THE EFFECT OF EXPERIENTIAL TEACHING APPROACHES ON YOUTH INTEREST IN LEARNING AMERICAN FRONTIER HISTORY

by

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DEDICATION

I dedicate this work to the faculty and volunteers committed to positive youth development across all 4-H programming and specifically the 4-H Western Heritage Project. The impact of your loyal and steadfast devotion to the boundless future of young people will never be truly measured.

I also dedicate this work to the 4-H youth who reassure me daily through their actions, perseverance, and exhibited leadership that the future of this nation will soon rest in capable hands. Ride, shoot straight, and tell the truth.
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The traditional history education methodologies of lecture and reading the textbook often leave students uninspired and disinterested in social studies. Historical knowledge among youth is often below the proficiency level in U.S. history according to national performance measures. Research suggests that an experiential approach to history education that allows for hands-on activities, group work, use of creativity, role playing, and self-directed learning can positively influence youth interest in history. This study investigated the effects of participatory living history methodologies on youth interest in the history of American frontier. The program utilized in this research was the 4-H Western Heritage Project in Montana and Missouri where youth become living historians through period dress, skills, activities, and mannerisms. A post-test/retrospective pre-test survey was used to measure changes in interest among 4-H members after at least one year of participation in the 4-H Western Heritage Project compared to their retrospectively recorded perceptions before participation. Respondents also rated the primary experiential teaching methodologies found within the project. A paired samples t-test was conducted to determine any significant differences between the mean scores of 4-H members before and after participation. The calculation of descriptive statistics reported ratings of primary experiential methodologies. Positive and significant differences were found in levels of interest from before participation and after at least one year’s participation in participatory living history methodologies. Self-directed learning, hands-on activities, group learning, the use of creativity, and role playing through historic character development were each identified by survey respondents as beneficial to learning history. This research suggests that participatory living history methodologies increase youth interest in learning American frontier history. Results may be applicable to museum education programs, living history sites, history camps, and potentially the traditional classroom.
CHAPTER ONE

INTRODUCTION

Background

The history of the United States is not one of passive events. It is shaped by many voices, struggles, failures, successes, great resolve, and intellect that is worthy of thoughtful examination. And yet, in a nation with such pride in its hard-fought freedoms and opportunities, American youth have very little knowledge of U.S. history (National Assessment of Educational Progress, 2010) and they show little interest in learning more (Salk & Glaessner, 1991; Zhao & Hoge, 2005). Many primary and secondary school students rate history as one of their least liked subjects and perceive social studies as unimportant both academically and in their daily lives (Shaughnessy, 1985; Stodolsky, Salk & Glaessner, 1991). With remarkable consistency throughout the past 30 years of educational research, common descriptors used by students when reflecting on history courses include the terms boring, useless, and irrelevant (Cervone, 1983; Taylor & Duran, 2006; Zhao & Hoge, 2005).

The most recent data gathered by the National Center for Educational Statistics are anything but encouraging. Only 20% of fourth-graders, 17 percent of eighth-graders, and 12 percent of high school seniors performed at or above the proficient level on the 2010 U.S. history assessment (NAEP, 2010).

A seminal factor contributing to the general dislike of learning history among school-aged youth is the commonly utilized instructional methodologies of assigned
textbook readings, lecture, and rote memory (Perricelli, 2008; Taylor & Duran, 2006; Wade 2002; Zhao & Hoge, 2005). These traditional methodologies common to formal history education in primary and secondary schools remain teacher-centered (Barton & Levstik, 2003) and typically leave students disinterested, uninspired, and detached from the content (Cervone, 1983; Foster & Padgett, 1999; Haladyna, Shaughnessy, & Redsun, 198; Perricelli, 2008; Shaughnessy & Haladyna, 1985; Stodolsky et al, 1991; Taylor & Duran, 2006; Wade, 2002; Zhao & Hoge, 2005). Students often perceive these teacher centered and textbook-focused strategies as offering a very shallow and uninspiring glimpse into the past with little regard for the humanness of the people involved or the challenges surrounding the issue (Cervone, 1983).

Fortunately, educational research suggests student attitudes toward social studies become much more positive when teachers incorporate active learning approaches into the classroom (Haladyna, Shaughnessy, & Redsun, 1982). Studies have found that student interest and enjoyment can be enhanced by allowing some student independence through activities like role playing, groups discussion, making dioramas, playing games, working on projects or reports, expressing personal opinion, and creating or listening to stories (Meece, 2008; Perricelli, 2008; Stodolsky et al, 1991). These active learning approaches are often found to be challenging, fun, and personally relevant to students (Zhao, & Hoge, 2005).

Allowing freedom of choice so that historical topics can be pursued according to the student’s personal interest is one way of satisfying the yearning for relevance often expressed by learners (Kobrin, Abbott, Ellinwood, & Horton, 1993; Schunk, Pintrich, &
Meece, 2008). Self-directed and student-conducted research, either online or through books and magazines, can help to bring significance, authenticity, and creativity to the learning process while allowing students to become creators of historic documentation (Foster & Padgett, 1999; Taylor & Duran, 2006).

**Introduction to the 4-H Western Heritage Project**

The 4-H Western Heritage Project is an experiential, participatory living history (PLH) and shooting sports program for nine to nineteen year old youth which incorporates many of the informal, active learning educational methodologies identified in the literature as appealing to youth. A century-old stalwart of experiential learning, 4-H provides the setting for this investigation of PLH.

The 4-H Center for Youth Development at Montana State University administers the project within Montana and trained adult volunteers direct local county programs. Participation encourages active immersion in the history of the American frontier period from 1860 through 1900 by dressing in authentic reproduction clothing, providing extensive training for members to safely and responsibly compete with period correct firearms depending on age and ability, using the tools of the era, and engaging in experiential learning activities. The consistent engagement and sustained enthusiasm shown by youth enrolled in the project warrants further investigate to provide insight to the effectiveness of PLH instructional methodologies in history education.

Supporting curriculum includes an adult leader guide, a youth activity guide, and a website companion to complement the written materials. Individual programs have the
flexibility to provide ethnic and regional relevance by supplementing this curriculum with materials or topics related to local history.

Each member of the 4-H Western Heritage Project develops a historical persona representing a typical inhabitant of the American frontier from 1860-1900. This may include a name or alias, an appropriate career, a lifestyle suitable to the character, proper attire, and other details such as birthplace, age, and family. In addition to role-playing, 4-H members also participate in group discussion, museum visits, genealogy research, and have the freedom to pursue historical topics of their choice through research in libraries, the internet, museums and historic site visits, and resource persons culminating in written, electronic, or personal presentations.

Volunteer adult leadership requires 12 hours of instruction in firearm and shooting range safety, positive youth development, ages and stages, and American frontier history. The Montana 4-H Shooting Sports Coordinator serves as the trainer within Montana and offers three to five workshops each year. Interested volunteers complete the training over a single weekend.

Over the past six years, promotional shoots at national 4-H shooting sports events attracted the interest of other states and created the need for a national train-the-trainer program. Volunteers with an interest in establishing a 4-H Western Heritage Project in their home state must attend a four-day training workshop. Successful completion of the course allows these volunteers to train others in their local program. To date, adult volunteers and university faculty from Missouri, Texas, Oregon, Oklahoma, Kansas, Colorado, Alabama, and Idaho have attended national level workshops.
Since the creation of a small inaugural program consisting of five teenaged Montana youth in 2008, the 4-H Western Heritage Project continues to expand with additional interest expressed by many more youth, parents, and 4-H university faculty in the eastern United States as well as the West. This widespread appeal of a historically based educational program for youth stands in sharp contrast to the interest shown by youth traditionally studying history in a formal educational setting and serves as the impetus for inspective research.

**Problem Statement**

The torch of freedom will soon pass to the hands of future voters who appear to have limited knowledge or interest in the traditions and history of our American democracy. Research has attributed a portion of this student disinterest to the traditional, teacher-centered methodologies applied in many formal classrooms (Barton & Levstik, 2003). The commonly utilized history education teaching approaches of lecture, textbook reading, and rote memory appear to decontextualize for students the significant events and important figures of history by excluding the struggles, contemporary morays, and human emotion inherent in any given era (Cervone, 1983; Foster & Padgett, 1999; Haladyna, Shaughnessy, & Redsun, 198; Perricelli, 2008; Stodolsky et al, 1991; Shaughnessy & Haladyna, 1985; Taylor & Duran, 2006; Wade, 2002; Zhao & Hoge, 2005).

Previous research has found that stimulating and encouraging student interest is crucial to learning (Ainley, 2006; Mitchell, 1993; Tobias, 1994; Schunk, Pintrich, &
Meece, 2008; Weber & Patterson, 2002). When students find a subject interesting, they exhibit higher levels of attention, cognitive engagement, memory, comprehension, higher order thinking, and achievement (Schunk, 2008).

Some studies suggest that student interest in social studies may be enhanced by adopting a historical character’s perspectives through role-playing, participating in group discussion, illuminating the relevance of current events, authentic experiences, humanizing historical figures, and experiential activities (Brophy, 2007). Specifically, experiential learning activities allow for student involvement, support group work, foster creativity, utilize role-playing, expose relevance, and facilitate self-directed learning; all factors related to creating higher interest (Askell, 2001; Brophy, 2007; Hidi & Harackiewicz, 2000; Mitchell, 1993). Increased levels of interest can also lead to a more powerful and lasting state of intrinsic motivation as indicated by questions, curiosity, and self-challenge (Malone & Lepper, 1987).

Participatory living history methodologies incorporate many of the factors related to sustained interest. Living history interpreters recreate personas from the past in mannerisms and authentic dress while teaching an aspect of history through audience engagement (National Park Service, 2009; Reid, 1997; The Association of Living History, Farm and Agricultural Museums, 2014). Living history interpreters are effective educators (Reid, 1997); however, it is rational to suppose that those gaining the most knowledge from the experience are the living historians themselves.

Pedagogical methodologies incorporating PLH allow youth to become living historians rather than members of a passive audience. Examples of PLH teaching
approaches exist, but evidence of effectiveness is anecdotal at best (Daniels, 2010; Morris, 2009). An extensive review of the literature indicates a severe lack of research investigating the effectiveness of PLH in history education.

