountability movement as a lack of community support and he expresses concern that non-educators do not trust teachers: “I am dismayed that many of the NCLB mandates have not come from educators. I am suspicious of mandates from non-educators. Generally, if I feel I have support and trust I am willing to take on tough topics.”

Parents.

The curriculum controversy highlighted the important role parents play in their children's education. One letter to the editor suggested that: "What seems to have gotten lost in all this debate is the idea that parents should be encouraged to get involved in their kids' education, especially in a public school setting." Diane agrees: "I think it's great that parents are paying attention…I think it's super they're asking their kids questions, because I ask parents to do that when I have a chance to talk to them and they're always welcome to come into my classroom." Diane does think it is unfair for parents to complain "when they've never been in my classroom."

Other participants report few difficulties with parental support. Scott has "never had [a negative response from] parents or community members. I've received supportive comments from parents whose kids love the class." Chris has never had any problems with parents or the community but says, "sometimes I wish I did get more response from parents." Laura is "surprised every year" that she does not have more questions from parents.

Collegiality

Collegial support also presented itself as an important component of change experiences for participants. For Scott, "personal interest is equivalent to professional motivation for me." Working with other teachers helps Scott with motivation. Scott describes the supportive collegial environment while teaching internationally: "the faculty lounge was packed and we were far more collaborative. [We] were more open and willing to share ideas." But, he says: "I don't think the teachers overseas are better or more qualified, but they seem more motivated and want to be there; teachers here are not

excited and kids see it." He goes on to describe his impression of collegial support in his current position: "it seems like it is scary for teachers to collaborate; they don't want others to know what they are doing, they are afraid of being judged."

Collegial support also impacts Mark when he makes curriculum change: "much of how I view change comes from who I'm working with to make this change. Are we motivated together? Are we discouraged together?" Chris appreciates "the good relationship" among "social studies people in [the district]" and adds, "that's not true with all departments."

Diane feels that "working with other teachers means that we have conversation about curricula [and] in this conversation our understanding is enriched." She adds, "I learn so much from other educators" and describes the valuable role the curriculum review process and working with student teachers play in improving curriculum in her classroom: "[student teachers] help me stay on top of new pedagogy, new references, and force me to reflect on what they see me do in the classroom. Student teachers help me define my own teaching style and discover areas that need improvement."

Laura relies on support from colleagues and says, "we used to observe each other…that was revitalizing." She feels a great deal of collegial support from her department chair who makes sure "we have the availability of resources…[the department chair] is really good about ordering what you need and making sure everybody is aware of what we have [available]." She adds that the department chair also provides support by keeping her informed: "[the department chair] types up notes so I know what happened if I miss a department meeting."

Chris thinks “teachers are skeptical of change in teaching practice” but feels discussions that are part of the 5-year curriculum review process help him “find out what’s working and how [teachers] can help each other.” He talks about a program that he was not involved in but has heard about from his colleagues: “teachers are given time to go into other classrooms...to create a dynamic where teachers talk to each other…and the focus is to learn [from each other]. I think it would be a great thing to get us out of our classrooms.”

One participant, responding to a question in the initial interview about how working with other teachers helps make change, comments: “we [referring to a colleague in the school] discovered we were both using Howard Zinn kind of secretly.” During observations and discussions with research participants, all of the participants reveal that they use the controversial author of social studies textbooks in their classrooms but seem reluctant to admit it.

Teachers in this district demonstrated overt support for their colleagues under fire in a letter published in the local paper during the curriculum controversy. More than 125 teachers and supporters, including some of the research participants, signed the letter:

> It began in October, and for nearly five months the debate over academic freedom has continued. Oddly, it has been exhilarating at times, because this is what we can do in a democratic society. We may also agree to disagree over the merits of any particular video.
>
> Unfortunately, a great injustice has also occurred with the public vilification and continued harassment of a person who loves teaching and cares deeply about our earth. We and future generations will have people like [this teacher] to thank, should our planet survive.
>
> With gratitude, we sign in support of a colleague and a friend.

All five participants in the research study comment on the community discussion over controversial issues during the research study, although all but one does so when the audio recorder is turned off.

Administrative

As noted earlier, participants' trusted me with information that it was clear they were not comfortable sharing and I will honor that trust by not identifying any individual participants in this section of the analysis. Administrative support was categorized at two different levels, the school and the district. The participants have positive things to say about administrative support in addition to things they feel administrators at both school and district levels could improve upon.

School Level Administrative Support.

Participants are sometimes positive about their school administrators: "the greatest support comes from administrators seeing what we do every day." Participants appreciate the trust they are given as professionals: "the administration helps me feel supported with respect to change; they give us leeway and trust that we are doing good things." But this trust also leads to negative perceptions of administrative support when feedback is limited or non-existent: "I've never been observed. I don't get any real feedback from colleagues or administration." Another participant adds, "nobody is checking on us, nobody is coming around with a checklist to see what we're teaching…We're professionals [so] they shouldn't, that would be caustic. But we need to collaborate."

Another comment suggests that administrators are not creating opportunities for collaboration by holding teachers accountable to the district employment contract. For example, “lack of a common prep time and lack of opportunity” are obstacles to collaboration. And although the district contract stipulates that teachers’ work day ends at 3:40 p.m. “many colleagues leave the building at 3:10, as soon as they can. I find it frustrating.”

Frustration for participants also revolves around school administrators’ inability to ensure teachers are following the curriculum document: “I think the curriculum document is often neglected. I wonder how often it is taught, if at all?” During the initial interview, a different participant indicates that administrators are “very, understandably, very concerned about being able to justify what I do.” She describes how pointing out specific sections of the curriculum document to the school administrator helps the administrator “justify” what is being taught in the classroom. For example, she asks whether teaching this year’s election cycle in a U.S. history course is appropriate? She points out that: “teaching the U.S. elections, helping kids understand and follow and become discriminating citizens is not in [our U.S. history curriculum] document per se, but it is in the introduction to it” where the district promotes citizenship. She is animated as she demonstrates pointing out parts of the curriculum document to school administrators: “So I can say it is here, here, here.”

One participant mentions a disagreement with a classified employee who made disparaging comments about readings assigned for class. The teacher approached a school administrator about it and was asked “well, have you talked to him?” The

participant responded: “oh, you’re right. I need to go talk to him.” The participant perceived this event as a supportive role by the administrator in solving a problem, even though the administrator was never directly involved.

Another participant asks, “how can a principal evaluate everybody? I mean, they can come in the class and say the kids are controlled, they are on task, but I think we need to create a system that would foster change based on teacher involvement.” A different participant feels, “visionary leadership” is the administrator’s responsibility. He goes on to say that “in the current environment [administrators] are the ones who can move the school and district [forward] in meaningful ways.”

For another participant “leadership at the administrative level” provides the “direction” to “improve curriculum.” He feels one of the most important ways administrators at all levels do this is by providing “time” and “space” for curriculum change. All of the participants feel administrators can provide support at both the school and district levels by creating time for curriculum change. One participant feels time is the most helpful ingredient in improving curriculum: “without time to evaluate curriculum changes, I lack the confidence in delivering it to my students.” Because time is an area that dominates conversations about curriculum change, both in terms of success and as an obstacle, I will address it as a separate theme.

District Level Administrative Support.

District level support, one participant argues, is critical to curriculum change. “I am hip deep…no make that neck deep in curriculum change right now. The district needs to make teacher [development] a top priority by surveying the actual needs of the teachers.” Another participant adds: “professional development sessions that introduce

curriculum changes are always helpful. I may go so far as to say necessary." The same participant also comments on how the district can provide technology to make teachers' lives easier in the change process: "a [compact disc] travels so effortlessly and only the necessary components need to be printed."

One participant expresses frustration over "the adoption of PLATO," a "credit recovery" option for students. He goes on: "not that a lot of kids are doing it, but I think some kids have realized that [they] don't have to put in the effort because [they] can do PLATO." He is concerned that students are "making up a year of failed American history or government in weeks." He believes summer school would be a better option for credit recovery and says, "summer school would be a nice stick…the carrot and the stick to make sure kids knew that they need to put in the effort." He feels district administrators need to provide this support for teachers.

Another area of support that participants view as central to teachers is the curriculum document. One participant expresses concern that "[the curriculum document] does not seem to challenge students to think critically" and adds, "it is often so broad and vague that teachers can find it difficult to know exactly what to teach or conversely, how to include it all." The same participant adds that they would like to see "the curriculum streamlined with clear learning objectives and manageable bits of required information" and feels this would be especially helpful to new teachers: "a first year teacher should be just as comfortable as a seasoned one in implementing the curriculum." Another participant refers to the curriculum document as "the Godly curriculum guide" and feels it keeps her from changing her teaching practice in the classroom: "we have to go from the Revolutionary War to current history, that's crazy."

Participants comment on both enjoyment and frustration about curriculum development as they work with district level administrators on the 5-year curriculum review process to create the curriculum document. One participant says, “it has been really good going through the curriculum review process…to visit with teachers [and] see how they do things.” Participants also find it frustrating: “[district level administrators] always know where they want us to end up so they kind of pick people who will push towards the end that they would like to see. They choose people that they want to be vehicles for their agenda.”

Another participant adds, “I had some frustrating experiences with curriculum [several years ago]…the curriculum office already knew what they wanted to do…by the time we were done I realized we were just there to provide consensus for what they’d already [written]. That was really disappointing.” However, the most recent review process is more positive: “I feel really good about [the curriculum document]…we changed it and built a real consensus with the teachers but the curriculum office and administration wasn’t standing there telling [us] what we could and couldn’t do in the document.” The participant goes on to add “they stood back and essentially sent the message [that] you guys are the professionals…they provided support.”

The Walls of Curriculum Improvement: Time

Vignette: Mark

> I have three preps and five classes and study hall…If I had an additional period devoted to curriculum development, I would do it, but I don’t have that…nobody gets that. Nobody gets an additional prep for curriculum development.

Mark has worked in the school district for seven years and in addition to teaching one regular education U.S. history class for juniors, he also teaches three advanced

placement U.S. history classes and a world issues seminar. Outside of the classroom Mark is a coach. He decides to take on extra duties "based on how enthusiastic I am about the subject…when an extra duty is forced I am often less enthusiastic about adding more to my plate." Until his children were born a few years ago, Mark spent many hours training for Ironman Triathlon competitions and still gets in a daily workout.

Mark's warm, welcoming classroom is often filled with laughter, but is serious if the topic demands. He does not see himself as a good disciplinarian, but for a class right after lunch the students are unusually well-behaved and responsive to his easy-going style. During one class discussion about child labor Mark asks his students: "where do we draw the line for students working to help around the house or to help make ends meet?" His students are drawn into an emotional debate demanding critical thinking; they are so engaged that they hardly seem to notice they have been asked to analyze a problem.

Mark describes his teaching style as "engaging but not overly exciting" and he tries to "apply present events to help students relate to history." He lectures regularly, but often involves his students through class discussion. He tries to keep the "discussion friendly and open" but adds, "I do have high expectations of my students and test them rigorously." He provides regular, positive reinforcement to his students during discussions and it is clear that his students feel comfortable sharing in his classroom.

Mark minored in economics as an undergraduate and has since taken two graduate classes in economics. He recently began work on a Ph.D. in an economics-related field and demonstrates a high-level of competency, confidence, and interest in teaching economics. He is "comfortable teaching basic economics concepts" and is "confident teaching socio-economics," political economics, and economic theories.

Mark feels the current recession is having a significant impact on our students and demonstrates an obvious need in the curriculum. One positive consequence is that our students are more interested in economics than in the past. Two years ago, Mark remembers, students signed a petition and published it in their student newspaper asking to create a stand-alone economics class. Mark supported their request, commenting that "You've got to feed the demand. If the kids want to learn about economics, why not?"

Analysis: Time

Mark points out, "I don't have the time [or] the resources" for curriculum change. Every participant places time at the top of their wish list when it comes to making curriculum change. Laura says: "I wish I had time, more time." Diane adds, "curriculum change requires time, time, and more time." Mark says, "we need more time." Chris says, "the biggest issue is time."

Mark's story represents this important component in curriculum change. I will use his story, along with comments from other participants, to analyze the various elements of time as they affect the curriculum change process: personal commitments and extra school duties, curriculum development, collaboration, capacity, and preparation.

Personal Commitments and Extra School Duties

Mark, like all the participants, has several competing interests for his time. "Many other things take up my time…I am furthering my own education" and he adds, "work on my dissertation" takes time. Family commitments also take Mark's time: "I have two young children." Coaching is another area that requires Mark's time.

Diane perceives her problems with time as partially her own fault: "lack of time is part[ly] my own doing…[I am] too involved." She likes to take on extra duties "that

enrich the curriculum" but adds, "there is always the danger that [it] actually hinders teaching" and "shortchanges" students. Diane works on "balancing" her extra duties, which are usually voluntary, with her "obligations" to her students: "sometimes it just means more weekend time invested in class preparation."

Chris says, "if I have time reserved for curricular change that does not take away from my teaching duties and parenting duties I am much more likely to embrace it," while Laura's added administrative duties this year are having an impact on her ability to change curriculum in the classroom: "I'm barely above water here." Later, she adds, "the challenge is time…[I] have so much to do and not enough time."