**Purpose Statement**

This study addresses the gap in the educational research literature regarding experiential learning in history education by investigating changes in interest toward learning history among youth engaged in PLH for at least one year. The program selected to investigate PLH methodologies was the 4-H Western Heritage Project, a non-formal educational setting where PLH is an overarching approach to historical learning. This study also attempts to identify specific aspects of the PLH that may contribute to any changes in student interest toward learning history.

**Research Questions**

The following research questions guided this study:

After participating in a PLH approach to learning history for at least one year,

1. Do youth report changes in interest in history?

2. What elements of PLH do youth identify as most relevant to their interest in history?
Method

This study employed a repeated measures post-test/retrospective pre-test study to examine the self-reported levels of interest in learning the history of the American frontier from 1860-1900. The participants are 4-H members experiencing the PLH teaching approach in the 4-H Western Heritage Project. Members were asked to rate their level of interest after one or more years of experience a PLH environment and again by recalling their interest before beginning the project. Subjects were 4-H youth, nine to 19 years old, enrolled for at least 1 year in the 4-H Western Heritage Project, and living in Montana, Missouri, Texas, Oregon, Colorado, Oklahoma, and Kansas. All 4-H members meeting the above criteria were invited to participate in this study. All 90 of the eligible members were expected to complete the survey instrument.

Results of this study may be generalized to future 4-H Western Heritage Project members and may provide insights for museum, historic site, drama, and living history camp educational programs as well as traditional social studies classroom settings favorable to PLH learning approaches.

Limitations

This study was designed to investigate PLH in a 4-H setting. This study makes no direct comparisons or contrasts to the perceptions of a control group of youth learning history through traditional, formal instruction. The literature, however, provides information pertinent to populations in formal educational settings.
The difference between 4-H youth and youth in general, however, must be considered. In many cases, 4-H youth have the benefit of parental involvement in the form of meeting attendance, enthusiasm, and educational support. This parental encouragement may influence the learning environment within the 4-H Western Heritage Project both during and between workshops. While 4-H members may engage in self-directed learning, parental encouragement could provide the reinforcement for sustained study. The external motivational influence of involved parents may or may not be present in different educational settings. With this in mind, careful consideration should be taken in generalizing the results of this study to traditional history education settings.

Some youth attracted to the 4-H Western Heritage Project have a preexisting interest in history thus making participation in a PLH program appealing. Youth entering the project with a high interest in history showed little or no change in their interest level after exposure to PLH methodologies.

Furthermore, 4-H Western Heritage Project clubs do not have identical resources from state to state or location to location. Imperfect resources could include a lack of access to museum exhibits and artifacts, few nearby historic sites, restricted or limited research archives, poor internet service, or even an uninspiring adult volunteer instructor. Any of these factors could hamper the learning environment regardless of educational methodologies.

With the relative newness of the 4-H Western Heritage Project, the sample size of this study was not large enough for a factor analysis of the survey statements or for the generalization of any changes in youth interest in history due to the implementation of
PLH practices. Even though the project continues to expand, the originating club is only six years old. All subsequent programs have therefore existed for less than six years. Some beginning programs have not reached full educational potential and are not entirely sound in PLH methodologies. Others do not have many members with one or more years of experience in a PLH learning environment.

The historical setting to the 4-H Western Heritage Project encompasses a rather romanticized time in American history. Due to media influences like the Western movie and novel genre, the American frontier from 1860-1900 may be more appealing to youth than other periods in American history. Anecdotally, this perception is common in the adult volunteer instructors leading the 4-H Western Heritage Project within their 4-H program. On the other hand, the attraction of the period may also contribute to instructor enthusiasm and positively influence the learning environment. Many adults may agree with the words of Edward L. Gaylord, former board member of the National Cowboy Hall of Fame and Western Heritage Center in Oklahoma City, Oklahoma – “In society where youth struggle with identity and self-esteem, the values of honesty, integrity, and self-sufficiency associated with the spirit of the American West should be cherished and nurtured.”

Similar to the possible effects of media, the modern existence of rodeo and the popularity of Western apparel may also contribute to a lingering connection to the Old West not found in other historic eras. Channeling the attractive nature of this romantic period of American history, however, may provide a jumping off point to developing interest in other historical periods.
Definition of Terms

1. Experiential Learning - experiential learning is the act of gaining knowledge through carefully designed and supervised experience. Other common descriptors are learning by doing, learning through action, and learning through discovery (Kolb, 1984; Livingstone, 2001; USDA, 2011). Experiential learning involves learner engagement, direct experience, and opportunities for reflection to increase knowledge (Association for Experiential Education, 2014).

2. Formal Education - formal education often takes place in a hierarchical, institutionalized setting with an approved curriculum where advances in learning lead to a degree or certificate (Livingstone, 1999; Schugurensky, 2000). Formal learning often mandates the participation of students of certain ages or grade levels by the authority of governing body (Schugurensky, 2000). Formal learning also tends to be teacher-centered with the educator deciding both content and curriculum (Colley & Malcolm, 2002; Livingstone, 2001; Mocker & Spear, 1982).

3. Living History Interpretation - living history interpretation utilizes trained interpreters in period dress, using authentic tools, and representing a past culture to demonstrate a period of history to an audience (National Park Service, 2009). Living historians also make use of the physical environment to replicate the sights, sounds and smells of the period being represented (The Association for Living History, Farm and Agricultural Museums, 2014).
4. Non-formal Learning - non-formal learning includes a predetermined curriculum and an instructor, but takes place outside the formal educational system (Schugurensky, 2000). Non-formal learning is identified as further education when incorporating professional development. Course work is usually organized, but shorter in duration than formal education and undertaken voluntarily based on the interest or need of the student (Colley & Malcolm, 2002; Livingstone, 1999; Livingstone, 2001; Mocker & Spear, 1982).

5. Participatory Living History (PLH) - participatory living history places the student in the role of the living history interpreter rather than a member of the audience. PLH is a term resulting from the investigation of experiential methodologies in history education undertaken in the course of this study. Participatory living history is self-directed, experiential, and non-formal.

6. Self-directed Learning - self-directed learning allows the individual the freedom to independently pursue a topic of personal interest and choose the methodologies engaged in that pursuit (Mocker & Spear, 1982). Self-directed learning is considered a component of informal learning (Livingstone, 2001; Schugurensky, 2000) where the locus of control is often placed with the student. Learning occurs external to institutions and in the absence of a predetermined curriculum (Colley & Malcolm, 2002; Schugurensky, 2000). The setting varies depending on need or the topic of inquiry and the methodologies are frequently activity or experience based. (Colley & Malcolm, 2002; Livingstone, 1999).
7. Workshop - the environment in which learning takes place within a 4-H program is often referred to as a workshop. A workshop is similar to class time in the formal education realm.

Significance of the Study

The initial beneficiaries of this study are the 4-H youth currently enrolled in the 4-H Western Heritage Project. Project improvement will likely result from their feedback and reported perceptions. Their enthusiasm, dedication, and achievements will also be showcased as an example to other youth. Furthermore, findings of this study may influence teaching approaches in history education to the advantage of youth enrolled in many non-formal educational settings.

Youth input concerning teaching approaches most appealing and least appealing to them, as indicated by this research, may alter or adjust the teaching methodologies of the adult volunteer leaders and 4-H faculty currently administering 4-H Western Heritage Projects. Beneficial approaches may be replicated while documented shortcomings of the project will also influence the future application of PLH methodologies.

Land Grant University Extension 4-H faculty considering the implementation of the 4-H Western Heritage Project in their state may base their decision partially on the findings of this study. History education may be an attractive new direction for 4-H Youth Development in many states.

Additionally, educators within public or private museums, as well as those serving at historic sites and history camps, could alter their living history methods from
passive audience engagement to including PLH approaches. If PLH methodologies are currently in use in some of these settings, this study may lend support to substantiate the perceived benefits of such an approach.

This study will also contribute to the educational research literature on the topic of experiential learning in history education and may also provide the impetus of further studies on the effects of PLH methodologies on student interest and learning in both non-formal and formal history education settings. Expanded research could provide valuable insight into the effectiveness of PLH methodologies in settings alternative to the 4-H program.

This study provides insights that could support and supplement the curriculum utilized by classroom teachers who often face a youth population with little curiosity about American history. Formal classroom teachers may not have the opportunity to involve students in PLH in all topics of social studies. However, results from this study may provide k-12 social studies teachers with creative methods for incorporating PLH learning activities within a portion of their curricula. For example, teachers can use original source materials like diaries and journals, role play, allow students a choice of related topics, assign projects like dioramas, promote public display of projects, use variety and novelty, and place students in the story thus making the subject personal and relevant (Schunk, Pintrich, & Meece, 2008).

Methodologies related to an increased student interest in U.S. history can lead to sustained personal interest (Harackiewicz et al, 2008; Brophy, 2004; Schunk, Pintrich, & Meece, 2008) where historical study becomes intrinsically motivated. Any gain in
historical knowledge can also improve the citizenship and voter competence of the youth involved (Hoge, 2002; NCSS, 2013).

Most importantly, all of society is shaped by history including science, medicine, architecture, engineering, politics, entertainment, and education. As a Sioux proverb states, “A people without history is like wind on the Buffalo Grass”. Societies sway back and forth with no foundation or direction.

**Summary**

Academic measures in social studies among 4th, 8th, and 12th graders place a vast majority of students below the proficiency level (National Assessment of Educational Progress, 2010). Unfortunately, as students progress through school grades, their proficiency in social studies decreases, as does their interest (Schunk, Pintrich, & Meece, 2008; Taylor & Duran, 2006; Zhao & Hoge, 2005).

Evidence suggests that formal educational methodologies can contribute to a lack of interest in youth toward learning history. The traditional instructional methodologies utilized in social studies education, specifically, lecture, rote memory, and textbook reading, is often uninspiring for students who see history education as unimportant and irrelevant (Cervone, 1983; Foster & Padgett, 1999; Haladyna, Shaughnessy, & Redsun, 1998; Perricelli, 2008; Stodolsky et al, 1991; Shaughnessy & Haladyna, 1985; Taylor & Duran, 2006; Wade, 2002; Zhao & Hoge, 2005).