Curriculum Development

Mark believes that a "beneficial professional development experience" is one that has "time set aside to review and develop lessons." He goes on to say, "if I have the time, I prefer to create [my own] materials. If I don't have the time, then I need something more like the ELM." Laura would like the opportunity to collaborate more often and for longer periods with teachers who are teaching the same, new curriculum. She says lack of time keeps her from adding economics to her curriculum, but adds, "if [I] have lots of notice, then [I] just work it in."

Chris also appreciates "time to plan lessons." He goes on to describe professional development opportunities sponsored by outside agencies that allow him to create lesson plans that "draw in rich information" through other teachers and professors who are useful resources for adding content. Chris thinks, "it would be nice to have blocks of time before school starts to work on on-going curriculum review."

For Scott “a year” advance notice would be helpful if curriculum changes are requested. Diane thinks “a week before school starts” is a good time to have a “conversation” about curriculum change and adds, “[the new curriculum] is fresh and you also have to have the time to think about where [the new curriculum] links [to the current curriculum].” She warns, “you don’t know what’s not going to work until you’ve tried it” and suggests a year to try out new curriculum in the classroom, paired with regular “conversations” with colleagues to help in the curriculum change process.

Collaboration

Mark feels it is important “to emphasize that we need more time to be open to and listen to ideas from our colleagues.” He adds, “I have no time to talk to anyone else” and the “scheduling of teachers makes it impossible to collaborate and discuss ideas.” During the school day he has almost no time to talk to anyone else because of his current teaching schedule, making it impossible to collaborate or discuss ideas. Time is what most encourages or keeps Mark from collaborating with his colleagues.

Laura loves the opportunity to collaborate with her colleagues and says, “we spent about 15 or 20 minutes just sharing ideas” at the last department meeting, she adds, “it wasn’t planned…It was great.” Laura says usually, “[the department meeting] is at the end of the day…and [I’m] brain dead…just mentally exhausted…and [we] have such a strict agenda in a short period of time…so [collaborating with colleagues at department meetings] doesn’t happen a lot.”

Diane’s many years of middle school experience give her a unique perspective on collaboration time for curriculum change. She says, “what I miss more than anything about middle school is teaming.” Collaborating with colleagues has been particularly

challenging for her this year and she says she has spent almost no time collaborating with colleagues, even though she is piloting a different program in another one of her U.S. history classes. “This year the changes I’ve made are so time consuming I’m just not sure anybody is interested.” However, Diane is not discouraged and adds, “change should always be a process, never an event. It is by definition ongoing, dynamic, and hopefully never finished.”

Although Scott “takes time to collaborate with [his team teacher] every day…one the biggest problems is there is no common prep time. How can [I] collaborate and plan if there is no common prep?” He goes on to say, “at the district level no time is built in for collaboration…[the district] always has specific issues to discuss…we don’t have time to just converse.”

Scott describes how his international experience differed from his current experience. Internationally in weekly department meetings colleagues would ask and discuss “what are we doing this week?” Currently Scott attends monthly department meetings where “administrative stuff” is discussed, but he is concerned that “we just identify a problem and then do nothing to solve the problem.”

For Chris, “time is number one” on the list of both obstacles to curriculum change and ways to encourage curriculum change. He goes on to add that “the English department chair at the time [the block class was created] was very concerned that we had the time to collaborate…we could have used more.” He also adds that “it is really beneficial to see how other teachers present and emphasize different things in their curriculum…it would be nice to create more time where teachers [can get] together to pick each other’s brain about those things.”

Capacity

Mark says that without "time and training…just write [curriculum change] off because I can't do this on my own." He suggests late spring workshops work best with the advanced placement schedule and thinks a refresher course in the fall before school starts is helpful. Mark also feels isolated in his position because he teaches the only advanced placement U.S. history classes in his school. He has only one other advanced placement U.S. history colleague district wide, so he relies on attending national conferences for collaboration and increasing his knowledge.

Scott feels district professional development often "teach[es] us things we already know how to do" while Diane feels the timing of professional development has an impact on her ability to implement new ideas to improve curriculum in her classroom. For Diane, workshops occur and "the next day school starts." She feels "locked in" to what she already knows and has planned." But, she goes on to say, "it is in the conversation [with other teachers] that our understanding is enriched" and later adds, "I find that talking through materials with other teachers is some of the best professional development."

Time and cost keep Chris from taking advantage of professional development opportunities, especially with two young children at home. Time also keeps Laura from participating in professional development for the first time: "this year I couldn't with this job…I'm on a learning curve."

Preparation

Since Mark has been teaching for several years the time he needs to prepare to teach is considerably lower than it was in his first few years of teaching. He notes that "At first it was probably a four to one ratio" of preparation time to classroom teaching

time. But even as a veteran teacher, he says that "with advanced placement classes it's sometimes two and a half hours [of preparation] to one hour" of teaching. It is clear that preparation time has a direct correlation to the quality of Mark's teaching. For the ELMs, in particular, Mark said:

> I don't think I taught the lessons very well. A lot of that has to do with the amount of time I put in. I probably didn't put in more than an hour per lesson [preparing] definitely no more than two…and unfortunately it was more of a frantic notion of putting something together…but quality education was probably missing on my part. I didn't feel comfortable in my own preparation.

Diane feels, "curriculum change requires time, time, and more time." She adds that another program she is piloting this year "requires so much extra preparation." However, she says new curriculum materials usually take more time to prepare than the ELMs did and she adds, "I think if I were 23 years old and this was my first year teaching, [the linear, step by step format of the ELMs] would be helpful."

Chris agrees: "when you team teach, like I do, you have to devote a lot of time to planning" but he feels the added planning time required of a team teacher is valuable: "the planning process opens up a lot of possibilities that I didn't know about. You learn from that teacher's style." On the other hand, he says, "not having the time to prepare" is an obstacle to changing curriculum in his classrooms. He goes on to add "one of the unique challenges of teach[ing] is that [I] prepare but [I] don't really get paid for that so it is hard at times to put enough focus on preparation."

Scott adds, "I work every day with my [team teachers] to create meaningful, relevant, and rigorous learning experiences for my students…We never teach the same lesson the same way and even during the process of teaching we readjust." Laura spent about three hours preparing to teach each of the ELMs she implemented in her classroom

and says she usually takes that much time preparing lessons, whether they are new to her or she has been teaching them for a long time. She "always does the readings and goes through the assignments" every time she teaches a lesson. She says, "I redo them so I don't forget."

The Windows of Curriculum Improvement: Motivation

Vignette: Laura

"I never want to become stagnant. I'm always trying to figure out a better way to teach." Laura says she is always reading "new books" and adds, "it's daunting to keep up" but she does not mind because of her "interest" in history.

Laura is in her eleventh year teaching in the district. Her duties changed significantly this year. She spends her mornings teaching two U.S. history classes and her afternoons as an administrative intern responding to attendance and student discipline issues. Laura's administrative duties extend outside of the classroom and she says the administrative team divides supervision of "all the extracurricular activities" among the four school administrators. She also coaches Model United Nations and her family includes two young children.

Laura is comfortable in front of her class and shares U.S. history content in a story-like format, often relating personal stories from her upbringing. She adds: "I love [storytelling] and I want to do more of that with history." Laura's students enjoy her stories and her classroom is often filled with laughter. Laura spends time at the beginning of each class period asking students about extra-curricular activities, after-school jobs, and other hobbies or interests.

Laura moves quickly in her lessons, using PowerPoint to keep her lectures organized. In only 50 minutes she gives a brief lecture, students read independently and participate in small group discussions, and she ends each lesson with a whole group discussion. Laura's quick pace allows very little time for student interaction during classroom discussions, but she "holds students accountable" for essay questions that she gives them daily as homework and expects formal, written responses at the beginning of the next class meeting.

Laura says she asks herself "twenty years from now, what is it that [students] have to know?" She also adds, "I've never taught [history] the same way or taught the same thing." She relies on current issues to help her decide on how to make curriculum change and says she tends to "focus more on twentieth century history." Laura often asks her students "how can we learn from this?" With her stories, Laura says, "I try to humanize history" for students and "figure out how we can progress…how we can do things differently or better" as a society. She relies on the textbook for background information. She says, "I really like talking to" a colleague in the school, however, she expresses concern that his students do not use textbooks: "that would be unconscionable for me…they have to have background information."

Laura's formal background in economics includes one graduate and five undergraduate courses. Her strength in teaching economics, she believes, is based on her previous "mistakes" in teaching economics. She goes on to describe her first year teaching government as an example. Laura had "no idea" she had to teach economics her first year as a government teacher. The teacher she replaced "didn't leave anything" and she was "scrambling." She adds: "Thank goodness I didn't have my [first] child yet

because it would have been crazy. I didn't have economics books or anything and never even thought about it." In April that first year another teacher asked her: "what are you doing for economics?" Laura says she looked at the other teacher "like she had four heads." Laura says she ended up "taking out her stuff from college" and she "met with a consultant, a stockbroker." She adds, "he was very practical and he gave me some good advice."

Analysis: Motivation

All of the participants commented on their passion and enthusiasm for history. What struck me as most amazing is the participants' ability to inspire similar levels of enthusiasm in their students. Laura's story represents an important theme in curriculum change, motivation. I will use her story to analyze elements that are directly affected by teachers' motivation during the curriculum change process: curriculum development, collaboration, and capacity.

Curriculum Development

Laura says, "we're constantly evolving" and gets excited about "sharing new ideas" with her colleagues. She says, "I've never taught [history] the same way" and adds, "I think it makes students better." She relies on her own interest to "humanize history" for her students through the stories she shares in class and continues to "do more storytelling" in her curriculum development and delivery.

Diane laughs as she says, "I rely a lot on my passion for the subject. I rely on the fact that this is what I do for leisure…It's fun for me." She goes on to say, "I particularly enjoy curriculum work…I truly love to develop new teaching units…how we bring [new information] to students is really exciting – but then sometimes I enjoy ironing too."

Scott "thrives" on change and says, "when you gave me the lessons I [thought] this is so cool, I can't wait to teach this." He adds, "I told the students you guys aren't going to believe the lessons I've come across and I can't wait to talk about some of these issues."

Collaboration

Laura says working with other teachers is "like a burst of energy." She adds, "[I'll] be in such a rut and I'll talk to [another teacher] and we talk about stuff we're reading" and "banter back and forth [about what we're teaching and] he'll bring in new concepts and I'll think, oh, I hadn't thought of that and vice versa." She goes on to say, "we work really good together because we have common interests…but I don't see my other colleagues as much. That's the problem with teaching, it's almost like you're an independent contractor."

Scott notes that "sharing makes us uncomfortable" but also expresses strong feelings about the benefits of team teaching. Opportunities to work with other teachers both internationally and in his current team teaching duties help him improve as a teacher: "I have grown more in the last four years that at any time in my career and I believe it is all related to the ability to work with fellow teachers who share the same passion and drive for excellence in the classroom."

Mark says, "it is nice to bounce ideas and concepts off one another. Change is easier to swallow, whether it is positive or not, when multiple parties have to endure and change together." However, Mark emphatically describes his colleagues as obstacles to change in the classroom: "Faculty, faculty, faculty!" Mark views teaching as a team effort, but does not sense a lot of enthusiasm from his colleagues. Instead he feels

negativity and lack of commitment across the board: “colleagues are selfish with their materials and ideas and often make excuses about why they are unable or unavailable to collaborate.”

Working with other teachers also impacts Chris’s ability to improve curriculum in his classroom. He says, “working with other teachers either informally (seminars) or formally (team teaching) is critical to improving my ability to be an effective teacher. When working with one or more teachers in a workshop or seminar it allows me to see how other teachers present, teach, and assess shared concepts.”

Diane says, “the teacher to teacher conversation usually proves to be the most valuable” and adds, “sitting on the social studies curriculum review committee has been like manna from heaven. I sit with other U.S. history teachers and we talk history for hours.” She goes on to say, “conversations like these keep the subject alive for me and ultimately for my students, I hope.”

Capacity

Laura excitedly describes a long list of classes she has taken and ones she wants to take and adds, “I’m always trying to take new classes.” She says, “as history teachers we think everything is important” but for her “[the classes] are enjoyable…it’s not work…it’s fun.” Mark agrees and adds, “interest is the only reason I participate in professional development.” Mark also feels that “interest is underrated” by professional development organizers.

Scott believes most teachers who seek out professional development opportunities on their own time do so because of their own interest. He thinks programs like the Teaching American History grant are “preaching to the choir” and goes on to add “people

are already doing these kinds of things." Instead, he asks, "how do [we] bring in people that aren't? I think the reason people aren't doing it is because the interest isn't necessarily there."

Even with 23 years teaching in the district Diane often attends professional development workshops and when asked about what motivates her to make curriculum change she says, "I figure if I'm bored my students must be bored" and, she adds later "I'm never completely satisfied with results."

The Furnishings of Curriculum Improvement: Adaptation

Vignette: Diane

> I think curriculum change for the sake of change is dangerous. [C]urriculum improvement [happens when] you notice that something is lacking or there is an area in which kids aren't grasping certain concepts or there seem to be holes in what they know and understand…I think that is a signal that you need to look at the curriculum. So, I'm not all about change, but I am all about better.

Diane is in her 23rd year of teaching in the district. This is her fourth year teaching at the high school level; previously she taught eighth grade U.S. history and language arts at the middle school level. Her current teaching duties include three periods of U.S. history and three periods of world geography which she teaches in 90 minute blocks.

Diane is very involved in activities at the school, district, and state levels. She coaches Model United Nations, is a member of the school's leadership committee, facilitates a "critical friends group" and serves on an advisory committee as part of a smaller learning communities grant. At the district level Diane serves in a leadership role in the local education association and this year she is helping with curriculum development by piloting new materials and participating in the district's social studies

curriculum review process. At the state level Diane is an officer in the state social studies organization and regularly presents at the annual Montana Education Association Educators' Conference. Outside of her professional duties Diane has three grown children and two young grandchildren; her husband also teaches in the district.

Diane's teaching style is enthusiastic and her passion for history is obvious. She brings a lot of energy to the classroom. She has a clearly established daily routine, which includes a short video clip, usually from BBC World News, and a discussion of local, state, national, and international current events. Her routine is consistent and familiar to her students and she always has the plan for the day written on the whiteboard.

Diane also uses "essential questions" as a regular part of her classroom routine. Regardless of the curriculum materials she is using to convey concepts, she provides essential questions in a graphic organizer that students are responsible for responding to on a daily basis. She uses these to clarify her expectations about what students should know after any particular lesson.

Diane is comfortable with cooperative learning activities as well as teacher directed learning and provides a variety of learning activities in a 90 minute class period. She works patiently with students, calling on some that seem unwilling to participate, and waits non-judgmentally for students to respond. She teaches and re-teaches, constantly checking for student understanding by asking her students analytical questions throughout the class period.

Diane describes her style: "[It] is dictated by my passion for the story [of history] but also by my love for our democratic values and the need to preserve them." She goes

on to say, “students must take what they learn and apply it to their world, hopefully making it a better place.”

Diane’s classroom is inviting and even though it is first thing in the morning, her students respond to her enthusiasm. Diane describes herself as “over the top” and tells her students: “we don’t do anything that isn’t fun, but I decide what’s fun.” She adds, “[my students are] willing to come along with me because they know I believe. I always tell them it’s okay if they don’t [believe], because I’ve got enough enthusiasm for all of us until they get there.”

Diane perceives her four undergraduate classes in economics as insufficient and this leads to a lack of confidence in teaching economics content in her classroom. She has increased her economics knowledge through professional development workshops provided by the district and the annual Montana Education Association Educator’s conference.

While Diane does not feel she has any particular strength in teaching economics, she is confident in her math, analytic, and theoretical abilities. She adds: “I think my strength in teaching economics is my same strength in teaching anything. I’m willing to do what I need to do to understand it myself.” She goes on to say, “I never do anything that I don’t believe in and am not enthusiastic about. I don’t know that I have any particular strength that would make me better at economics than anything else.”

Analysis: Adaptation

Adaptation of curriculum is an essential part of the curriculum change process. Teachers are given or find curriculum materials to use in their classrooms, but teachers have to find a way to fit those materials into their teaching style and the district’s

curriculum document. Integrating curriculum materials across content areas is one way two participants adapt curriculum on a daily basis. Diane does not work with a team teacher, but her story represents an important element of curriculum change and will be used to analyze the individual parts of adaptation in more detail.

Teaching Style

All of the participants use primary sources regularly in their classroom which requires them to adapt curriculum materials to their teaching style. Diane feels that "sometimes areas need enrichment" and adds, "we do not have adequate primary sources given to us." She says, "the text does not do a very good job at presenting all of the voices of any era, so I provide them by using diaries, photos, etc."

Scott agrees and feels working with primary sources "necessitates moving away from the textbook." He adds, "the curriculum does not always adequately challenge students to reach beyond a basic understanding of our past," requiring him to adapt the curriculum to his teaching style. He adds, "[students] often reach or surpass our expectations when we expose them to higher order thinking that demands as much of teachers as students [and] it keeps me more excited and invigorated as a teacher." Mark believes curriculum materials that can be "altered" to "fit a teacher's classroom style and schedule" are most beneficial.

Interpretation of the Prescribed Curriculum

Diane notes that interpretation of a prescribed curriculum can be difficult: "so often we miss important details in new curriculum." She goes on to suggest a way to help with this problem: "sharing the implementation would provide an extra set of eyes." Using another history program she is currently piloting as an example she says, "part of

the problem is that the suggested activities frequently seem age-inappropriate. This is a case when a colleague's input would be valuable."

One way Diane adapts her curriculum is by bringing several elements together. Current events are a regular part of her daily routine. After teaching the ELM on American Indian poverty she creates a relevant learning experience for her students by bringing together concepts from U.S. history, economics, and current events, inlcuding Montana examples. She creates an essay for her end-of-unit assessment over the Great Depression and the New Deal. The question forces her students to compare what they learned about the Great Depression and the New Deal programs with what they learned about the cycle of poverty. Next she asks students to recommend ways President Obama's economic stimulus package can alleviate the cycle of poverty today on the Rocky Boy reservation of the Chippewa-Cree tribe in north central Montana.

All the participants used examples or materials not included in the ELMs to enrich the curriculum for their students. Diane used graphs from economics textbooks to demonstrate the supply and demand curve. She also used "the gray dress example" from her college economics class to explain socialism and socialisms' effect on supply and demand. Scott used the Big Mac Index to explain purchasing power parity and to help students understand "what a dollar can buy you in China." Mark and Scott both used iPods as examples, in place of the wheat example provided in the ELMs, because both felt iPods were more relevant to students than wheat. Chris created additional visuals to explain the poverty cycle and to demonstrate the cycle of wealth. Laura showed her students a video of *The Lorax* rather than reading the book.

Early in my research Scott suggested photos of Montana reservations would be beneficial in his students' visual understanding of American Indian poverty. Later, Diane did just that, without collaborating with Scott. Diane taught the same lesson and she used a PowerPoint presentation with photographs that she found on the internet of the Rocky Boy reservation (Chippewa-Cree tribe) and the Flathead Indian reservation (Salish, Kootenai, and Pend d'Oreilles tribes).

Curriculum Integration

Chris believes that "working with other teachers is key" but feels it is "hard at the high school [level] because we get so focused on our little piece of the pie." He also believes more "emphasis" has been put on "teaming" and "smaller learning communities" as a result of a district-wide grant. He adds that the grant seems to be pushing all of the district's high schools toward the middle school model of curriculum integration. Chris tries to "teach concepts across curriculums" and thinks it is "more relevant to the student," but he seems frustrated as he says, "that is the way all schools used to be…and [we] went away from that and now we're trying to re-create that."

Laura believes multiple disciplines should be taught together and economics provides a good opportunity to integrate math and social studies. However, she says, "I'm not going to teach algebra concepts." She laughs as she adds, "I would rather go put my head in the toilet and flush it than do that [and] the students would be better off. So I know I'm not going to [teach algebra]…but that doesn't mean I'm not teaching something about math."

The Beacon of Curriculum Improvement: Student Learning

Vignette: Chris

> I saw a high level of interest from a number of kids that I usually don't get that from. I was very pleased. I think the students really received [the ELMs] well. In fact, I had one comment which hurt my feelings a little bit: that was the best lecture you ever did.

Chris is in his sixteenth year teaching in the district. He teaches two periods of sociology/criminology and one period of a specialized sociology class. In his specialized class, Chris works with high school students who teach elementary students about the effects of alcohol on the developing brain. Additionally, he team teaches two periods of U.S. history with an 11th grade English teacher.

Out of the classroom Chris coaches cross-country and track. This year he serves as social studies department chair for his school and is heavily involved in the curriculum review process that occurs every five years. Chris also has two young sons and his wife is an educator at an elementary school in the area, but not in the same district.

Chris teaches in two different classrooms. The classroom atmospheres are complete opposites. One room, used regularly by his team teacher, is dark, busy, disorganized, unkempt, and the furnishings are broken and outdated. Chris uses his own, smaller classroom when the block class is divided, but whenever he needs to teach the entire group, he uses his team teacher's classroom. Even though his team teacher's classroom is larger than his own, the 45 students in the class are crammed into the space. A strangely dressed mannequin looks out over the classroom from one corner, while a full-size cardboard cutout of James Dean towers over students from the top of a cabinet in another corner.

The empty, white walls of Chris's own classroom create a different atmosphere and it is difficult to tell if students behave more appropriately in Chris's classroom because they are less cramped or they are responding to Chris's individual teaching style. Chris is clearly more comfortable in his own space and spends far less time managing student behavior. Only 19 students are present in the divided class. Students sit at tables with 3 to 4 other students of their own choosing. The students obviously prefer to segregate themselves by gender. One table seats four females, while the rest of the class is made up of 15 males. It is clearly dominated by male students.

Chris begins most classes with a reading. Often, the local newspaper is placed on each student's desk and students are expected to find relevant current events to share with the rest of the class. Students also respond to the daily reading in a journal. Chris uses "overriding questions" to guide each lesson and at the end of each lesson uses the overriding question as an informal check for student understanding. Students are also responsible for formal, written responses to the overriding question.

Chris's teaching style relies on lectures and he uses lengthy, detailed outlines to help students follow along. Chris includes primary sources, as well as local, relevant examples to explain people, places, events, and terms as he lectures: "I want to cover the curriculum [and] I try [to relate] things to what is going on today." He expresses frustration with a "mile-wide, inch-deep curriculum" and says his teaching style is affected by conflicting mandates: "you must cover this curriculum with fidelity…but you must also encourage interaction and reasoning." He says he does not have "the time necessary to go into depth."

Chris took three undergraduate courses in economics and feels he teaches economics from a historical point of view. He says that "economics is constantly a driving force" in his classroom and he tends to teach U.S. history content from political and economic viewpoints and less from a social viewpoint. Chris says that he has not participated in economics related professional development because "until recently it was not a high priority." For Chris, the interest is not there and he says, "if I had opportunities to go to workshops, [I] would tend to focus on history or criminology, rather than economics." But he adds, "I think recent events may indicate that we have failed to teach kids…specific skills on how to manage their money…then again, our age group isn't doing very well either."

Analysis: Student Learning

Ultimately the goal of all curriculum change is enhanced student learning. Chris's story represents a key element in increased student learning during the curriculum change process: student interest. I will use Chris's story, along with comments from other participants, to analyze student interest. Additionally, in asking participants to implement a newly-released economics curriculum (ELMs) in their classrooms, I was able to observe student responses to the ELMs. These, along with participants' comments, reveal several strengths and areas for improvement in the ELMs.

Student Interest

Chris relies on "student interest…as much as [he] can" to determine which areas of the curriculum need changing. He likes to "draw connections from historical [events] to current day situations" in order to make learning relevant for his students. Chris also believes integrating learning across content areas makes learning "more relevant to the

student." Laura finds "storytelling" helps her "deliver information that's accessible [to] students and interesting" for students.

Student input is an important element in the change process for Scott: "lessons where students are most involved are successful. They have great ideas that I never thought of. In education, student opinion is often neglected by Ph.D.s. No one asks students." Diane describes her own experience as a student and feels it has an impact on how she teaches: "the classes I was drawn to were classes where teachers made it interesting. So I enjoyed it."

Mark talks about the petition his students signed requesting more economics and says, "there's a demand from the students, there should be a greater demand from the parents. I don't know why there isn't." Because of the student demand Mark says he will teach some of the ELMs to his advanced placement students "who didn't get to experience [them] when [he] has free time after the AP exam."

The Economic Learning Modules

Participants gravitated to the descriptive ELMs, such as Module 15, The Economics of Poverty: American Indian Reservations in Montana and not to the conceptual ELMs, such as Module 7, Supply: Doing Well by Doing Good-Firm Behavior and Supply. Participants integrated the ELMs into the U.S. history curriculum and the descriptive ELMs added to the "story" of U.S. history. The conceptual ELMs may be more easily integrated into the U.S. government curriculum.

All the participants chose to use Module 15, , in their classrooms for this study. This provides an opportunity to see how several teachers interpret the prescribed ELM curriculum, how different teachers adapt the module to their own teaching style, and how

students respond to the module across a variety of classrooms. I am able to identify strengths and areas of improvement for the ELMs from the participants' experiences in the classroom. Table 6 shows which modules each participant taught in their classrooms. As noted previously, two participants (Chris and Scott) were only able to teach two modules.

Integrating the ELMs in the U.S. History Curriculum.

Participants' feelings were mixed on the usefulness of the ELMs in the U.S. history curriculum. While all of the participants believe teaching economics is essential throughout the social studies curriculum, Scott feels the ELMs are better placed in U.S. government. Scott is the only participant in the study who also currently teaches U.S. government and the linear nature of the ELMs, each one builds upon the previous ones, impacted his opinion.