Educational research indicates non-formal, experiential learning, however, is more engaging, allows for creativity, fosters inquiry, encourages self-directed personal
interest, and can lead to intrinsic motivation (Hidi & Renninger, 2006; Perricelli, 2008; Zhao & Hoge, 2005). Interested students often exhibit higher levels of attention, cognitive engagement, memory, comprehension, higher order thinking, and achievement (Ainley, 2006; Hidi & Harackiewicz, 2000). When applied to social studies, enhanced interest may be achieved through experiential methodologies such as role-playing historical characters, group discussion, relating history to current events, providing authentic experiences, and hands-on activities (Brophy, 2007; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008).

While research indicates living history interpreters in period dress and mannerism are effective in engaging a passive audience, little research has been done on participatory living history where the learner becomes a living historian (Daniels, 2010; Morris, 2009). Studying the self-reported changes in interest among youth experiencing PLH methodologies while learning history may strengthen the empirical literature and provide direction toward the improvement of history education.
CHAPTER TWO

REVIEW OF THE LITERATURE

This first component of this literature review examines the current status of student aptitude in historical knowledge and any persistent trends in both instructional methodologies and student interest. The succeeding section explores educational research concerning sustained interest. Next, definitions of formal and non-formal learning lay the groundwork for approaches positively affecting student interest. This leads to an examination of the effectiveness of experiential learning and living history approaches to history education followed by a description of participatory living history (PLH). The chapter ends with an overview of the 4-H Western Heritage Project and the instructional methodologies found therein.

Status of History Education in the Classroom

Like every American generation over the past 238 years, the safekeeping of this democratic republic will soon pass to those currently receiving their primary and secondary education. It is questionable, however, whether they will be prepared for the responsibility of a citizen government build on founding principles and precedents where a fundamental knowledge of American history is paramount. According to a 2010 report from the National Assessment of Educational Progress (NAEP), a research division of the National Center for Education Statistics under the U.S. Department of Education, less than one in five students in 4th, 8th, and 12th grade perform at the proficiency level in
U.S. history. Specifically, only 12% of high school seniors, 17% of eighth-graders, and 20% of fourth-graders performed at or above the proficient level on the 2010 U.S. history assessment (NAEP, 2010).

Equally concerning is the evidence in the educational research literature suggesting student interest in U.S. history, and in social studies in general, is low and appears to further decline with age and ascending grade level (Haladyna, Shaughnessy, & Redsun, 1982; Shaughnessy, 1985; Shaughnessy & Haladyna, 1985; Schunk, Pintrich, & Meece, 2008; Taylor & Duran, 2006; Zhao & Hoge, 2005). If given the option, most ninth-graders would choose not to take a social studies class (Haladyna & Shaughnessy, 1985).

After a two year study where 60 fifth-graders were interviewed from six schools in a metropolitan area of a large Midwestern city, Stodolsky, Salk, and Glaessner (1991), of the University of Chicago, found many students rated social studies as one of their least liked subjects in school and perceive the subject as inconsequential to their academic preparedness and inapplicable to everyday life. Both math and reading ranked higher in importance. An earlier qualitative study found similar sentiments among 30 randomly selected middle school and high school students in New England public and private schools who saw social studies as irrelevant with stiff, lifeless historical figures presented with a lack of human emotions during times of difficulty or personal challenges (Cervone, 1983).

Students often cite “boring” to describe their experiences of learning in the traditional classroom (Cervone, 1983; Zhao & Hoge, 2005). Adult attitudes fall along a
similar vein. When surveying 1,400 adults across the United States, Taylor and Duran (2006), researchers from the University of Michigan, found the word “boring” as the most common descriptor of history classes (p. 11). Adults also reported feeling least attached to the past when they had studied history in school (Taylor & Duran, 2006). Other common disparaging labels by both students and adults include “useless”, “it doesn’t apply/not relevant”, “it’s reading a text book” and “memorizing facts” (Taylor & Duran, 2006; Zhao & Hoge, 2005).

Student Interest in History

Two major factors arise from the literature when considering student’s lack of interest in social studies: instructional methodologies and teacher enthusiasm. The most common and least liked instructional methodology in social studies classes is lecture (Foster & Padgett, 1999; Haladyna, Shaughnessy, & Redsun, 1998; Perricelli, 2008; Stodolsky et al, 1991; Wade 2002). A second unpopular methodology identified by students was reading the textbook (Cervone, 1983; Shaughnessy & Haladyna, 1985; Stodolsky et al, 1991; Taylor & Duran, 2006; Zhao & Hoge, 2005). These teacher-centered strategies can leave students feeling uninspired by a shallow, characterless, and decontextualized treatment of historical issues and significant personalities (Cervone, 1983).

Student-Centered Learning

Fortunately, research suggests that a student-centered, active learning approach, as opposed to lecture and reading the textbook, elevates student interest toward learning
social studies (Haladyna, Shaughnessy, & Redsun, 1982). Students report a higher level of interest and enjoyment in social studies when teachers allow some student independence by including activities like role playing, groups discussion, cooperative learning, simulations, making dioramas, playing games, working on projects or reports, expressing personal opinion, and storytelling (Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991). When interviewing 300 kindergarten through fifth-grade students in three different school districts in northeast Georgia, Yali Zhao and John Hoge (2005) found that children liked social studies activities that were experiential, challenging, fun, and related to them personally. A personally relevant approach can be as simple as a student interviewing a grandparent to gain perspective of an issue confronting an earlier generation (Cervone, 1983; Fink, 2001).

Perricelli (2008) surveyed 69 fourth graders at a public school in the Midwest to assess their attitudes toward social studies. She taught five social studies lessons using a different methodology with each lesson. The first lesson was in a lecture format, the second employed cooperative learning, the third involved simulation/role play, the fourth was an experientially based project, and the fifth lesson implemented audio/visual aids followed by a simulation. The researcher administered a survey after each lesson. After the first lesson using lecture, only 13% of the students felt learning social studies was important and 10% felt motivated to learn and pay attention in class. Opinions of the importance of social studies and interest in learning increased after lesson two’s cooperative learning approach where 76% of the students saw social studies as important and 80% indicated they were motivated to learn. After the role-playing activity in lesson
three, 82% of the students found social studies important and 82% felt the class was interesting. Students who recognized social studies as important increased to 83% after the experiential activity in lesson four and 92% of the students indicated they were motivated to learn. After the final lesson incorporating audio/visual aids and simulation, 82% of the students reported social studies as important and 97% felt motivated to learn. Perricelli’s (2008) research supports that notion that using a variety of active learning methodologies appear to increase interest. She cautioned, however, that an over-reliance of any one method may ultimately decrease interest.

Another approach for addressing student yearning for relevance when studying history is allowing freedom of choice so that topics can be pursued according to the student’s personal interest (Kobrin, Abbott, Ellinwood, & Horton, 1993; Schunk, Pintrich, & Meece, 2008). However, in order for successful historical inquiry once a topic is chosen, students must learn basic research skills (Kobrin, Abbott, Ellinwood, & Horton, 1993). Foster and Padgett (1999) suggest several considerations for teachers to assist students in conducting historical research. They suggest brainstorming the student’s chosen topic promotes a wider understanding of the subject before narrowing the focus. Second, assist students in finding resources, analyzing each source, and glean relevant information. Third, lay out a step-by-step process with intermittent accomplishments to break up the project and measure progress. Finally, teachers should allow students to showcase their work through a paper, oral presentation, or display for recognition among peers. Self-directed and hands-on research, either online or through books and magazines, brings relevance, authenticity, and creativity to the learning
process while allowing students to become creators of historic documentation (Foster & Padgett, 1999; Taylor & Duran, 2006).

Participation in simulations can also play a role in enhancing interest by placing students within the context of an issue or event (Ghelbach et al, 2008). Simulations not only create a relevant, vivid, “real life” situation, but also encourage group collaboration. In some cases, computer applications can provide variety, novelty, and active learning instruction. Digital games require students to assess information from multiple sources and make quick decisions while they pick up on the rules, overcome impediments, test their approaches, and collaborate with classmates (Ghelbach et al, 2008, Prensky, 2003).

Ghelbach et al (2008) investigated learning through one such web-based simulation related to social studies called GlobalEd where students negotiate treaties around world issues while taking on a perspective of a country they represent. The researchers surveyed 305 fifth through eighth-graders from 19 schools across the United States who engaged in the GlobalEd simulation and found that students perceived social studies to be more challenging than they previously believed. In addition, findings indicated that role-playing during simulation increased student interest and heightened their motivation to learn social studies (Ghelbach et al, 2008). Computer simulations in history education also assist students in improving communication skills, learning new study techniques, and refining problem solving abilities (Hillis, 2008). Group discussion is a key factor in effective simulations. Decisions are not made individually on impulse, but instead through consensus (Rantala, 2001). Moreover, while simulations and role playing can teach more than historical facts, they can also assist students in experiencing
the human and emotional side of history in the everyday lives of those in the past (Barton & Levstik, 2003; Wineburg, 2001).

**Teacher Enthusiasm**

Teacher enthusiasm, the second major factor in retaining student interest in social studies, appears to be positively related to student engagement and achievement (Covington, 1999; Haladyna, Shaughnessy, & Redsun, 1982; Larkins & McKinney, 1982). Haladyna, Shaughnessy, and Redsun, (1982) collected survey data from 1500 urban and rural fourth, seventh, and ninth-graders in Oregon and found the teacher’s genuine interest in the subject, enthusiasm, willingness to help students at a personal level, praise and reinforcement, fairness, commitment to student learning, and making students feel they could succeed all correlated positively with student attitudes toward social studies. In addition, learning environments where the teacher has an organized classroom, offers a variety of activities, sets identified goals, and requires completed assignments correlated highly with positive student attitudes toward social studies (Haladyna, Shaughnessy, & Redsun, 1982; Ormrod, 2011).