Table 6. Economic Learning Modules Taught by Participants

Participant/ ELM	**Chris**	**Diane**	**Scott**	**Mark**	**Laura**
Module 5 Incentives Matter: Opportunity Cost Revisited					✓
Module 7 Supply: Doing Well by Doing Good-Firm Behavior and Supply		✓			
Module 8 Consumer Choice and Demand: Higher Price		✓			
Module 10 The Minimum Wage: Supply and Demand Analysis				✓	
Module 11 China and Montana: The Economic Connection			✓	✓	
Module 13 Property Rights: This Land is Whose Land?,					✓
Module 15 The Economics of Poverty: American Indian Reservations in Montana	✓	✓	✓	✓	✓
Module 16 The Role of Business in the Economy: Markets and Commerce	✓				

Laura usually teaches U.S. government, but with her extra duties this year she is limited to teaching two classes of U.S. history. She initially agreed with Scott that the ELMs fit best in the government curriculum and would not integrate well into the U.S. history curriculum. After looking at them more closely and teaching a few in her U.S. history classes she feels they integrate well into any social studies curriculum: "all of them fit perfectly…you could make almost every single one work; [fitting the lessons into the U.S. history curriculum] was never a problem." She adds, "all of [the lessons] that I looked at were completely relevant."

Diane feels the ELMs fit into the U.S. history curriculum but voices concern: "am I clever enough to make the fit seamless?" In the future, she plans to incorporate an "economics strand" into her U.S. history curriculum that would allow her to "start earlier and use [the ELMs] through the year" so that students can "get used to using that [the] language." She goes on to say, "[students] need to understand that economics is not separate from what's happening in the world."

Mark also feels that "[the ELMs] work nice when you are trying to pair current issues with what you are learning in the past." For example, he paired the Native American poverty lesson with the Great Depression: "we talked about poverty in the Great Depression and we paired it with poverty in Montana, which I thought worked phenomenally well."

Chris says, "we need to do a better job of infusing more specific economic instruction all the way down to middle school and elementary." Even so, Chris was initially hesitant about integrating the modules into U.S. history, but after teaching two of the modules he feels they integrated well. He adds, "I think [economics] needs to be

integrated [in U.S. history] and the textbooks don't go into depth." He feels the ELMs are "very doable" and says, "I think it really helps provide students with more knowledge about economic issues." He goes on to say that he knows economics plays "a dominant role in history but I've never felt like I've done a great job teaching it. I think [the ELMs] are a really nice tool."

Student Response to ELMs.

Chris is "very pleased" with his students' response to the ELMs and adds, "I think the students received [the ELMs] very well." He says, "I saw a high level of interest from a number of kids that I usually don't get that from." Chris feels the ELMs "are very helpful." Students in his class do respond well to the lessons. At the end of teaching module 16 (Role of Business), one student comments: "This is like probably the best lesson you've ever given" and Chris responds, "Really? We need more activities, huh?" Many students in the class respond in agreement. Working with the ELMs and getting the positive response from his students may be the catalyst for Chris to include more student-centered, hands-on learning activities in his classroom. In the final interview, Chris comments that the lessons are "real" and include hands-on activities. He feels this is why his students responded so well to the ELMs.

Mark believes he gets "more excited about economics than his students" but feels his students "were very engaged" with the module on minimum wage: "Many of them have part-time jobs, they're influenced by minimum wage, they like the potential of making more but they have to see the problems with it as well." Mark finds his students' interest in this lesson "rewarding," but feels that his students were less engaged with the other two ELMs he taught, modules 11 (China) and 15 (Poverty).

Diane feels her students responded more favorably to modules 8 (Demand) and 15 (Poverty) than module 7 (Supply) because it was the first module she taught. She says that "it just felt stilted" and goes on to say, "with all three ELMs I have found that the second time through was markedly smoother, fit within the allotted time frame, and seemed engaging. While this does not surprise me, I wish there was a way to not shortchange the class that hears it first." But, she adds, "I don't think they necessarily saw [the ELMs] as something just dumped on top [of the U.S. history curriculum]." She chose module 15 (Poverty) "because it has a story with it, a real life story" and adds, "I think that is more interesting to them." Later, she says, "I think they were much more interested in 15" and says, "I want to figure out how to make [the lessons] more personal to them with the other [modules]."

Scott says, "I think the Native American one stirred a lot more discussion and debate than the China one, and I don't think it's because one was superior to the other. I think it's because our students have been studying Native American issues for weeks."

Laura polled her students the day after she taught each ELM and says the students thought "they were nice, a good break" from Laura's regular classroom lecture routine. She also thinks the students enjoyed the opportunity to use "common sense" to analyze problems and says, "I thought that was really positive." Her students feel "it was harder to understand" than historical information, but they add "it makes sense." Laura goes on to say, "I was actually worried [they would not like it] but they loved it."

ELM Strengths.

Overall, the participants feel the ELMs are a valuable tool in teaching economics concepts to students. Participants particularly appreciate the variety of student-centered

activities that engage students' interest and the data specific to Montana that helps create a local, relevant connection to economics for students.

All of the participants felt module 15 (Poverty) fit well in the U.S. history curriculum. Scott feels that "[module 15] does a nice job of helping kids understand why Native Americans are in the situation they are in." Chris agrees and adds, "[module 15] gave [students] a better understanding of why some people are in poverty today, not just Native Americans." Diane says, "I talked to two people who used [module 15] and they liked it" and adds, "I thought that I could tie [module 15] into the specifics of our curriculum more easily."

Chris finds the ELMs "very helpful" and goes on to say, "it would be a fun project [to] find a connection and link [the ELMs] to critical economic times in American history." He thinks module 16 (Role of Business) "had a great activity" which engaged student interest. Prior to teaching the lesson, Chris said he felt the lesson was "low-level" relative to his students' abilities, but changed his mind after positive feedback from his students.

For Chris, the ELMs are "really logical…[they show you] step one, two, three, four" making it "really easy to follow along." He says he has spent "10 hours" gathering resources for units that he has created in the past and he feels the ELMs offer a helpful advantage: "it's really nice that all the resources are there [in the ELMs] and you can just tweak it a little bit."

Chris thinks the module on Native American poverty "did a really nice job of describing poverty and what leads to poverty." He goes on to say, "I think [the module] gave everybody a lot better understanding of why some people are in poverty today, not

just Native Americans on reservations. I thought that one really fit in nicely with the curriculum." He says he "wasn't sure about" the module on the role of business, but after teaching it he feels it did a good job of "stating the appropriate reasons for a market based system and capitalism." He adds, "I thought that was a nice way to come back after beating up on industry so much in the Progressive era."

Chris plans to teach the two modules he taught in his classes again and hopes to choose "a couple more" to "blend into his curriculum." He also says he will recommend the lessons to his colleagues: "I would definitely encourage other teachers to take a look through [the ELMs] and find what they feel they could use." He feels the modules help "create background about economics." As a result, historical events make "more sense for students."

Scott says, "I think any lesson that gets [students] to ask questions is a good lesson" and feels that "students had a lot of questions" with both modules he taught. Scott uses module 11 (China) while teaching imperialism in the late 19th and early 20th centuries. He says, "[what] is great in the lesson is that it illuminates the interdependence of the American economy, the Montana economy, and the Chinese economy as a comparison to the imperialistic impulse which was not to integrate, it was to dominate." Scott says, "I often try to draw [lessons] into the modern context because the more kids can connect the world they live in [now] with past events the more they understand the past and the present."

Scott has already taught the China module in his government classes and plans to use part of module 15 (Poverty) in his government classes. He says, "I'm not going to use the [whole] poverty lesson because we're not [focused on] Native American issues, but I

thought [module 15] did an awesome job of talking about skill sets." He goes on to say, "students need to know that the reason why low wage jobs are [low wage] is because it's a really low skill set. [Students] need to have higher skill sets to earn higher wages." For Scott, the lesson presents an important lesson for students who will soon graduate and are deciding whether to enter the workforce or higher education.

Scott says he will recommend the modules to some of his colleagues and not others: "I don't think some of them would use it. I think other [colleagues] would [say] oh, that's really cool." He expresses concern that some colleagues "would not go outside of the lesson itself to find and bring information in" to the lesson to make the lesson "better." He adds, "other [colleagues would say] I just don't have the time, covering all of this other stuff." He goes on to say, "a lot of times teachers are set in their ways…and they're just not going to do new stuff, whereas other teachers would [say] I want to do that."

Diane made notes about what works and what does not work well for her with the ELMs. She regularly makes notes to herself about lessons as an organizational strategy. She made minimal changes to the first module she taught, module 7 (Supply), because, she says, "I was trying to be true to the ELM and it felt very uncomfortable." She also says, "I prefer doing things I feel really comfortable doing" but adds she is "considering…starting earlier and using [the modules] throughout the year [as] an economics strand" in the U.S. history curriculum so that she can have a "daily conversation" with students about economics.

Diane feels the opportunity cost module, which she did not teach but plans to in the future, provides "something [students] can grasp easily and apply to their lives daily,

like where they are going to go for lunch." Diane feels that module 15 (Poverty) "was a nice connection" to what is expected of her for inclusion in her "*Indian Education for All* report." Also, she usually spends more time preparing new curriculum for delivery in her classroom, but says the "step 1 do this, step 2 do that, step three do that" format of the ELMs is "helpful" and took her less time for preparation.

Diane says she will recommend the modules to her colleagues because, she says, "I think it's important to have this language." She adds, "anybody who's watched a single news program in the last six months knows this is language we need to understand."

Laura appreciates that the ELMs "are short and sweet" and says she has already recommended some of the modules to her colleagues. Mark feels the minimum wage lesson is rewarding because it allows him to address a topic "from a different angle" in a way that is significant to students. Both Mark and Laura plan to continue teaching more modules this spring and integrating modules into their U.S. history curriculums in the future. Mark is hesitant about recommending the lessons to his colleagues, but says, "I will recommend the lessons to my colleagues if they are updated." He feels some of the data is "outdated already."

ELM Areas for Improvement.

Participants note a few areas where the ELMs could use improvement. While many of the comments from the participants are minor and easily fixed, one major concern arose: how will ELM data be regularly updated and who will do the work it will require?

Chris would like to see module 16 (Role of Business) updated to "focus a little bit more on the realities of market failures" but adds, "it's hard to update those because

things change so much." Mark echoes this concern. About module 11 (China), in particular, he says, "I like the subject however I didn't like the lesson itself. The reason I didn't like the lesson is it has a lot of errors, it's not updated." He acknowledges that accurate Chinese data is difficult to get: "anytime you're working with Chinese data it is so cooked and skewed…about 70% of the data coming out of China is reliable…but you have to go on what the Chinese government is telling you."

Mark and Scott both comment about the wheat example in module 11 (China). Mark notes that kids "draw upon things familiar to them, like iPods…not many know about wheat." He adds, "in 2002 we had three kids with iPods, by 2008 we had 15 and that's two-thirds of the class and now I have at least two-thirds of the class paying attention…when you apply things that are applicable to their lives, then they're paying attention." Both Mark and Scott used iPods as examples to explain concepts in their classes, rather than using the examples provided in the module.

Scott says, "I didn't think the lesson about babysitting worked very well. I don't think it was very clear." Scott used the Big Mac Index to explain purchasing power parity to students instead and adds, "I thought the Big Mac Index was great. I thought it did a much better job explaining [the concept]. The kids all know what a Big Mac is." Scott also expresses concern about grade-level appropriateness: "Sometimes the lessons are a little bit over the heads of high school students and sometimes they are dumbed down." He goes on to say, "definitions of terms are just like breathing to [University professors], they know implicitly what they mean and so they shoot over the heads or under of the audience" they are targeting.

All of the participants adapted the assessments in the modules. Chris says, “I had to adjust it to the current economic situation.” Mark, Scott, and Diane also indicate concern about the multiple choice assessments for the modules. Mark feels one of the multiple choice questions about “average or median [in module 15] was incorrect.” Diane worked with Scott on multiple choice questions for modules 7 and 8; ultimately both of them concluded some of the questions in the multiple choice assessment were oddly worded and easy to misunderstand. Mark also feels the assessment questions in module 15 (Poverty) are “elementary” for high school students.

Only Chris liked the visuals. He says, “I thought the visuals were excellent” and adds, “I would like to see more visuals in [module 15].” Mark would also like to see more visuals. He agrees with Diane and Scott that photos of Montana reservations would be particularly helpful for module 15 (Poverty) so students who “have never been on a reservation” can see what poverty looks like and “get background information.” Mark would also bring in “supplemental articles” to help build background information.

Scott feels, “some of the visuals were pretty basic.” But adds, “I used some of them because I thought they worked well but some of them seemed really middle school-ish, almost cartoon-ish.” He says, “high school students see right through that and think this is a silly visual - I’m not a third grader. [High school students] want complexity.” However, he is concerned that “the supply/demand curve is too complex.”

Diane is frustrated by the inability to put the ELM data files into her Power Point presentations because they are .pdf files. She is unable to cut and paste information or integrate the visuals directly into her usual method of teaching and organization. Diane, Mark, and Laura all regularly use Power Point in their teaching.

Summary

For this study of teachers' curriculum change experiences five high school teachers implemented an economics curriculum in their U.S. history classrooms for the first time. These teachers represent a cross-section of experience, knowledge, teaching styles, and personalities within three high schools and one school district located in western Montana. Through observations, pre and post interviews, electronic journals, and document analysis it became apparent that each participant trusted me with an intimate portrait of their classrooms. It would be difficult, if not impossible, for a researcher to gain open and honest access to teachers' thoughts, style, habits, and classroom atmosphere if they do not already have a long-established working relationship with the teachers.

Two unexpected conditions emerged during the research process, adding unanticipated complexity to the teachers' change experiences. A local curriculum controversy added increased urgency to teachers' need for community and administrative support, while an economic recession created an unusual level of interest in learning about economics concepts.

The review of the literature revealed five major areas related to teachers' curriculum change experiences: commitment, workload, capacity, collaboration, and the perception of the teaching profession. Overall, five themes emerged from the participants' curriculum change experiences: support, time, motivation, adaptation, and student learning. Each of the themes found in the study is evident in the existing literature on curriculum change. However, the complex relationship and inter-dependency of the themes is not apparent in the existing body of literature. A skyscraper, shown in Figure 1,

depicts a visual model of the complex and inter-dependent relationship of themes in the curriculum change process as determined in this study.

Each of the themes was presented, along with a story, or vignette, giving voice to the teachers' change experiences. Each theme was then analyzed, along with sub-themes, using the participants' comments for depth and clarification. Finally, students' response to the ELMs, along with the strengths of the ELMs and areas in need of improvement were presented.

CHAPTER 5: INTERPRETIVE SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Interpretive Summary

The central research question that guided my research in this study was: what are the curriculum change experiences of five high school social studies teachers in a western Montana city who are integrating a newly-released economics education curriculum into their U.S. History curriculum for the first time? I also wanted to know what factors contribute to or stand in the way of successful curriculum change, how teachers demonstrate commitment to and are prepared to make curriculum change, how teaching and extra-curricular duties affect curriculum change, how teachers collaborate with colleagues to make curriculum change, and how outside influences affect teachers in the curriculum change process.

My review of the existing literature revealed five themes of curriculum change from the teachers' perspective: commitment, workload, capacity, collaboration, and the perception of the teaching profession. These themes suggested the design of a case study using qualitative research methodology. I conducted pre and post interviews with five teacher participants. Next, I observed the teachers on two separate occasions in their classrooms before they implemented the Economic Learning Modules (ELMs). I also observed them during their implementation of the ELMs. Additionally, I analyzed the ELM curriculum and the school district's social studies curriculum document.

My research questions and the review of existing literature guided my observations, interviews, and journal questions. As I began the research process, themes began to emerge. I can now offer answers to the central question and each of the seven sub questions, provide suggestions for teachers, administrators, and curriculum developers involved in the curriculum change process, and raise questions for future research.

During my research five themes emerged in the curriculum change process which I ultimately renamed the curriculum improvement process. I represent the five themes using a skyscraper to show how each of the five themes is a part of the curriculum improvement process, while also demonstrating the structure that limits curriculum improvement. Below, I briefly describe each theme using the structural element of the skyscraper that best represents each theme. Figure 1 on page 94 graphically represents the themes presented using the skyscraper model.

First, support represents the foundation of the structure. Without the support of the community, administration, colleagues, and outside agencies curriculum change fails and the structure falls.

Second, time is shown by the walls of the structure. The walls, or time, constrain teachers' ability to improve curriculum. Personal commitments and extra school duties affect teachers' time for curriculum change. All of the participants in this study perceive a distinct "lack of time" for curriculum development, collaboration, knowledge building, and preparation. This makes lack of time the biggest obstacle to curriculum change for all participants and thus the largest part of the structure.

Third, the windows of the structure represent motivation because it is through teachers' own view of the world that they make curriculum change decisions. Motivation is affected by many factors, most notably teaching style and personal interests. Motivation also plays a significant role in teachers' willingness to build capacity, develop curriculum, and collaborate with colleagues.

Fourth, the furnishings inside the building represent the tools of adaptation. Teacher interpretation of prescribed curriculum and integration with other content areas are important tools of adaptation in the curriculum change process. Capacity, collaboration, preparation, and curriculum development are also important elements of adaptation.

An elevator inside the building visually represents the movement of four components in the curriculum change process. Preparation, collaboration, curriculum development, and capacity are sub-themes that move throughout and impact all areas of curriculum change.

Ultimately, the goal of all curriculum change is increased student learning, represented by the structure's beacon. Many buildings have radio-antennas on top that provide an important function: communication. Architects often refer to this architectural element as a beacon. Students will broadcast what they learn during their educational experiences to our global society. As adults they will directly participate as members of the community, bringing us back to the beginning of the curriculum change process and the important role community support plays in the process.

This study serves to benefit communities, school districts, schools, administrators, and teachers in the on-going curriculum change process. I found that support of the

community, administration, outside agencies, and colleagues is essential to successful curriculum change. Teachers need time for collaboration, preparation, knowledge building, and curriculum development in the curriculum change process. The participants' own interest, or motivation, in the content area subject is also key to successful curriculum change. Teachers adapt or create curriculum materials to fit their personal teaching style, time constraints, and curriculum requirements. Support, time, motivation, and adaptation work together, and, ironically, sometimes against each other, in the curriculum change process.

Summary Conclusions

The following section addresses the research sub questions. The sub questions are analyzed in support of the central research question.

Sub Questions 1, 2, 3, and 5

1. *What factors contribute to, or stand in the way of, success for participants making curriculum change?*
2. *In what ways do the participants demonstrate commitment to curriculum change and the teaching profession?*
3. *How do the participants' teaching and extracurricular duties affect curriculum change?*
5. *How do the participants collaborate with and perceive their colleagues when making curriculum change?*

Teachers Need Time.

Time, more than any other change factor, influences teachers' ability to make curriculum changes in the classroom. Teachers need time for preparation, curriculum

development, ongoing formal education, and collaboration. Teachers request common preparation time and space in order to collaborate more effectively with their colleagues. Personal commitments and extra-school duties take away from teachers' ability to dedicate time outside of the negotiated contract. Teachers need more time for preparation, curriculum development, collaboration, and knowledge building incorporated into every school day and the negotiated contract. Teachers also need blocks of student-free time before the school year, at the end of the school year, and during the school year to work on all aspects of curriculum change.

Teachers integrating a substantive component to curriculum, like the ELMs, need multiple and focused opportunities away from the daily grind of the classroom and school. A curriculum development workshop held off-campus the week prior to the beginning of school in the fall, followed by several one-day workshops throughout the school year, would help teachers begin planning major curriculum changes. Throughout the year, instructional leadership from administrators and talented colleagues would give teachers formative assessment while they practice, adapt, and perfect lessons in their own teaching style. Finally, teachers need an additional workshop the week prior to the beginning of school for the following academic year. This will create the time and space teachers need to collaborate with their colleagues, make significant changes to their curriculum, adapt curriculum materials to their style, and increase student learning through the curriculum change process.

During the school year teachers need ample opportunity to collaborate with colleagues while they are engaged in curriculum change. They need a shortened teaching schedule, 4 periods per day instead of 5. Teaching schedules need to include common

preparation time to enhance teachers' ability to collaborate and create opportunities for them to mentor each other and integrate subjects across curricular areas. Teachers also need pleasant, common space to collaborate and plan.

Teachers need encouragement to change.

Teachers' own motivation also plays a significant role in curriculum change. Change needs to be voluntary, but teachers need to be encouraged to change. It is easy for teachers to become stagnant when they teach the same class year after year, in the same classroom, with little to no supervision or collegial support. Teachers should be asked to reflect on their teaching practices regularly; electronic journaling is a convenient, under-used method for regular reflection. Teachers should be asked what areas they need or want to improve upon so that professional development coordinators, either within the district or outside agencies, can better meet the individual needs and interests of teachers.

Teachers need feedback.

Teachers desire consistent, constructive feedback on their teaching practice. Students, colleagues, and administrators all provide valuable support in helping teachers know where and how they can improve. Teachers could use technology based, data-driven, formative assessment to continually improve instruction in their classrooms, leading to higher student achievement. Teacher preparation programs should look for and mold new educators to be reflective, flexible, and open to suggestions.

Collaboration had little impact for the participants in this study, largely due to the fact that the participants did not have the time or space in which to collaborate with their colleagues. Even the two teachers who regularly team teach did not collaborate with their

team teacher before presenting the lessons except to plan when the lessons would be presented in their classroom.

Sub Question 4

4. *In what ways are the participants prepared to teach the new curriculum content?*

Participants' who are most willing to devote time and energy to adapting new curriculum materials to their own style are most successful in the change process. Students become confused when teachers hurry to implement new curriculum in their classroom without taking the time to understand the materials and adapt them to their own style. The amount of time spent preparing and additions that participants' make to the prescribed curriculum directly affect students' ability to understand and learn the content.

Participants in this study, with years of experience ranging from 5 to 23 years, had varied amounts of formal and informal economics background. While quantitative studies of economics education during the literature review revealed an important relationship between teacher capacity and student learning, it was not apparent from observations in this qualitative study that a formal background in economics had a noticeable impact on the participants' ability to teach the ELMs. Using observational data from student discussion responses, the participants' formal economic background also did not have a noticeable impact on students' ability to understand the concepts.

Sub Question 6

6. *How do outside influences affect participants in the curriculum change process?*

Support is an essential element to successful curriculum change. Teachers need support from the community, administrators, outside agencies, and colleagues.

The Community.

The community needs to be involved in schools. Local businesses, public agencies, and individuals can all make a difference in the effectiveness of schools. The community needs to recognize problems in our current education system and vote in favor of positive reform including increased funding that allows teachers time and space to collaborate, prepare, develop curriculum, and build knowledge.

Parents need to speak out on behalf of teachers who make a positive difference in the learning experiences of their children. Parents also need to ask teachers questions and voice concerns about teachers that are not fulfilling their professional responsibilities. Parents and teachers need greater access to communicate with each other to ensure successful student learning.

However, schools boards and administrators need to be cautious in how they handle parent concerns about teaching in the classroom. Parent complaints can have a stifling effect on all teachers in a school district when it may be one particular teacher or specific incident in question.

Administrators.

Administrators need to spend time in the classroom. They need to observe, mentor, and provide on-going, regular feedback to teachers. All teachers, brand new or master, have areas in which they can or want to improve. Administrators need to work closely with teachers to understand the curriculum, regardless of their own teaching background, and ensure that teachers are effectively reaching the goals stated in the district's curriculum document.

Administrators need to support hardworking, talented teachers to elevate the public's perception of the teaching profession. Administrators must recognize, mentor, and be honest with weak teachers to improve their skills in the classroom. Administrators need to work with these teachers to create plans of improvement and growth.

Professional Development and Curriculum Planners.

Teachers need sufficient, high quality curriculum materials when they begin implementing new materials or making significant curriculum change. Materials in electronic format are especially helpful so that teachers can work with resources at the most convenient time and location. Electronic materials in adaptable formats are also helpful so that teachers can easily integrate visuals, tables, instructions, and assessments into existing teaching materials and styles. However, paper copy curriculum materials are more readable than electronic formats and are also easier for teachers to copy. Materials in both formats should be provided to teachers.

Teachers also need hands-on workshops to learn about new curriculum materials and to collaborate with colleagues on implementation and integration of the new materials into existing curriculums. Opportunities to practice teaching and discuss new materials with colleagues need to be created to help teachers in the curriculum change process.

Sub Question 7

7. *What strengths and suggestions for improvement are evident in the application of the ELMs?*

Strengths.

The ELMs provide engaging, hands-on student learning activities and pose challenging discussion questions in the assessments that attract students' interest. The lessons also compel students to ask questions and search for answers outside of the ELMs. The ELMs provide teachers with easy-to-use materials that are especially useful in the current economic recession. They help teachers make local, current, and relevant connections to what students are learning throughout the high school social studies curriculum.

The ELMs are logical and standardized. The consistent organization and presentation of the lesson materials makes it easy for teachers to understand each module's objectives. Once teachers integrate the first ELM in their classroom, subsequent integration is easier. Teachers can adapt the ELMs to their personal teaching styles because the ELMs provide options for student activities and assessment.

The modules integrate well into the U.S. history curriculum, although teachers need plenty of advance notice to map the most effective curriculum plan particularly because the modules build upon one another. For such an expansive addition to the U.S. history curriculum, teachers need time to collaborate, plan, and adapt the ELMs to create an economics strand throughout the U.S. history curriculum.

Students should not have to wait until 12th grade U.S. government class to begin learning economics concepts. Students need to learn the language of economics earlier so that they use economics vocabulary in an historical context. Integrating the ELMs into a required 11th grade U.S. history class gives students an opportunity to do this.

Areas for Improvement.

The ELMs need revision on a regular basis. The publishers, Montana Council on Economic Education, need to determine how this will be accomplished and who will update the data. Adding data, especially on the current economic recession, will enhance teachers' efforts to make relevant connections and increase learning for students.

Student learning requires engaged students. The ELMs need to take student experience and interest into account and the examples used in the ELMs should reflect student interest. High school students are employed in the workforce and few babysit or mow lawns as a dependable source of income. Data used in the ELMs also needs to focus on students' interests. Wheat does not interest most students; students connect more readily with iPods and Big Macs. All of the examples in the ELMs need scrutiny to make sure they are relevant to high school students.