Similarly, Frymier (1994) studied 178 undergraduates at a mid-sized eastern university and found that the mannerisms and attitudes of teachers contribute to student interest. Teachers who addressed students from close proximity, maintained eye contact, smiled, and were inclusive could positively influence interest and motivation in the task at hand and hold the attention of their students. Furthermore, developing positive relationships with teachers at school increase the likelihood that adolescents feel cared for, respected, and valued (Whitlock, 2006).
Additionally, student learning in classrooms where the teacher possesses a strong degree of domain knowledge in social studies correlates highly with positive student interest toward social studies. Research indicates that, while important, enthusiasm alone is not a substitute for knowing the material (Haladyna, Shaughnessy, & Redsun, 1982; Schunk, Pintrich, & Meece, 2008; Stipek, 1998).

**Student Interest**

Studies suggest that student learning relates to the level of interest in the subject under study (Ainley, 2006; Mitchell, 1993; Schunk, Pintrich, & Meece, 2008; Tobias, 1994; Weber & Patterson, 2002). Interest can be defined as focused attention created by a topic or situation (Hidi, 2001). When students lack domain knowledge of the subject, interest arises from an initial encounter with that subject. Several factors determine interest including novelty, surprise, arousing curiosity, teacher enthusiasm/attitude, quality of instruction, and enjoyment (Askell & Lawson, 2001; Perricelli, 2008; Schiefele, 1991; Schunk, Pintrich, & Meece, 2008). Often times, an exciting or thought-provoking encounter with a subject prompts an initial interest. This sudden new interest is labeled “situational interest” due to the effect of the situation in which interest was piqued (Ainley, 2006; Ormrod, 2011). Situational interest, when maintained, can lead to personal interest (Brophy, 2004; Harackiewicz et al, 2008; Schunk, Pintrich, & Meece, 2008).

Many educational researchers use the terms individual interest and intrinsic motivation interchangeably; however, some sort of situational interest would have
occurred earlier in order for individual interest or intrinsic motivation to form (Brophy, 2004; Schiefele, 1991). Hidi and Renninger (2006) propose a four-phase model of interest development that can lead to individual interest and intrinsic motivation. The first phase is triggered situational interest where some minimal level of knowledge is introduced. The support and encouragement of triggered situational interest may facilitate a student progression to the second phase identified as maintained situational interest. Phase two can lead to phase three, emerging personal interest, and then to phase four, well-developed personal interest. Regression to a lower level of interest can occur if students are not further engaged, supported, or provided with the opportunity to pursue questions they find intriguing (Hidi & Renninger, 2006).

Harackiewicz et al, (2008), tested the four-phase model of interest by surveying 858 undergraduate students enrolled in an introductory psychology course at a large, Midwestern university. Survey data indicated student interest can deepen over time, progressing through the four phases of interest, when the student perceives a topic valuable and personally relevant. Students who entered the course with low initial interest could progress as high as emerging individual interest once triggered situational interest occurred. External support was required on the part of the instructor for progression to advance, demonstrating that educators may be able to influence continued interest from situational interest (Harackiewicz et al, 2008).

Research indicates interest has a powerful effect on cognitive functioning (Ainley, 2006; Hidi & Harackiewicz, 2000; Schiefele, 1991). Students with an individual interest in a topic pay closer attention in class, persist at a task for longer periods of time, learn
more, and find learning enjoyable. Interest is associated with increased levels of arousal, alertness, attention, and concentration (Ainley, 2006).

Domain knowledge can also have an effect on interest (Alexander, Kulikowich, & Schulze, 1994). In his review of research on prior domain knowledge and interest, Tobias (1994) found a positive linear relationship between prior knowledge and interest. Harackiewicz et al (2008), however, found only a moderate correlation between background knowledge and initial interest. This study suggests that prior domain knowledge is not the only contributing to student interest.

It is encouraging that students with little prior experience in a domain area may become situationally interested. Educators who identify situational interest early, and encourage that interest, can move students toward higher competencies (Alexander, Kulikowich, & Schulze, 1994). Adapting instruction to meet student interest is important in order to nurture positive motivational effects for longer periods of time (Tobias, 1994). One such way is allowing students the freedom to choose topics of their own interest, thus not only increase their domain knowledge, but also strengthen their individual interest in the topic.

**Maintaining Student Interest**

Situational interest plays an important role for students with no pre-existing knowledge in the topic area, however, maintaining interest has a greater effect on learning than triggering interest (Hidi & Harackiewicz, 2000; Lee & Brophy, 1996). Sustained interest contributes to learning by arousing deeper comprehension, greater use
of imagery, and can provoke emotional, personal, and relevant associations (Tobias, 1994).

Interest-maintaining teaching strategies bear a strong resemblance to the strategies for creating interest in social studies discussed above. Holding interest can be accomplished by affording students more choice in their pursuit of a subject they find interesting, making the subject meaningful to student’s lives, allowing creativity, and involving students in the learning process (Askell & Lawson, 2001; Hidi & Harackiewicz, 2000; Mitchell, 1993). Personal interest correlates positively with involvement, concentration, and activation (Harackiewicz et al, 2008; Hidi & Renninger, 2006; Schiefele, 1991).

To lend relevance and authenticity to human events, Schunk, Pintrich, and Meece (2008) suggest teachers use original source materials like diaries and journals. Strategies that model enthusiasm for the content at hand, create surprise, confront prior knowledge to generate curiosity, and introduce variety and novelty in the classroom also heighten motivation (Schunk, Pintrich, & Meece, 2008). Brophy (2004) adds collaborating with peers, identifying relevance, teacher embellishment of a topic, and interesting activities are important to sustaining interest. These strategies also move students from being extrinsically motivated (pleasing the teacher, parent, or getting a good grade) toward developing a personal interest that leads to the more powerful and lasting state of intrinsic motivation as indicated by questions, curiosity, and self-challenge (Malone & Lepper, 1987).
Reaching a level of well-developed personal interest intrinsically motivates students to learn for their own sake (Covington, 1999; Schiefele, 1991). Students also appreciated working on tasks over which they had some choice and control as well as an opportunity to share what they learned with others while discovering their hidden talents.

When students find a subject interesting, they exhibit higher levels of attention, cognitive engagement, memory, comprehension, higher order thinking, and achievement (Schunk, 2008). Learner interest in a topic or activity leads to greater engagement within that topic and an accumulation of more knowledge (Tobias, 1994). Highly interested students employ in more intensive and meaning-oriented processing that produce inferences, allow for the recall of main ideas, and encourage applications to new situations (Schiefele, 1991). Interest may also serve as an emotional coping resource for student to overcome an imperfect learning environment (Katz, Assor, Kanat-Maymon, & Bereby-Meyer, 2006).

Formal and Non-Formal Learning

Educational researchers provide multiple definitions of formal and non-formal, learning (Colley & Malcolm, 2002; Livingstone, 2001; Mocker & Spear, 1982; Schugurensky, 2000; Sefton-Green, 2004). These distinctions often blur and overlap as one form of learning can contain elements of another (Colley & Malcolm, 2002). However, the setting in which the learning takes place aids in the delineation (Colley & Malcolm, 2002).
While not universally defined, formal learning is largely identifiable by its hierarchical, institutionalized setting, with an approved curriculum where one level of instruction prepares students for the next level eventually leading to a degree or certificate (Livingstone, 1999; Schugurensky, 2000). Participation in formal learning is often made mandatory through certain ages or grade levels by a governing body (Schugurensky, 2000). Formal learning also tends to be teacher-centered. The appointed authorities decide both content and curriculum and learning can be mostly individualistic with decontextualized content (Colley & Malcolm, 2002; Livingstone, 2001; Mocker & Spear, 1982).

Non-formal learning, sometimes referred to as continuing education when professional development is involved, is usually organized, but shorter in duration and undertaken voluntarily based on the interest or need of the learner (Colley & Malcolm, 2002; Livingstone, 1999; Livingstone, 2001; Mocker & Spear, 1982). Non-formal learning environments include a predetermined curriculum and an instructor, but are conducted outside the formal school system (Schugurensky, 2000). Community education programs such as photography workshops, language courses, cooking classes, or technology instruction provide a few examples.

Even with the presence of an instructor and a predetermined curriculum, non-formal learning environments can include student-centered, self-directed learning. Self-directed learning occurs when students research a personal interest by reading, searching through archives, visit museums or other related sites, or seek out a resource person. The learner decides both what is learned and how it is learned (Mocker & Spear, 1982) and
this can take place under the context of a general topic. Self-directed learning is both intention (the topic is determined by the learner) and conscious because the learner is cognitive to acquiring information related to their inquiry (Schugurensky, 2000).

Learning can also be unintentional, but conscious. This type of learning is titled “incidental learning” and takes place when the learner is aware that something new was learned, but did not initiate the learning (Schugurensky, 2000). In other words, students may learning something valuable even thought they had no initial intention of learning it.

Generally, learners can undertake non-formal learning as individuals or in groups, at any age, and in any setting from wilderness trails to libraries or museums. The subject under study influences the methodology and setting.

**Experiential Learning**

Experiential learning is the act of gaining knowledge through carefully designed and supervised experience. Other common descriptors of experiential learning are learning through action and learning through discovery (Kolb, 1984; Livingstone, 2001; USDA, 2011). Experiential learning involves learner engagement, direct experience, and opportunities for reflection to increase knowledge (Association for Experiential Education, 2014).

Experiential learning is common in non-formal learning contexts (Livingstone, 2001) and often incorporates the flexibility to include many of the factors related to sustained interest. Specifically, experiential learning methodologies allow for student
involvement, group work, creativity, role-playing, relevance, and often self-directed learning (Kolb, 1984; USDA, 2011).

John Dewey, an early proponent of experiential learning, recognized the importance of cognitive thought in conjunction with experience (Miettinen, 2010; Torock, 2009). Dewey’s experiential learning model begins with an impulse, commonly considered an experience, which is observed in the context of the situation. Combining the experience and observation with past experiences and the input of others results in knowledge that leads to a judgment of what occurred (Kolb, 1984). This cycle can repeat several times as a sophisticated, cumulative, reflective purpose or action develops (Starnes, 1999). In Dewey’s model, reflection upon experiences, both past and new, allows the learner to act deliberately rather than impulsively (Starnes, 1999).