The ELMs need to use technology to augment students' learning experiences and appropriate technology can ease the use of the ELMs for teachers. The ELMs need to use a different technology for publication. The current use of Adobe Acrobat .pdf files for publication makes it difficult for teachers to integrate the ELMs into their personal teaching style and use portions of the ELMs. Teachers need the ability to cut and paste portions of lesson directions, visuals, activities, and assessments to other technology so that they can adapt materials more easily to their particular students and their own teaching styles. The ELMs need to use a variety of technologies that engage students, including wikis, pod casts, and interactive software applications that allow students to emulate the work economists do with data.

The ELM assessments need revision. The multiple-choice questions in the ELM assessments are confusing, particularly due to lack of clarity in wording of questions. Discussion questions sometimes lack sophistication and modules should be reviewed to include more discussion questions that ask students to think critically and problem-solve.

The ELMs' visuals need improvement. Some of the visuals are not appropriate for high school students. Some are simplistic and cartoon-like. If high school students think the visuals are more suitable for middle-school students, they are less likely to take the lesson seriously. High quality photographs should be added where appropriate. For example, module 11 (China) and module 15 (Poverty) provide a powerful opportunity to help students visualize the cultures described in those lessons. The age-level appropriateness of the definitions provided on the visuals need to be reviewed to ensure they are effective for teaching high school students.

Qualitative Methodology

I discovered during my review of the literature that qualitative research on curriculum change from the teachers' perspective is significantly lacking. This is due in large part to researchers' inability to gain access to the classroom. In this study, I learned several important lessons about qualitative research and they all have to do with the researcher gaining access to the classroom. Teachers are the gatekeepers of their classroom and ultimately it is the individual teacher who decides what and how each will teach and who has access.

Trust.

My long-term, professional relationship with each participant helped me gain access to their classrooms. It also allowed my participants to trust me with candid and

personal comments regarding all aspects of curriculum change. They knew me, trusted me, and were positively disposed to saying “yes” when I asked them to participate in the research study. Truly successful curriculum change requires honest, frank conversations between and among teachers, administrators, the community, students, and outside agencies. Teachers need to feel safe in voicing their concerns and ideas. Researchers can gain access to the classroom in a variety of ways, but the most effective is to establish trust with individual teachers, which takes a long time. I know that it will be difficult to engage in this type of research in the future absent this type of trusting relationship.

Electronic Journals.

Electronic journals provided an unexpected bonus as a source of information. They were unobtrusive and quick. Participants had the opportunity to reflect on their change experiences and write their thoughts when it was convenient to them. Perhaps it is easier for people to write ideas, rather than speak them face-to-face.

However, the journals also required constant communication with the participants in order to get responses to the emailed prompts. I requested responses from some of the participants numerous times. Once I spoke to the participants and determined a time that best fit each participant’s schedule, participants responded to the prompts much more quickly. Working with participants in the beginning of the study to create a schedule of email requests for journal prompts would be most efficient.

Scheduling Observations.

Observations, a core technique of qualitative research, proved challenging. Participants were told to implement the modules at a time that best fit their curriculum needs. Several of the observations took multiple class periods to complete, especially for

those with 50 minute class periods. Particularly near the beginning of the study and at the end of the study, participants requested that I observe modules at the same time as other participants, making scheduling difficult. A longitudinal study, with fewer participants being observed during the same period would make scheduling observations easier for both the researcher and the participants.

Recommendations for Future Research

Using a qualitative case study design for this research makes generalizability of the findings impossible. I understood this from the onset of the research study and determination of the research design. I used several strategies of data analysis for transferability and verification through careful and thorough analysis. Even so, this study has more questions regarding teachers' curriculum change experiences that could lead to even further improvements in curriculum change and improvement in the future.

Researchers may find it useful to conduct more longitudinal studies using a similar research design as this study. Gaining access to participants' classrooms over a longer period may create an opportunity to build trust and provide a more realistic curriculum change experience. Many teachers continually work to implement and improve curriculum and longitudinal studies may reveal other areas of the curriculum change experiences that were not evident in a four month curriculum implementation experience.

Research focused on specific change attributes, such as collaboration or time, could provide more in-depth meaning. This study looked at teachers' curriculum change experiences as a whole and it may be useful to examine each change attribute more closely to identify additional sub-themes or specifics of each theme.

A study of teachers' responses to regular, on-going feedback may provide important answers to how teachers experience the curriculum change process. More specifically, how feedback from students, colleagues, and parents, in addition to administrators, influences teachers' curriculum change experiences could lead to increased student interest, teacher motivation, and community support in the change process.

A quantitative study of the relationship between teachers' capacity in understanding economics concepts and student understanding would also be a useful addition to the existing body of literature. A quantitative assessment tool could be used to determine teacher's capacity in teaching economics concepts before implementing the ELMs. Students could also be given the same pre-assessment to determine their level of understanding in economics. Finally, students could be given a post-assessment after implementing the ELMs. This would be particularly useful in analyzing the effectiveness of the ELMs for increased student understanding of economics concepts as well as the relationship between teacher capacity in economics and usefulness of the ELMs to increased student understanding of economics.

Researchers could use the economics portion of the NAEP assessment if it is disaggregated at a local level, but that will require longitudinal study. Walstad and Rebeck's (2001a) *Test of Economic Literacy* may be a more useful assessment tool for researchers.

Summary

In this chapter I applied the findings I presented in Chapter 4 to the central research question and the seven sub questions of the research study. The research design

used for this study was a qualitative case study, which provided an in-depth picture of the curriculum change experiences of five high school teachers integrating economics in U.S. history classes for the first time. The answers presented were based on multiple perspectives gained from several sources of data collection, including pre and post interviews, observations, electronic journals, field notes, and document analysis.

I cannot say that one best or right way to go about curriculum change exists. All teachers are different and experience curriculum change in a myriad of ways. No one particular type of curriculum material is best. Teacher proof curriculum does not exist; each individual will interpret materials in a way that best fits their own teaching style. Curriculum changes needs to be an ongoing, democratic process that is determined at the local level, even the individual level. Each teacher has their own style and how they teach concepts can be effective in multiple ways.

Overall, teachers are positive about curriculum change and look at it as an on-going process to improve curriculum in an effort to increase student learning. I offer several suggestions to ease the curriculum change process for teachers and include strengths and areas of improvement directly for the ELMs used by participants in this study. Teachers need the support of the community, administrators, colleagues, and outside agencies for continued, successful curriculum change. Teachers require time and space for collaboration, planning, curriculum development, and knowledge building. Teachers must also be able to easily adapt curriculum materials to their own teaching styles and district curriculum guidelines.

Teachers are motivated by what interests them and so are students. Curriculum developers and planners need to keep their interests in mind when creating curriculum

materials. Students and teachers demand relevant, current, local examples to increase their understanding and reach the ultimate goal of curriculum change in the classroom: curriculum improvement and increased student learning.

REFERENCES

Aikin, W. M. (1942). *The story of the eight year study.* New York: Harper & Brothers.

Allen, L., Osthoff, E., White, P., & Swanson, J. (2005). *A delicate balance: District policies and classroom practice.* Chicago: Cross City Campaign for Urban School Reform.

Allgood, S., & Walstad, W. B. (1999). The longitudinal effects of economic education on teachers and their students. *Journal of Economic Education, 30*(2), 99-111.

American Institutes for Research, National Council on Economic Education, and Council of Chief State School Officers. (2002). *Assessment framework: 2006 National assessment of educational progress in economics (Developed under contract number ED01CO0130 for National Assessment Governing Board).* Washington, D.C.: AIR, NCEE, and CCSSO.

Atkin, J., & House, E. (1981). The federal role in curriculum development: 1950-80. *Educational Evaluation and Policy Analysis*, 3,5-36.

Baker, M., & Foote, M. (2006). Changing spaces: Urban school interrelationships and the impact of standards-based reform. *Educational Administration Quarterly, 42*(1), 90-123.

Bennett, R. M. (2002). Teacher participation in curriculum development: A history of the idea and practice, 1890--1940. (Ed.D., University of Georgia).

Berman, P. (1980). *Toward an implementation paradigm of educational change.* Washington, D.C.: National Institute of Education.

Berman, P. (1978). The study of macro- and micro-implementation. *Public Policy, 26*(2), 157-84.

Berman, P., & McLaughlin, M. (1978). *Federal programs supporting educational change, vol. i-viii.* RAND. No. R-1589/8-HEW, Santa Monica, CA: U.S. Department of Education, Department of Health, Education, and Welfare.

Bogdan, R., & Biklen, S. (2003). *Qualitative research for education: An introduction to theories and methods* (4th ed.). Boston: Allyn and Bacon.

Bosshardt, W., & Watts, M. (1990). Instructor effects and their determinants in precollege economic education. *Journal of Economic Education*, v(*i*), 231-45.

Brown, S. D. (2006). History Teacher Certification Standards in the States. *The History Teacher*, *39*(3), 367-80.

Buckles, S., & Walstad, W. B. (2008). The national assessment of educational progress in economics: Test framework, content specifications, and results. *The Journal of Economic Education, 39*(1), 100-6.

Buckles, S., & Watts, M. (1998). National standards in economics, history, social studies, civics, and geography: Complementaries, competition, or peaceful coexistence? *Journal of Economic Education, 29*(2), 157-66.

Burch, P., & Spillane, J. (2005). *Leading from the middle: Mid-level district staff and instructional improvement.* Chicago: Cross City Campaign for Urban Reform.

Cho, J. (1998). Rethinking curriculum implementation: paradigms, models, and teachers' work. *Annual Meeting of the American Educational Research Association.* San Diego.

Clandinin, D. J., & Connelly, F. M. (1992). Teacher as curriculum maker. In P. W. Jackson (Ed.), *Handbook of Research on curriculum* (pp. 363-401). New York: Macmillan Publishing Company.

Clark, D., & Guba, E. (1967). *Rational planning in curriculum and instruction.* Washington, D.C.: National Education Association.

Commission on the Reorganization of Secondary Education. (1928). *Cardinal Principles of Secondary Education.* (No. 35). Washington, D.C.: U.S. Government Printing Office.

Committee of Ten. (1893). *Report to the U.S. commissioner of higher education on secondary school studies.* Washington, D.C.: National Education Association.

Cremin, L. A. (1961). *The transformation of the school: Progressivism in American education, 1876-1957.* New York: Knopf.

Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks: Sage.

Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed method* (2nd ed.). Thousand Oaks: Sage.

Curriculum Development Associates. (1972). *Man: A course of study.* Washington, D.C.: Curriculum Development Associates.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence.* University of Washington. Center for the Study of Teaching and Policy.

Doll, R. C. (1996). *Curriculum improvement: Decision-making and process* (9th ed.). Boston: Allyn & Bacon.

Dumas, W., Evans, S., & Weible, T. (1997). Minimum state standards for secondary social studies teacher licensure: A national update. *The Social Studies, 88*, 163-6.

Eisner, E. (1991). *The enlightened eye: Qualitative and quantitative approaches.* London: Sage.

Elmore, R. F. (2004). *School reform from the inside out: Policy, practice and performance.* Cambridge: Harvard University Press.

Everton, T., Turner, P., Hargreaves, L., & Pell, T. (2007). Public perceptions of the teaching profession. *Research Papers in Education, 22*(3), 247-65.

Fontana, A., & Frey, J. (2003). *The interview: From structured questions to negotiated text.* Thousand Oaks: Sage.

Fullan, M. G. (2007). *The new meaning of educational change* (4th ed.). New York: Teachers College Press.

Fullan, M. G., Hill, P., & Crevola, C. (2006). *Breakthrough.* Thousand Oaks: Corwin Press.

Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly, 42*(1), 124-156.

Glaser, R. (1969). The design and programming of instruction. In H. James (Ed.), *The school and challenge of innovation* (pp. 156-215). New York: Committee for Economic Development.

Glidden, H. (2008). Common ground: Clear, specific content holds teaching, texts and tests together. *American Educator, Spring*, 13-21.

Goals 2000: Educate America act (P.L. 103-227). (1994). *H.R. 1804* . Washington, D.C.

Goodlad, J. I. (1984). *A place called school: Prospects for the future.* New York: McGraw-Hill Book Company.

Goodson, I., Moore, S., & Hargreaves, A. (2006). Teacher nostalgia and the sustainability of reform: The generation and degeneration of teachers' missions, memory, and meaning. *Educational Administration Quarterly , 42* (1), pp. 42-61.

Hargreaves, A. (2007). The long and the short of educational change. *Canadian Education Association, 47*(3), pp. 16-23.

Hargreaves, A., & Fink, D. (2003). Sustaining leadership. *Phi Delta Kappan, 84*(9), 693-700.

Hargreaves, A., & Goodson, I. (2006). Educational change over time? The sustainability and nonsustainability of three decades of secondary school change and continuity. *Educational Administration Quarterly, 42*(1), 3-41.

Harris, D. N., & Sass, T. R. (2007). *Teacher training, teacher quality, and student achievement*. Retrieved May 22, 2008, from National Center for Analysis of Longitudinal Data in Education Research: http://www.caldercenter.org/PDF/1001059_Teacher_Training.pdf

House, E. R. (1979). Technology vs. craft: A ten year perspective on innovation. *Journal of Curriculum Studies , 11*(1), 1-15.

Individuals with Disabilities Education Improvement Act, 20 U.S.C. 1400 (Dec. 3, 2004).

Johnson, J., & Duffett, A. (2003). *An assessment of survey data on attitudes about teaching-including the views of parents, administrators, teachers and the general public.* New York: Public Agenda. Retrieved from: http://www.publicagenda.org/research/research_topic.cfm.

Kourilsky, M. L., Walstad, W. B., & Thomas, A. (2007). *The entrepreneur in youth : An untapped resource for economic growth, social entrepreneurship, and education.* Northampton, MA: Edward Elgar.

Labaree, D. F. (2006, February). Innovation, nostalgia, and the politics of educational change. *Educational Administration Quarterly, 42*(1), 157-164.

Leip, D. (2005). *Atlas of U.S. presidential elections*. Retrieved October 26, 2008, from http://uselectionatlas.org/

Leithwood, K., & McAdie, P. (2007). Teacher working conditions that matter. *Canadian Educational Association, 47*(2), 42-5.

Lortie, D. C. (1975). *Schoolteacher: A sociological study.* Chicago: The University of Chicago Press.

Marsh, C., & Willis, G. (2005). *Curriculum: alternative approaches, ongoing issues* (4th ed.). Upper Saddle River: Merrill\Prentice Hall.

Mayhew, K. C., & Edwards, A. C. (1936). *The Dewey school; the laboratory school of the University of Chicago, 1896-1903.* New York: London, D. Appleton-Century.

Mead, N., & Sandene, B. (2007). *The nation's report card: Economics 2006.* (NCES 2007-475). Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Merriam, S. (1998). *Case study research in education: A qualitative approach.* San Francisco: Jossey-Bass.

Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed). Thousand Oaks: Sage Publications.

Millikin, N. (2008). Interview with Norm Millikin regarding the ELM development team. (H. Davis, Interviewer).

Montana Administrative Rules. (2007). *Title 10: Education* . Helena, MT: Administrative Rules Bureau.

Montana Board of Public Education. (2001). *Montana school accreditation: Standards and procedures manual.* Helena: Montana Office of Public Instruction.

Montana Council on Economic Education. (2008). *Economics: The study of choices.* Bozeman, MT: MCEE (www.econedmontana.org).

National Center for Education Statistics, Institute of Educational Sciences, U.S. Department of Education. (2006). *Digest of education statistics.* Washington, D.C.: U.S. Government Printing Office.

National Council on Economic Education. (2007). *Survey of the states: Economic and personal finance education in our nation's schools in 2007.* New York: NCEE.

Delta Kappan , 88 (8), 620-624.

National Council on Economic Education. (1999). *National Voluntary Economic Content Standards.* New York: NCEE.

National Council for the Social Studies. (1994). *Position statements: Creating effective citizens; Curriculum guidelines for social studies teachinig and learning.* Retrieved April 17, 2008, from http://www.socialstudies.org/positions/.

Neumann, R. (2008). American democracy at risk. *Phi Delta Kappan, 89,* 328-339.

Newlon, J. H. (1923). What research can do for the superintendent. *Journal of Educational Research, 8,* 106-112.

Newlon, J., & Threlkeld, A. (1926). The denver curriculum-revision program. In G. Whipple (Ed.), *The twenty-sixth yearbook of the national society for the study of education: The foundations and technique of curriculum-construction* (pp. 229-240). Bloomington, IL: Bloomington Publishing Co.

Orrill, C., & Anthony, H. (2003). Implementing reform curriculum: A case of who's in charge. *Annual Meeting of the American Educational Research Association.* Chicago.

Peltier, G. L. (1967). Teacher participation in curriculum revision: An historical case study. *History of Education Quarterly , 7* (2), 209-19.

Posner, G. (2004). *Analyzing the curriculum* (3rd ed.). Boston: McGraw Hill.

Rice, J. M. (1893). *The public-school system of the United States.* New York: Century Co.

Rosenholtz, S. J. (1989). *Teacher's workplace: The social organization of schools.* New York: Longman.

Ross, E. W. (2001). Remaking the Social Studies Curriculum. In *The Social Studies Curriculum: Purposes, Problems, and Possibilities* (2nd ed., pp. 313-327). Albany: State University of New York Press.

Rustique-Forrester, E., & Haselkorn, H. (2002). Learning from the U.S., in: M. Johnson & J. Hallgarten (Eds.). *From victims of change to agents of change: The future of the teaching profession.* London: Institute for Public Policy Research.

Sahlberg, P. (2006). Education reform for raising economic competitiveness. *Journal of Educational Change, 7*, 259-87.

Salemi, M., Siegfried, J., Sosin, K., Walstad, W., & Watts, M. (2001). Research in economic education. *The American Economic Review, 91*(2), 440-445.

Saunders, P., & Gilliard, J. (1995). *A framework for teaching basic economic concepts with scope and sequence guidelines k-12.* New York: National Council on Economic Education.

Scott, C., Stone, B., & Dinham, S. (2001). I love teaching but...International patterns of teacher discontent. *Education Policy Analysis Archives , 9* (28).

Siegfried, J. J. (2000). How many college students are exposed to economics? *Journal of Economic Education* , 202-04.

Siegfried, J., & Meszaros, B. (1998). Voluntary economics content standards for America's schools: Rationale and development. *Journal of Economic Education*, *29*(2), 139-149.

Snyder, J., Bolin, F., & Zumwalt, K. (1992). Curriculum implementation. In P. Jackson (Ed.), *Handbook of research on curriculum* (pp. 402-435). New York: Macmillan.

Sowell, E. J. (2005). *Curriculum: An integrative introduction* (3rd ed.). Upper Saddle River: Merrill Prentice Hall.

Stake, R. (1967). The countenance of educational evaluation. *Teachers College Record, 68*, 523-40.

Stake, R. (1995). *The art of case study research.* Thousand Oaks: Sage.

Swanson, C., Hightower, A., Lloyd, S., Mitani, H., Wittenstein, R., & Reed, A. (2008). *Quality counts 2008: Tapping into teaching.* Bethesda: EPE Research Center.

Thornton, D. (2003). Changing the economic education curriculum. (Ph.D., Ohio University).

Thornton, S. J. (2005). Why gatekeeping matters more than curriculum change. In *Teaching Social Studies That Matters* (pp. 10-27). New York: Teachers College Press.

Tyler, R. W. (1949). *Basic principles of curriculum and instruction.* Chicago: University of Chicago Press.

United States Census Bureau. (2007). *Statistical abstract of the United States: 2008* (127th ed.). Washington, D.C.: U.S. Government Printing Office.

Walstad, W. B. (2001). Economic education in U.S. high schools. *The Journal of Economic Perspectives, 15*(3), 195-210.

Walstad, W. B., & Rebeck, K. (2001a). *Test of economic literacy: Examiner's manual* (3rd ed.). New York: National Council on Economic Education.

Walstad, W.B., & Rebeck, K. (2001b). Assessing the understanding of U.S. high school students. *The American Economic Review,* 452-7.

Walstad, W. B., & Rebeck, K. (2000). The status of economics in the high school curriculum. 95-101.

Wigginton, E. (1985). *Sometimes a shining moment: The foxfire experience.* New York: Doubleday.

Wolcott, H.F. (1994). *Transforming qualitative data: Description, analysis, and interpretation.* Thousand Oaks: Sage.

Yin, R. (2003). *Case study research: Design and methods* (2nd ed.). Thousand Oaks: Sage.

Yucel, C. (2008). Teacher burnout and organizational citizenship behavior in Turkish elementary schools. *Educational Planning, 17*(1), 27-42.

APPENDIX A

Interview/Observation Field Note Form

INTERVIEW/OBSERVATION FIELD NOTE FORM

Curriculum Change in Action: Montana Economics Education

Date: _____ Subject Code: _____

Page _____ of _____ Interview/Observation Number: _____

Economic Learning Module Observed (if applicable): _____

Length of Activity: _____

Descriptive Notes	Code	Reflective Notes

APPENDIX B

Interview/Observation Field Memo

INTERVIEW/OBSERVATION FIELD MEMO

Curriculum Change in Action: Montana Economics Education

Date: _____ Subject Code: _____

Page _____ of _____ Interview/Observation Number: _____

Economic Learning Module Observed (if applicable): _____

Emerging Categories:	***Reflective Notes:***

APPENDIX C

Teacher Interview Opening Statements

INTERVIEW FORM: OPENING STATEMENTS

Curriculum Change in Action: Montana Economics Education

Date: _____ Time: _____ Interview No. _____

Subject Code: _____ Years of Experience: _____

Opening Statements:

Thank you for taking the time to participate in this research study. Before we start, I want to clarify a few items:

- I will be asking some general questions and audio taping the responses as we proceed.
- I estimate this is a 1 hour interview.
- All information from this study will be kept confidential. You will not be identified by name, location or place of employment in this study or in any report from this study.
- You will be identified by a subject number during this interview. Subsequently, a confidential code will be used to identify your responses for the purposes of the study.
- You will be directly quoted only with your permission. When quoted, your personal identifying information will be kept confidential.
- Your name and position will be known only by myself and Dr. Jean Luckowski, the chair of this research study.
- All aforementioned confidentiality is protected by the Institutional Review Board of The University of Montana.
- Though I would prefer to complete the interview before a break, you may take a break at any time, or leave the interview at any time.

Please be assured that I am only interested in your thoughts and opinions. No right or wrong answers exist for the purposes of this research. The purpose of the interview is to understand your thoughts, feelings, and experiences, not to make personal judgments about them.

APPENDIX D

Teacher Interview Questions

Teacher Interview One Questions

1. What are your teaching duties?
2. What are your school duties outside of the classroom?
3. How do you decide which areas of your curriculum you need to change at any given time?
4. When you have made significant changes in your classroom practice, what factors contribute most to your success?
5. What are obstacles to change in your practice?
6. How does working with other teachers help you make change?
7. How much time do you spend collaborating with colleagues when making curriculum change?
8. What makes you feel supported when making curriculum change? (Ask open ended, but probe further with colleagues, administrators, parents, community members, curriculum materials, education associations, controversial curriculum if needed).
9. What keeps you from or encourages you to take advantage of opportunities to collaborate with your colleagues when making curriculum change?
10. How is economics part of the curriculum in your school and school district?
11. In which courses do you teach economics?
12. What is your academic background in economics?
13. What are your strengths in teaching economics?
14. What keeps you from or encourages you to take advantage of professional development opportunities in economics education?

15. What keeps you from or encourages you to take advantage of professional development opportunities in other content areas?
16. Do you have any questions for me or additional comments regarding curriculum change?

Teacher Interview Two Questions

1. Which three Economic Learning Modules (ELMs) did you choose for inclusion in your curriculum, and why?
2. How do each of the ELMs you chose fit into the U.S. history curriculum?
3. What modifications did you make to the lesson before you taught it? Why?
4. If you use the lesson again, what modifications will you make?
5. How long did it take you to prepare to teach each lesson?
6. Did you use any sources outside of the ELM materials in your preparation to teach the ELMs? If so, what sources and how did you use each source?
7. How did the students respond to the lesson?
8. Would you recommend the lesson to your colleagues? Explain.
9. How did you collaborate with colleagues prior to and during the implementation of the ELM curriculum?
10. What success did you achieve and what challenges did you face in implementing the ELM curriculum?
11. After teaching the three ELMs, will you teach any of the other modules? If so, which ones and why? If not, explain.

APPENDIX E

Journal Questions

Journal Prompts

One

1. How would you describe your teaching style?
2. How does your teaching style affect curriculum change in your classroom?

Two

1. How do you decide what extra duties to take on?
2. What motivates you to make curriculum change?

Three

1. How do you think non-educators view the teaching profession?
2. How do the views of non-educators motivate or discourage you in making curriculum change?

Four

1. How does working with other teachers help you make change?
2. What kinds of support are most helpful to you in making curriculum change?

Five

1. What areas of economics would you like to have more knowledge about?
2. What types of professional development experiences are most beneficial to you when making curriculum change?

APPENDIX F

Letter to Superintendent

Superintendent

Heather C. Davis
c/o Dr. Jean Luckowski
University of Montana
School of Education
Missoula, MT 59812

Dear _____:

My dissertation proposal has recently been accepted through The University of Montana, School of Education. My research study is entitled: "Curriculum Change in Action: Montana Economics Education." The purpose of this study is to explore the curriculum change experiences of five high school social studies teachers in _____ who are implementing a new curriculum produced by the Montana Council on Economic Education, known as Economic Learning Modules. The *National Voluntary Economic Content Standards* and the *Montana Social Studies Content Standards* were used in the development of the Economic Learning Modules.

I have worked in _____ Public Schools for seven years and I currently serve as a half-time Teacher on Special Assignment as Administrative Intern at _____ High School. My research study could help _____ Public Schools, as well as many other school districts, understand curriculum change from the teachers' perspective. An additional benefit to participating in this study is the application and content expertise that teacher participants will gain and can bring to their colleagues in the area of economics education. I am asking your permission to complete this study in the _____ Public School District and work with a total of five teachers from _____, _____, and _____ High Schools.