Experiential learning has been described by Kolb (1984, pg. 38) as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience.” Similar to Dewey, Kolb’s view of experiential learning begins with a concrete experience processed by reflective observation and then developed into abstract thought. This abstract conceptualization provides the foundation of active experimentation that leads to another concrete experience and further reflection (Kolb, 1984). Thus, experiential learning can be viewed as a spiral with the learner in the center repeatedly experiencing, reflecting, thinking, and acting in response to the learners needs (Kolb, 2000). The learner’s conceptions are continually formed and reformed by experience (Kolb, 1984).
The 4-H Experiential Learning Model is an adaptation of Dewey’s model and has become the nationwide standard of the 4-H approach to learning (Enfield, 2001). Like the models of Dewey and Kolb, the 4-H Experiential Learning Model begins with an experience. This experience allows for both exploration and engagement in a creative process. Experience is followed by sharing observations and reactions with others. Sharing then leads to processing or reflecting. New concepts are generalized to real-world situations applicable to the learner or the group. The final phase is the application of new knowledge to similar situations in order to gain new experiences (Norman & Jordan, 2012; USDA, 2011). The 4-H Experiential Learning Model is summarized as Do (experience), Reflect (share and process), and Apply (generalize and apply) (Norman & Jordan, 2012). Do, reflect, apply are the foundations of most 4-H curriculum design (Enfield, 2001).

From its inception, experiential learning rests heavily on experience and reflection and emphasizes the process of learning and not simply the outcomes (Kolb, 1984; Kolb, 2000; Miettinen, 2010). It is the holistic process of experiential learning that allows the flexibility for acquired knowledge to be applied to new situations (Kolb, 1984; USDA, 2011). Experiential learning also takes into account past experiences, cultural bias, and societal expectations that may potentially be recognized by the learner through reflection (Kolb, 1984; Miettinen, 2000).
Historical Interpretation

One approach to introducing students to experiential learning in the field of history education is through the use of historical interpretation. Historical interpretation can be defined as an educational activity where historical meanings and relationships are revealed through original objects or artifacts, experientially, or by utilizing illustrative media, rather than the simple communication of factual information (Tilden, 1977). Historical interpretation recognizes that multiple perspectives from various cultures can arrive at different conclusions. Moreover, historical knowledge is constructed from many sources (Barton & Levstik, 2003; Martell, 2011; VanSledright, 2002). Allowing student access to a variety of sources alters the learning approach from teacher-centered to student-centered and learning becomes self-directed, informal, and experiential. In the process, students begin to develop questions about the past, look to historical evidence for answers, compare perspectives with others, and discuss or debate conclusions (Barton & Levstik, 2003). Historical interpretation adds meaning to the educational experience (Bruno-Jofre’ & Schiralli, 2002).

Studies suggest historical interpretation while visiting a museum is important to adults, families, and children who want to engage the senses of taste, touch, and smell in the experience as well as don the clothes of the period (Reid, 1997; Wilkening & Donnis, 2008; Reach Advisors, 2012). In survey research conducted in three cities with museums, Hood (1989) found visitors were looking for novelty, discovery, interaction, workshop participation, and authentic demonstrations. Engagement allowed audiences to learn while enjoying themselves (Hood, 1989). The expectations of museum visitors are
very similar to the expectations expressed as important to social studies students and to the building blocks of individual interest (Askell & Lawson, 2001; Haladyna, Shaughnessy, & Redsun, 1982; Hidi & Harackiewicz, 2000; Meece, 2008, Perricelli, 2008; Zhoa & Hoge, 2005).

Living History Interpretation

Living history interpretation takes historical interpretation a step further by utilizing trained interpreters in period dress, using authentic tools, and representing a past culture to demonstrate a period of history to an audience. The National Park Service (2009) defines living history interpretation as:

… encompassing a variety of interpretive techniques in which the interpreter uses period reproduction clothing and objects to interpret and present impressions of the people, events, and practices of the past. The interpreter attempts to impart knowledge and engage the interest and imagination of the visitor by simulating as accurately as possible historical appearances, manners, occupations, and attitudes. Living history programs are not an attempt to literally recreate the past. They are an interpretive technique designed to stimulate the visitor's intellectual and emotional involvement with the resource through the creation of well-documented, historically accurate impressions of historical events and people (2009, p. 1).

Few traditional classrooms embrace historical interpretation (James, 2008; Martell, 2011; Westhoff, 2012; Wineburg, 2001) and empirical research related to living history interpretation in formal education is severely limited (Morris, 2009). Visitors to historic sites and museums, however, see living historians as the most important part of their experience (Wilkening & Donnis, 2008). Living history interpreters in period dress add excitement, raise expectations, and make site visitors more comfortable in asking
questions (Magelssen, 2006; Saxe, 2009) and can contextualize a period of the past with real-life scenarios (Ciolfi & McLoughlin, 2012).

Attention to authenticity is important to historic site visitors and serves as a standard of credibility (Wilkening & Donnis, 2008). Museum visitors see authenticity as something real or true, rather than imaginary, false, or imitative (Hill & Cable, 2006). Simply donning period dress and impersonating an individual from the past, however, is not interpretive. While re-enactors might entertain audiences with comical skits and fictitious gunfights, living historians must engage an audience through demonstration, storytelling, or walking tours while adhering to historical accuracy (NPS, 2009).

Stern and Powell (2013) found visitor learning increases when programs are relevant to the audience, include holistic stories, stimulate reflection, and lead learners to an epiphany. Interpreters must also have confidence, charisma, verbally engage the audience, present a clear message, and have a high level of responsiveness (Stern & Powell, 2013a).

Historical museum consultants, Wilkening and Donnis (2008), surveyed 5000 visitors of outdoor history museums and found that 58% of visitors equated authenticity with historical accuracy. Anything that revealed the modern world such as wristwatches or jewelry degraded the experience. Museum staff in period dress assisted visitors in their imaginary journey to the past and humanized historical figures by representing real people, real stories, and real lives (Wilkening & Donnis, 2008).
Participatory Living History Interpretation

Participatory living history (PLH) places the student in the role of the living history interpreter rather than a member of the audience. Preparation for an authentic representation of an individual from the past requires attention to textiles and period fashion, accessories, tools, vocational skills, social status, family life, and, potentially, race relations (Morris, 2009). Creating a historical persona incorporates dimensions of non-formal learning, self-directed learning, and experiential learning.

A review of the literature indicates the term “first-person living history”, of which PLH is a component, is largely unrecognized in educational research both in the formal and informal realm. Examples of participatory living history curriculum exist, but evidence of classroom use and effectiveness is anecdotal at best (Chilcoat, 1996; Daniels, 2010; Morris, 2002, 2009).

Youth history camps organized by non-profit organizations such as living history museums and history associations, as well as for-profit groups, include living history interpreters. However, participatory living history is limited even in these settings. Often theater groups cast young actors in historical roles with period costume (Jackson, 2000), but appear to fall short in self-directed and holistic learning.

Even so, PLH in theater can have a motivational effect on historic learning through first-person interpretation, as it can provide students with an opportunity to develop a deeper understanding of the historic period than learning in the traditional classroom (Goalen & Hendy, 1993; Jackson, 2000), and may heighten student enjoyment of history education (Otten, Stigler, Woodward, & Staley, 2004). Playing a role assists
students explore the perspectives of historical figures by temporarily adopting these perspectives as their own (Cruz & Murthy, 2006). Such experiences elicit strong emotional ties to the character and can deepen student understanding of the event or issue by arousing curiosity and stimulating imagination (Kelin, 2005).

Participatory living history is more common in re-enactment organizations (Hunt, 2008). Hunt (2004), from the University of the West of England, interviewed 32 historic re-enactors and surveyed 96 more. Surprisingly, over 1500 adults actively participate in American Civil War Re-enactments in England. The experiential activity of dressing the part in historic study is appealing to adults and ‘living history’ in detail, including camp life and daily routines, is important to those of a higher education level. Simply participating required members to have a specific understanding of the historical period and material culture and most joined for their own educational fulfillment. Improvement in authenticity takes place through peer evaluation and discussion and a minority of members remain active to pursue scholarship and historical research (Hunt, 2004). While education of the public is one goal of participatory living history, those learning the most are the living historians themselves.

Drawing from 20 years of elementary teaching experience and 15 years as a professor of education for undergraduate college students, Robert Morris (2009) writes that first-person presentations created by school children encourages historical empathy where the student understands a character in the context of the period. This understanding exposes the many facets of complicated issues rather than the traditional rote memorization of facts and dates. The views of people often excluded from the
debates and narratives are also uncovered thus exposing a variety of perspectives. First-person presentations by students, along with any available artifacts, assist in cognitive retention, context, and contemporary ideas (Morris, 2009).

The 4-H Western Heritage Project

The 4-H Western Heritage Project is a combination of 4-H Shooting Sports and a study of the American frontier West from 1860-1900. Like all 4-H projects, experiential learning is the foundation of the 4-H Western Heritage Project and incorporates PLH to address many of the factors research identifies as instrumental in increasing student interest in social studies and developing that interest into personal interest. Members engage in self-directed learning, cooperate and collaborate among peers, have opportunities for peer and adult acknowledgement, role-play, and use their personal creativity.

By making period correct clothing, creating leather goods, exploring personal family genealogy, digitally mapping immigrant or cattle trials, cooking frontier foods using period correct cookware, and learning fairness, honesty, and loyalty through “cowboy ethics”, 4-H Western Heritage Project members vicariously become a piece of the past.

The project is administered within Montana by the 4-H Center for Youth Development at Montana State University and directed locally by trained volunteer adult instructors. Youth, ages 9-19 years old, voluntarily enroll and learning activities take place during out-of-school hours. Youth members immerse themselves in the history of
the American frontier period by dressing in authentic reproduction clothing, using the tools of the era, engaging in hands-on learning activities, and competing with authentic style firearms.