The teacher participants for this study should possess a Class 1, professional teaching license, or a Class 2, standard teaching license issued by the state of Montana; be qualified in social studies broadfield or history, government, and economics; and have at least five years of teaching experience in the area of social studies. The teacher participants should also have a teaching assignment for the 2008-2009 academic year that includes at least one section of U.S. history.

This research will provide educators with teachers' perspectives on curriculum change through their experience with implementing a new curriculum using the Economic Learning Modules (ELMs) produced by the Montana Council on Economic Education. These modules were released in September of 2008 to all Montana high schools in an effort to increase economic literacy among high school graduates in Montana. A critical look at the curriculum change process, using the MCEE Economic Learning Modules curriculum as a model, will provide insight into what works, as well as the barriers to curriculum change from the teachers' perspective, and what steps can be taken to improve the curriculum change process for experienced teachers.

Pre- and post- teacher interviews will be conducted. Additionally, teachers will be asked to implement three of sixteen Economic Learning Module curriculum units within their high school U.S. history class and email bi-weekly journal responses to the researcher throughout the four month research period. The researcher will observe the ELM lessons implemented by the teacher participant, and selected other lessons in order to minimize researcher influence on the study and cause the least amount of disturbance to the classroom environment. The participants may also be asked to participate in a focus group discussion at the end of the research study. No student will be identified nor will any individual student data be collected.

As a doctoral candidate in Curriculum and Instruction at The University of Montana, I will be collecting the data for this study. I will collect the data under the direction of my dissertation chairperson, Dr. Jean Luckowski, a professor in the Department of Curriculum and Instruction at The University of Montana. Data will be collected over a period of four months and will consist of the collection methods described above. All information regarding the district, location, and people involved will be kept confidential and is protected under the guidelines of the Institutional Review Board of The University of Montana.

It is important to note that the purpose of this study is not to make judgment on action or teaching practices, but rather to gain insight into what works, as well as the barriers to the curriculum change process, and what steps can be taken to improve the curriculum change process for experienced teachers. The district's participation in this study supports the development of improved curriculum change and economics education in Montana, and provides _____ School District students with a new curriculum and tools for advanced economic literacy essential to democratic citizenship.

If you are willing to have _____ School District participate in this study, please indicate so by responding with written approval and I will contact you with further details. If you have any questions please do not hesitate to call (406) 544-2408.

Thank you in advance for your consideration.

Sincerely,

Heather C. Davis

APPENDIX G

Letter to Principals

Principal's Address

Heather C. Davis
c/o Dr. Jean Luckowski
University of Montana
School of Education
Missoula, MT 59812

Dear [Principal's name]:

My dissertation proposal has recently been accepted through The University of Montana, School of Education. My research study is entitled: "Curriculum Change in Action: Montana Economics Education." The purpose of this study is to explore the curriculum change experiences of five high school social studies teachers in _____ who are implementing a new curriculum produced by the Montana Council on Economic Education, known as Economic Learning Modules. The *National Voluntary Economic Content Standards* and the *Montana Social Studies Content Standards* were used in the development of the Economic Learning Modules.

I have worked in _____ Public Schools for seven years and I currently serve as a half-time Teacher on Special Assignment as Administrative Intern at _____ High School. My research study could help _____ Public Schools, as well as many other school districts, understand curriculum change from the teachers' perspective. An additional benefit to participating in this study is the application and content expertise that teacher participants will gain and can bring to their colleagues in the area of economics education.

The teacher participants for this study should possess a Class 1, professional teaching license, or a Class 2, standard teaching license issued by the state of Montana; be qualified in social studies broadfield or history, government, and economics; and have at least five years of teaching experience in the area of social studies. The teacher participants should also have a teaching assignment for the 2008-2009 academic year that includes at least one section of U.S. history.

This research will provide educators with teachers' perspectives on curriculum change through their experience with implementing a new curriculum using the Economic Learning Modules (ELMs) produced by the Montana Council on Economic Education. These modules were released in September of 2008 to all Montana high schools in an effort to increase economic literacy among high school graduates in Montana. A critical look at the curriculum change process, using the MCEE Economic Learning Modules curriculum as a model, will provide insight into what works, as well as the barriers to curriculum change from the teachers' perspective, and what steps can be taken to improve the curriculum change process for experienced teachers.

All five teacher participants will currently be teaching 11th grade U.S. history in the _____ Public School District at one of the urban, general education high

schools in _____. Pre- and post- teacher interviews will be conducted. Additionally, teachers will be asked to implement three of sixteen Economic Learning Module curriculum units within their high school U.S. history class and email bi-weekly journal responses to the researcher throughout the four month research period. The researcher will observe the ELM lessons implemented by the teacher participant, and selected other lessons in order to minimize researcher influence on the study and cause the least amount of disturbance to the classroom environment. The participant may also be asked to participate in a focus group discussion at the end of the research study. No student will be identified nor will any individual student data be collected. One of your teachers is a perfect candidate for this research and I would like to ask your permission to invite [teacher participant's name] to participate in this study.

As a doctoral candidate in Curriculum and Instruction at The University of Montana, I will be collecting the data for this study. I will collect the data under the direction of my dissertation chairperson, Dr. Jean Luckowski, a professor in the Department of Curriculum and Instruction at The University of Montana. Data will be collected over a period of four months and will consist of the collection methods described above. All information regarding your school, location and people involved will be kept confidential and is protected under the guidelines of the Institutional Review Board of The University of Montana.

It is important to note that the purpose of this study is not to make judgment on action or teaching practices, but rather to gain insight into what works, as well as the barriers to the curriculum change process, and what steps can be taken to improve the curriculum change process for experienced teachers. Your participation in this study support the development of improved curriculum change and economics education in Montana, and provide you and your students with a new curriculum and tools for advanced economic literacy essential to democratic citizenship.

If you are willing to have your teacher participate in this study, please indicate so by responding with written approval and I will contact you with further details. If you have any questions please do not hesitate to call (406) 544-2408.

Thank you in advance for your consideration.

Sincerely,

Heather C. Davis

APPENDIX H

Letter to Teacher Participants

Teacher Participant's Address

Heather C. Davis
c/o Dr. Jean Luckowski
University of Montana
School of Education
Missoula, MT 59812

Dear [Teacher's name]:

My dissertation proposal has recently been accepted through The University of Montana, School of Education. My research study is entitled: "Curriculum Change in Action: Montana Economics Education." The purpose of this study is to explore the curriculum change experiences of five high school social studies teachers in _____ who are implementing a new curriculum produced by the Montana Council on Economic Education, known as Economic Learning Modules. I have worked in _____ Public Schools for seven years and I am currently serving as a half-time Teacher on Special Assignment as Administrative Intern at _____ High School. My research study could help _____ Public Schools, as well as many other school districts, understand curriculum change from the teachers' perspective. An additional benefit to participating in this study is the application and content expertise that teacher participants will gain and can bring to their colleagues in the area of economics education.

The teacher participants should possess a Class 1, professional teaching license, or a Class 2, standard teaching license issued by the state of Montana; be qualified in social studies broadfield or history, government, and economics; and have at least five years of teaching experience in the area of social studies. The teacher participants should also have a teaching assignment for the 2008-2009 academic year that includes at least one section of U.S. history.

This research will provide educators with teachers' perspectives on curriculum change through their experience with implementing a new curriculum using the Economic Learning Modules (ELMs) produced by the Montana Council on Economic Education. These modules were released in September of 2008 to all Montana high schools in an effort to increase economic literacy among high school graduates in Montana. A critical look at the curriculum change process, using the MCEE Economic Learning Modules curriculum as a model, will provide insight into what works, as well as the barriers to curriculum change from the teachers' perspective, and what steps can be taken to improve the curriculum change process for experienced teachers.

I write to ask you to be one of the teacher participants. If you agree to participate in this study, over the course of four months you will be asked to implement three of sixteen new Economic Learning Modules (ELMs) referenced above. In addition, you will be asked to participate in pre- and post-interviews and write bi-weekly journal responses to questions posed by the researcher via email. You may be asked to participate in a focus

group discussion at the end of the research process. The researcher will observe the ELM lessons implemented by you, as well as other lessons, in order to minimize researcher influence on the study and cause the least amount of disturbance to the classroom environment. No student will be identified nor will any individual student data be collected.

As a doctoral candidate in Curriculum and Instruction at The University of Montana, I will be collecting the data for this study. I will collect the data under the direction of my dissertation chairperson, Dr. Jean Luckowski, a professor in the Department of Curriculum and Instruction at The University of Montana. Data will be collected over a period of four months and will consist of the collection methods described above. All information regarding your school district, location and people involved will be kept confidential and is protected under the guidelines of the Institutional Review Board of The University of Montana.

It is important to note that the purpose of this study is not to make judgment on action or teaching practices, but rather to gain insight into curriculum change and what steps can be taken to improve the curriculum change process for experienced teachers. Your participation in this study will support the development of improved curriculum change and economics education in Montana and provide you and your students with a new curriculum and tools for economic literacy essential to democratic citizenship.

If you are willing to participate in this study, please indicate so on the form provided and I will contact you with further details. If you have any questions please do not hesitate to call (406) 544-2408.

Thank you in advance for your consideration.

Sincerely,

Heather C. Davis

APPENDIX I

Teacher Participant Consent Form

TEACHER PARTICIPANT INFORMATION AND CONSENT FORM

Curriculum Change in Action: Montana Economics Education

PROJECT DIRECTOR(S):

Heather C. Davis
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School of Education
The University of Montana
Missoula, MT 59812
(406)544-2408(work cell phone)
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Dr. Jean Luckowski
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The University of Montana
Missoula, MT 59812
(406)243-5054 (UM office phone)
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Special instructions to the potential teacher participant:
This form may contain words or phrases that are new to you or you are not familiar with. Please ask the person who gave you this form for further explanation if needed.

Purpose:
You are asked to participate in a study that will explore the curriculum change experiences of five high school social studies teachers in _____ who are implementing a new curriculum produced by the Montana Council on Economic Education, known as Economic Learning Modules. This study looks at curriculum change from the teachers' perspective through the implementation of the ELM curriculum to gain insight into what works, as well as barriers to curriculum change, and what steps can be taken to improve the curriculum change process for experienced teachers.

Procedures:
If you agree to take part in this study, you will be asked to choose three of the sixteen ELMs and teach them in your U.S. history class. The entire study will take place over the course of four months and you will be asked to participate in pre- and post-interviews and write bi-weekly journal responses to questions posed by the researcher via email. You may be asked to participate in a focus group discussion at the end of the research process. In addition, the researcher will observe the ELM lessons implemented by the teacher participant, as well as other lessons, in order to minimize researcher influence on the study and cause the least amount of disturbance to the classroom environment. No student will be identified nor will any individual student data be collected. All data will keep in strict confidentiality in accordance with the guidelines of the Institutional Review Board of the University of Montana. It is also important that you understand the purpose of this study is not to judge your actions or teaching, but rather to gain an in-depth perspective of curriculum change through the implementation of the ELM curriculum.

The study will take place at your school.

Risks/Discomforts:
There are no anticipated risks or discomforts associated with this research study.

Benefits:
Your participation in this study will not only support the development of an improved curriculum change process and improved economics education in Montana, but will also provide you with tools for advanced economic literacy which are essential to democratic citizenship. An additional benefit to participating in this research study will be the use of reflective teaching practices.

Confidentiality:
Your records will be kept private and will not be released without your consent except as required by law. Only the researcher, her faculty supervisor, and the Institutional Review Board of The University of Montana will have access to the files. Your identity will be kept confidential. If the results of this study are written in a scientific journal or presented at a scientific meeting, pseudonyms will be used and your name will not be used. The data will be stored in a locked file cabinet. Your signed consent form will be stored in a cabinet separate from the data. The interview audiotape will be transcribed without any information that could identify you and the tape will then be erased.

Compensation for Injury:
Although we do not foresee any risk in taking part in this study, the following liability statement is required in all University of Montana consent forms:

In the event that you are injured as a result of this research you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University's Claims representative or University Legal Counsel.

Voluntary Participation/Withdrawal:
Your decision to take part in this research study is entirely voluntary. You may refuse to take part in or you may withdraw from the study at any time without penalty or loss of benefits to which you are normally entitled.

You may be asked to leave the study for any of the following reasons:

1. Failure to follow the Project Director's instructions;
2. A serious adverse reaction which may require evaluation;
3. The Project Director thinks it is in the best interest of your health and welfare; or
4. The study is terminated.

Permission to Use Quotations:
By signing this consent form, the participant hereby grants permission for Heather C. Davis to utilize quotations to be reported in her research publications resulting from the study. Confidentiality will remain at all times.

Questions:
You may wish to discuss this with others before you agree to take part in this study. If you have any questions about the research now or during the study, contact:

Heather C. Davis, c/o Dr. Jean Luckowski
Dept. of Curriculum and Instruction, University of Montana
Missoula, MT 59812
Phone: (406) 544-2408 (work cell phone)
Email: heather.davis@umontana.edu
If you have any questions regarding your rights as a research participant, you may contact the Chair of the IRB through The University of Montana Research Office at (406) 243-6670.

Participant's Statement of Consent:
I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

_____ I agree to participate in the research study.

_____ I decline the opportunity to participate in the research study.

[teacher participant's name]_____
Name of Participant

_____
Participant's Signature

_____
Date