The competitive shooting component often provides the situational interest that attracts young people to the project. Extensive training in the safe and responsible use of firearms takes place before members compete. After exhibiting exacting safety competencies, older members engage steel targets with period correct sidearms, rifles, and shotguns. Younger members compete with long guns only. Scoring is based on the time, to hundredths of a second, from the initial buzzer to the last shot. A five-second penalty is added to the competitor’s time with each missed target. Other errors, such as engaging the targets out of order, results in a ten second penalty. Instructors certified in the discipline shadow competitors throughout the entire loading, shooting, and non-loading sequence to ensure safety.

Participation in the shooting discipline requires wearing period dress, which becomes more authentic with age and experience. Competitors must also interview with a clothing judge and take a written history exam. The interview not only exposes the 4-H member’s knowledge of period dress, but also assists in the development of communication skills that may become all the more relevant in future scholarship and job interviews. There is no requirement to possess a complete period outfit. The 4-H member is expected to, however, explain the deficiencies of their attire if such deficiencies exist. The written exam provides an opportunity for youth participants to
draw upon the historical knowledge they have retained through participation in the project.

Neither the interview nor the written exam have any bearing on 4-H membership. However, a combination of shooting, interview, and exam scores determine final competition scores. This approach is taken so that historical knowledge remains significant to the shooting aspect of the project and not disregarded as irrelevant to becoming a potential champion. For example, the 2014 National Champion was not the fastest or most accurate shooter, but overcame his opponents due to his exam and interview scores. In order to succeed in competition, 4-H members must draw upon their experiences gained throughout the project year.

Supporting curriculum includes an adult leader guide, a youth activity guide, and a website companion to complement the written materials. Individual programs utilize the nationally standardized curriculum, but often supplement with materials or topics related to local history to provide ethnic and regional relevance.

The concept for the adult leader guide began as a pamphlet intended for youth that highlighted significant figures in American firearms history and their inventions associated with the frontier West. A trip to the Pioneer Museum in Bozeman, Montana resulted in photographs of period firearms and research in the works of leading author/historians assisted in the development of biographical text related to the inventors.

The Pioneer Museum curators recommended the archives of other museums as a resource for further artifacts and the pamphlet expanded to a 160 page, coffee table styled, full color book written at an adult reading level. The book, entitled *Montana*
Western Heritage Project: Firearms, Gunleather, and Attire of the Frontier West 1860-1900, consists of six chapters describing Old West sidearms, rifles, shotguns, holsters and other leather goods, a description of hats, boots, and chaps, and, finally, a chapter on men’s and women’s period clothing (Kesner, Abbot, & Andersen, 2011). Stories of prominent historical figures include Samuel Colt, Oliver Winchester, the Remington family, Smith and Wesson, Eli Whitney Jr., John Stetson, Levi Strauss, and a general account of the social dictates of women’s fashion. Ultimately, the completed book documents artifacts from 18 museums, as well as numerous private collections, and provides a foundation for the creation of a historical persona representing an inhabitant of the frontier in clothing, accoutrements, and firearms. Useful as a teaching guide, the coffee table design is also appealing to the general public and book sales assist in funding the 4-H Western Heritage Project. The book is currently available through Montana State University Extension Publications.

The development of the 4-H Western Heritage Project Youth Activity Guide, Levels 1-3 (Kesner & Abbot, 2013) took place shortly after the completion of the Montana Western Heritage Project book and provides 4-H members with a criterion for advancement in the project through experiential activities and self-directed historical study. Member progression is divided into three levels of increasing challenge and each level is further divided into bite-sized sub-levels so that advancement is both perceptible and readily attainable.

Each level begins by requiring members to identify three goals: a shooting goal, a clothing or accessory goal, and a historical knowledge goal. The first two goals may
involve improvement in either skills or knowledge while the third goal necessitates scholarly achievement. Utilized as a workbook, levels include pages of fill-in-the-blank or matching exercises focused on firearm safety and shooting, gunleather, and period dress in the same sequence this information is provided in the leader curriculum. Succeeding levels require a deeper understanding of each topic.

Each level of the Youth Activity Guide concludes with dozens of experiential activities and self-directed research assignments. In order to advance to the next level, members must complete three required activities and nine electives under the general categories of Historical Inquiry, Firearms and Shooting, and Clothing and Accoutrements. In these activities, 4-H members may explore the similarities and differences between two historical figures, investigate 19th century technology, study Native American leaders, describe the roles of women on the frontier, determine the authenticity of Hollywood westerns, learn the origins and history of natural fabrics, research the science of historic propellants and projectiles compared to modern ballistics, or inquire into many other cultural or technological topics of the American frontier period.

The website companion, found at www.4-hwesternheritageproject.org, contains labeling and matching games as well as instructions for completing activities too detailed to print in the Youth Activity Guide. In addition to providing supplemental materials, the website is also a central location to announce state, regional, or national events and learning opportunities.
Through the use of this established national curriculum, the project contains elements of non-formal education. There is, however, ample freedom within the curriculum for self-directed learning. Youth create a historical persona of their choice from 1860 to 1900 and develop an authentic life around this persona. This may include a fitting profession, a lifestyle suitable to the character, proper attire, and developed personal history including birthplace, age, and family. Learning is self-directed based on personal interest within the historical Old West period.

Members also pursue topics of personal interest and research those topics through inaction with literature, museum visits, interviews with historians and other adults, archival research, film, and photographs. Experiential learning and historic interpretation are accomplished through artifacts, resources from multiple cultural perspectives, role playing, group discussion and collaboration, genealogy research, public presentations, visits to museums and historic sites, and hands-on activities in areas such as leathercraft, foods, sewing, and woodworking. Teaching strategies include cooperative group activities, goal setting, computer learning games, internet research, hands-on projects, interviews with family members, and peer instruction.

Members showcase completed projects through public presentations or, if digitally created maps or storyboards, upload their project to the 4-H Western Heritage website. This approach creates a venue where projects are viewable by youth across the state and nation. Furthermore, including curriculum activities in social studies that relate to students personally, allows for cooperative learning, and provides a variety of choices.
for student study, all major goals of the 4-H Western Heritage Project, can foster continued growth and expansion of interests (Wade, 2002).

Erekson (2011) writes that “doing history” is much more than passing out photocopies of primary sources and sending students into historical archives. Students need to have “transformative experiences” through many resources (Erekson, 2011). In the 4-H Western Heritage Project, youth are encouraged to consider their homes and families as a resource and source of perspective. An old box of photographs, antiques, treasured documents, wedding dresses, conversations with family elders, diaries, and maps all provide relevance and are clues to personal genealogy and a sense of place (Erekson, 2011). Through participation in the experiential learning approaches found in the curriculum of the 4-H Western Heritage Project, youth become living historians rather than members of a passive audience. This is the distinction between common living history instructional approaches and participatory living history methodologies where situational interest may be transformed to sustained interest thus providing an opportunity for the development of personal interest.

Since the creation of a small inaugural program in 2008, the 4-H Western Heritage Project has expanded across Montana and into six other states with additional interest expressed by many more youth, parents, and 4-H faculty in the eastern United States as well as the West. Demonstrations at national 4-H events, the distribution of curriculum materials to fellow Land Grant Universities, and media attention resulted in requests for 4-H Western Heritage training. Montana State University Extension faculty and volunteer instructors have conducted three and four-day trainings in Missouri, Texas,
Oregon, and New Mexico. Many of these trainings drew faculty and volunteers from a multi-state region. This widespread appeal of a historically based educational program for youth stands in sharp contrast to the interest shown by youth traditionally studying history in a formal educational setting and serves as the impetus for inspective research.

Applying the 4-H Experiential Learning Model and Kolb’s Experiential Learning Theory, the 4-H Western Heritage Project affords youth to experience, reflect, conceptualize, and apply. Each experience builds upon the last as both domain knowledge and human emotion are revealed in the perspectives of many experiences, sources, cultures, and viewpoints. Learning through the 4-H Western Heritage Project is an interpretive process for youth where “knowledge is created through the transformation of experience” (Kolb, 1984).

Taken in full, the 4-H Western Heritage Project encompasses many of the facets indicated as important to effective learning. The experiential approach allows for self-directed learning, cooperation and collaboration among peers, opportunities for acknowledgement, role-playing, creativity, and an enthusiastic instructor who can provide guidance and embellish the stories of history. Each facet is recognized as key to not only learning social studies, but also instilling intrinsic motivation through individual interest. Furthermore, 4-H members in the Western Heritage Project have an opportunity to immerse themselves in a slice of American history with all its success, failures, and racial and social issues so they might learn from the past before they take the reins of this democracy in the future. The engagement and sustained enthusiasm of the youth enrolled
in the project suggests a PLH instructional methodology may be an effective approach to learning history.
CHAPTER THREE

METHODOLOGY

Introduction

Educational research and assessment indicates a vast majority of primary and secondary students perform below the proficiency level in U.S. history and find social studies disinteresting, unimportant, and irrelevant (NAEP, 2010; Taylor & Duran, 2006; Zhao & Hoge, 2005). This lack of interest and perception of irrelevancy increases with age and grade level (Schunk, Pintrich, & Meece, 2008; Shaughnessy & Haladyna, 1985) and may be more related to the traditional teaching methodologies of lecture, textbook reading, and rote memory associated with social studies than the subject itself (Cervone, 1983; Zhao & Hoge, 2005). Teacher enthusiasm and quality of instruction also play a role in engaging student interest (Covington, 1999; Larkins & McKinney, 1982; Ormrod, 2011).

A more student-centered approach to history education, often found in non-formal learning environments, can elevate interest in social studies (Askell & Lawson, 2001; Hidi & Harackiewicz, 2000). Students report a higher level of interest in social studies when allowed pursue individual interest and participate in active and interactive learning activities such as role playing, group discussion, peer collaboration, simulations, game playing, creating projects or reports, and having the opportunity to express personal opinions (Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991).
Previous research has found that student interest is a key component in the learning process (Schunk, Pintrich, & Meece, 2008; Weber & Patterson, 2002) and interest can arise from initial encounter when something novel, surprising, enjoyable, or curious occurs (Ainley, 2006; Ormrod, 2011). If interest is maintained, students may develop an intrinsic personal interest in the subject (Brophy, 2004; Harackiewicz et al., 2008; Schunk, Pintrich, & Meece, 2008).

Experiential teaching methodologies incorporate many of the factors that contribute to sustained interest in learners (Kolb, 1984; USDA, 2011). One way of incorporating experiential learning in history education is through participatory living history (PLH) where students become the living historian by first-person representation of a character from the past. Through the preparation process, students must develop knowledge in all aspects of the character from textiles to social status and contemporary opinions (Morris, 2009). A PLH approach may assist students in gaining a deeper understanding of the historic period than through traditional classroom learning (Goalen & Hendy, 1993; Jackson, 2000). Currently, anecdotal evidence suggests that teaching history through a PLH methodology may maintain student interest and can lead to the development of personal or individual interest in history. However, little empirical research has been conducted to investigate its effectiveness (Chilcoat, 1996; Daniels, 2010; Morris, 2002, 2009).
Purpose Statement

Irish statesman Edmund Burke (1790), whose philosophy was instrumental in shaping the thoughts of the American Founding Fathers, wrote, "In history, a great volume is unrolled for our instruction, drawing the materials of future wisdom from the past errors and infirmities of mankind."

Few would disagree that there are lessons to be learned from history and, in the context of lessons, learning history becomes all the more important. And yet, if given the chance, students would avoid taking a history class (Haladyna & Shaughnessy, 1985). While lecture and textbook reading have a valuable place in history education, learning history can also be active, experiential, enjoyable, and attractive to youth (Boardman, 1997; Otten, Stigler, Woodward, & Staley, 2004).

One experiential approach to history education is living history interpretation, which can transport learners to the time and place of the historic character (Wilkening, 2008) and adds meaning to the educational experience (Bruno-Jofre’ & Schiralli, 2002). Participatory living history goes one step further by putting the learner in the role on living historian where a wealth of experiential learning takes place. Anecdotal and limited educational research indicates student interest and deeper understanding of history and historical context can result from PLH experiences (Kelin, 2005). Stronger empirical evidence, however, is needed. This study examined if PLH methodologies influence student interest in learning history and identify the elements of PLH that support any changes in interest in a non-formal setting.
Research Questions

After participating in a PLH approach to learning history for at least one year;

(1) Do youth report changes in interest in history?

(2) What elements of PLH do youth identify as most relevant to their interest in history?

This study investigated PLH methodologies contained within the 4-H Western Heritage Project, an experiential history education program for youth ages nine to nineteen years old, to measure student self-perceived changes in interest in history and identify the specific teaching approaches youth find most relevant.

Members with at least one year of enrollment in the 4-H Western Heritage Project were asked to rate their level of interest in learning history both as a current participant in the project and then retrospectively as they perceived their interest before taking part in the PLH program. This post-test/retrospective pre-test repeated measures design was implemented to determine self-reported changes in interest in learning history among youth since participating in the 4-H Western Heritage Project. Descriptive statistics identified the specific learning activities members rated as most relevant.

Design

A descriptive and repeated measures post-test/retrospective pre-test survey was used to address the research questions. The first section of the survey asked participants to rate instructional approaches utilized within the 4-H Western Heritage Project related to key factors of interest as identified in the educational research literature. These factors
include self-directed learning, experiential learning, individual creativity, role playing, and the enthusiasm of their instructor.

The second section measures self-reported changes in youth perceptions by asking participants to rate their level of agreement or disagreement to statements regarding cognitive and behavioral factors related to interest in history. Subjects first responded as a current member in the 4-H Western Heritage Project and then again by recalling their perception before participation in the 4-H Western Heritage Project.

Descriptive statistics were used to analyze responses to the first section of the survey instrument where participants rate the instructional approaches related to interest they experienced in the project. To analyze data from the second section of the survey instrument, a paired samples t-test was calculated to determine any significant differences between the means of the post-test responses and the retrospective pre-test responses. Further analysis was planned, but the sample size was too small to determine if significant differences occurred between the posttest and retrospective pre-test mean responses by group such as years of participation in the 4-H Western Heritage Project, age, and state of residence. Finally, a correlational analysis investigated if any relationships exist between cognitive or behavioral changes and instructional methodologies.

Survey Development

Survey development was based on interest indicators identified in the literature as well as informal observations and verbal feedback provided by 4-H members enrolled in
the Montana 4-H Western Heritage Project over the past six years. Indicators of increased interest in history were identified as self-directed study, pointed questions to instructors, voluntary visits to museums and historic sites, self-motivated reading, interviews of elderly family members, and personal pursuit of historical authenticity in clothing and accoutrements. These indicators are related to the educational research literature as student preferred methods of learning history (Cervone, 1983; Fink, 2001; Haladyna, Shaughnessy, & Redsun, 1982; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991; Zhao & Hoge, 2005).

The survey instrument begins with a few demographic questions to determine the number of years the 4-H member has participated in the 4-H Western Heritage Project as well as age and gender. There was no request for names or other identifying information.

The descriptive portion of the survey contains a list of activities implemented in the project meetings and asks respondents to rate the importance of project activities on a scale from one to seven. This provided an indication as to the perceived importance of each activity.

The final portion of the survey is a retrospective section where 4-H members are asked to respond to several statements in two ways. First, they report their perceptions of history education after at least one-year’s participation in the project and second, they recall their perceptions before joining the 4-H Western Heritage Project. The same seven-point scale was used to compare before and after responses. Placing the columns for post-test and then retrospective pre-test responses side by side allowed participants to
compare their scores in each column to more accurately indicate their self-perceived levels of change.

**Survey Validity**

When evaluating the effectiveness of educational programs, self-report instruments are common and accepted measures of change (Alreck & Settle, 2004). In addition, educational research supports the notion that a post-test/retrospective pre-test survey carries more validity than a true pre-test/post-test instrument (Goedhart & Hoogstraten, 1992; Howard & Dailey, 1979; Howard, Dailey, & Gulanick, 1979; Lam & Bengo, 2003; Pratt, McGuigan, & Katzev, 2000).

Studies have found that when responding to a pre-test before an educational program has occurred, participants often over-estimate what they know, only to come to the realization after the program that they knew less than they previously believed (Howard & Dailey, 1979; Howard, Dailey, & Gulanick, 1979). If this is the case, changes in attitudes and behavior between the pre-test and post-test responses narrow due to the artificially high pre-test responses. This phenomenon is labeled response shift bias and contributes to potential validity issues (Howard & Dailey, 1979; Howard, Dailey, & Gulanick, 1979).

In a survey development study, Lam and Bengo (2003) compared three instruments designed to measure change in participants due to educational practices. These instruments included a perceived change model, a post-test plus perceived change model, and a post-test plus retrospective pre-test model. Each model was designed to
minimize response shift bias. The perceived change model asked participants to simply rate their level and direction of change after an instructional program concluded. The post plus perceived change model asked participants to respond to a post-test as well as estimate the level and direction of change due to an instructional program. The post plus retrospective pre-test model asked participants to respond to a post-test and again to a retrospective pre-test. Data analysis revealed the post-test plus retrospective pre-test model as most effective in reducing response shift bias.

Pilot Testing the Survey Instrument

Investigation into the validity of the instrument designed for this study took place though a pilot test of 23 youth in the Montana 4-H Western Heritage Project. Participants in this pilot study were 4-H members from eight rural communities and two urban communities in five counties in Montana enrolled in the 4-H Western Heritage Project for at least one year. Member ages ranged from 9 years old to 19 years old with about a third being home schooled and two thirds enrolled in public schools.

An initial survey instrument (Appendix A) was developed with input from 4-H colleagues and Department of Education faculty at Montana State University and then administered by project instructors in each location. Matched pair t-test results indicated significant positive change (p<.01) for each of the retrospective pre-test/post-test statements.

Effect size ranged from a low of d=.317 to the highest being d=1.249. Two statements related to family, “My family history is important to me” (d=0.365) and “I have in-depth conversations with adults in my life” (d=0.345), as well as a third
statement, “I watch television shows about history topics” (d=0.317), had small effect sizes thus indicating any changes in behavior were only slightly related to PLH methodologies.

Moderate effect sizes were calculated for the statements, “I can see a connection between the past and today” (d=0.639), “I like visiting museums and historic sites” (d=0.613), and “I use the internet to find information about historic subjects I like” (d=0.544). All other statements received effect sizes larger than d=0.7. The strongest effect sizes were found for the statements, “History is important to me” and “History is ‘real’ to me”. Both with calculated effect sizes well over d=1.0.

Considering a sample of only 23 respondents, many of whom indicated a priori interest in history, no statements were discarded based on effect size. Considering the low effect sizes of the family related statements, it is probable that many participants grew up with strong family ties and, while participation in the 4-H Western Heritage Project may have slightly redirected their focus, it did not initiate many new family connections. A strong priori interest in history also may have also skewed the statement related to television programming preferences.

Ideally, a factor analysis would be run to assist in the further refinement of the survey statements. The sample size of 23 participants responding to a survey instrument of 23 statements, unfortunately, did not suffice for a meaningful factor analysis. Reliability, however, was calculated with a sufficient Cronbach’s alpha (α = .879) larger than the accepted threshold of α = .70 (Morgan, Leech, Gloeckner, & Barrett, 2011). As
a whole, the statistical analysis of this trial survey did not reveal the need to make major changes to the pilot instrument.

**Qualitative Follow-up Pilot Study**

As a follow up to the quantitative pilot study, a qualitative pilot study provided a deeper understanding of the cognitive process engaged when participants responded to the previously administered pilot instrument and what these responses meant to students. The study also recorded the expressed perceptions of parents and compared this data to youth perceptions for consistency or contrast.

The Gallatin County, Montana 4-H Western Heritage Project group supplied the participants for the qualitative pilot. This group is the first 4-H Western Heritage club in the country, has the most experience in the project, and was also the most accessible for research. The club consists of 26 members ranging in age from 9 to 18 years old. Some were first-year members while others had participated for six years. Seventeen members met the criteria to qualify for this study with participation in the project for at least one year.

Four youth participants were purposefully selected based on a wide range of involvement. One exhibited a strong degree of self-directed historical study, another had a modest degree of self-directed historical study, and two fell somewhere in between based on progress in the curriculum activity guide related to the project. One youth participant was female and three were male. Two youth participants were home schooled and two attended public school. Demographic information was collected to adequately describe the study participants including gender, age, ethnicity, and years of involvement.
A parent of the highly active youth and a parent of the moderately active youth were also purposely selected.

Interviews served as a primary source of data and interview questions were designed to shed light on youth perceptions toward learning history and the validity of the quantitative survey questions. Of the ten question survey, the first two questions set a baseline of student interest in learning history and the instructional approaches encountered in their formal education. The next three questions investigated each subject’s self-perception of learning history after experiencing the PLH teaching approaches in the 4-H Western Heritage Project. The final five questions probed for deeper meaning behind student’s personal perspective concerning the importance of history and why, if history felt real to them, and the connections each respondent saw between the past and today.

Of the four students interviewed for this study, three had a strong priori interest in history before joining the 4-H Western Heritage Project. Only one student expressed a moderate level of interest and this was consistent with the perceptions of the participant’s parent. Regardless of a formal learning environment in the classroom or a more flexible approach in a home-school setting, all of the interviewees learned history through the traditional approaches of textbook reading, lecture, watching videos, and note taking.

Two research questions framed the design of the pilot qualitative study. The first concerned youth perceptions and the second related to the validity of the previously implemented quantitative research instrument.
1. How do middle school and high school aged 4-H member’s experiences in the 4-H Western Heritage Project influence their meanings, attitudes, and behaviors toward learning the history of the American frontier?

2. How are 4-H member’s perceptions of their understandings and experiences with learning history represented by their responses to the 4-H Western Heritage Project member survey?

Five main findings emerged from the data analysis. First, through the project, students developed an appreciation for the past and the people who lived in 1800s society. Participants expressed a deep appreciation for the people of the past when learning how different life was in the 1880s without the advantage of today’s technology. Second, the modern lifestyle enjoyed today is a result of an accumulation of knowledge throughout history. Each participant felt modern conveniences sprang from the seeds planted in an earlier time. Participants believed much of the conveniences we take for granted today began in the past and were continually improved upon step by step.

Third, history teaches lessons applicable to today’s world. Each participant recognized history as a source of examples that can inform today’s society. To participants, understanding today’s issues in the context of history is similar to opening a lesson book on what to do and what not to do.

Fourth, participants indicated increased interest in history due to the influence the 4-H Western Heritage Project. For the 4-H members with a strong prior interest in history, the 4-H project enhanced that interest. The parent of a 4-H member with high priori interest expressed an observed increase in interest in history in his child. This
parent also attributed his child’s success in the Montana history section in school to his participation in 4-H. The parent of a child with moderate priori interest in history saw that interest in history increase through self-directed study and mentoring younger children in history education.

Youth behavioral changes included the study of authentic frontier fashion, engaging in lengthy conservations or interviews with family elders, and, for one student, an appreciation for passed-down family heirlooms.

When participants were asked how their perceptions of their understandings and experiences with learning history were represented by their responses to the 4-H Western Heritage Project member survey, responses returned to appreciation of historic times, the accumulation of knowledge, and lesson to be learned from the past. Participants also felt participation in the 4-H Western Heritage Project made history seem “real”. Common elements contributing to realism included authentic artifacts, role-playing, and taking an interest in family heirlooms, and ancestral inquiry. Listening to oral history also provided a glimpse of the past from the experiences of someone long deceased. Role-playing brought history to life by pretending to be a character of the past with authentic clothing, period correct accessories, firing historic firearms, and even the through the mock backdrops made to look like frontier buildings at shooting competitions. Participants expressed they felt placed back in time when completing hands-on activities in the same manner as people in the past. As one participant noted, “It’s kind of like you were there a little bit.”
All participants saw a connection to the past. As one student remarked, “If certain things didn’t happen a certain way, what would be different from then and now?”

The National Council for History Education identifies the cognitive bridge between the past and the present as “history’s habits of mind” where the significance of the past assists in shaping the present. Students begin to understand past events as they might have been perceived by the people of the time while reflecting on the connection between yesterday and today (NCHE, 2015).

Finally, consistent with the related literature, this qualitative pilot study revealed that members in the 4-H Western Heritage Project prefer an experiential approach to learning history (Cervone, 1983; Perricelli, 2008; Stodolsky et al, 1991; Zhao & Hoge, 2005). Wearing period correct clothing, using authentic reproduction firearms in shooting competitions, performing tasks by hand, and including family oral history into the learning process brought enjoyment, aroused curiosity, motivated self-directed learning, and added relevance to the study of history.

**Adjustments to the Survey Instrument**

Additional investigation into post experience plus retrospective pre-experience design revealed the importance of arranging survey statements in an order that enhances respondent recall of activities experienced in the educational program (Pratt, McGuigan, & Katzev, 2000). In light of this research supported recommendation, the second section of the pilot survey, which asked respondents to rate the importance of seven teaching methodologies incorporated into the 4-H Western Heritage Project related to interest, was
moved ahead of the retrospective section. Recalling these methodologies may better prepare each participant for the post-test plus retrospective pre-test section.

Furthermore, research recommends that the post experience statements precede the retrospective pre-experience statements (Goedhart & Hoogstraten, 1992; Howard & Dailey, 1979; Howard, Dailey, & Gulanick, 1979; Lam & Bengo, 2003; Pratt, McGuigan, & Katzev, 2000). Participants should first respond from the perspective of completing the educational program and then respond from the perspective of their cognition and behavior before entering the educational program. This order was reversed in the pilot quantitative survey, but was corrected in the final survey.

Finally, research experts reviewed the pilot survey and suggested the inclusion of more specific language in statements containing the words “racial issues” or “minority roles”. The experts believed that identifying racial or minority groups as African Americans, Native Americans, Chinese immigrants, Mexican Americans, and women would help to reduce ambiguity in the minds of youth.

No instrument is beyond reproach. Validity can only be described is a preponderance of evidence suggesting validity and a substantial effort was been made to validate the survey designed for this study. Despite a factor analysis not being possible due to a small sample size in the pilot study, the combination of analyzing the pilot data, conducting a qualitative follow-up study with youth and parents, the consistency of insights between pilot participants and the literature, and employing the editorial expertise of faculty members at Montana State University lends to a strong internal validity of the quantitative survey instrument.
Sampling

All members of the 4-H Western Heritage Project with at least one year of participation comprise the population for this study. This population does not exceed 90 youth across the country. Therefore, the solicitation of responses from the entire population is feasible and eliminates the need to utilize a random sampling technique to reduce the chance of sampling error. However, data analysis by respondent age and experience reduced the numbers in each category to a point where validity was compromised. Therefore, no assertions could be made concerning categories with low participant representation.

To be enrolled in the 4-H Western Heritage Project, members must be nine to nineteen years old. Participation is completely voluntary and parental involvement is both encouraged and largely present. Indicated by 4-H enrolled data, boys are slightly more attracted to the project and make up approximately 65% of the participants. Instruction takes place in a group setting with no segregation by gender, age or experience level. Older youth are often encouraged to teach and mentor younger members while assisting adult instructors. Only the shooting competition separates members into divisions based on the age appropriateness of specific firearm use. For example, members under 12 years old may only compete with long guns of small caliber.

The Montana program is in its seventh year and is the longest running program in the country although some counties in Montana are newer to the project. Missouri has the second longest running program with a five-year tenure while Oregon places third with two years of participation and Alabama, Oklahoma, Kansas, Colorado, and Idaho
each have beginning programs. A handful of Texas 4-H faculty and volunteers received training shortly after Missouri, but follow through has been severely limited. Most of the survey respondents are expected to be from Montana, Missouri, and Oregon. Colorado’s and Oklahoma’s implementation of the project has been rapid and strong potential existed for responses from both states.

Grants, fundraisers, and sponsorships provide funding to eliminate financial barriers for participants. However, despite efforts to reach Native American and other underrepresented minority populations, participation remains primarily white youth from middle class families. Parents and volunteer instructors range in education level from high school graduates to university faculty with terminal degrees.

Place of residence of respondents is almost universally small town and rural locales. Urban and inner-city program do not exist due to the requirements of the shooting portion of the project. While it is not impossible to accommodate urban youth, shooting sports, including the 4-H Western Heritage Project, continues to be a primarily rural activity.

**Internal Validity**

Internal validity refers to the degree to which the changes in this study can be attributed to the work of the program rather than other possible causes or alternative explanations (Gay, Mills, & Airasian, 2012). There were multiple threats to internal validity that were addressed in the design of this study in order to increase the internal validity of the findings. First, concern has been expressed regarding the ability of youth
to accurately respond to a retrospective-single use survey. A true pre and post survey would have addressed this potential problem; however, it would have introduced further problems such as the effect extraneous variables, participant drop-out, participant maturation, pretest interaction, statistical regression, and response shift bias.

Measuring interest in history of a control group of youth not participating in the 4-H Western Heritage Project and comparing levels of interest to youth enrolled in the project may suggest a higher interest among 4-H members. The possibility, however, that 4-H members in the project have a pre-existing interest in history may foreshadow the results. If a higher interest in history education is observed in 4-H members, it may have little to do with participation in the project. Thus, this study chose to involve peers in the creation of a new survey instrument in order to increase both reliability and validity. Experienced researchers provided alternative interpretations of the statements on the survey and perspectives on the format of the instrument itself. Integrating this feedback into the survey design led to improvement.

Many extraneous variables may contribute to the general like or dislike of learning history among 4-H members that may not be related to project participation. Youth enrolled in a history education project may have a deep prior individual interest in history that creates an impetus to participate. Implementing a post-test plus pre-test retrospective survey addresses this issue by measuring interest both before and after engagement in the project by identifying respondents with strong initial interest.

Other conceivable threats to internal validity include parental support and encouragement, positive experiences in formal classroom settings, variability of the
quality and enthusiasm of 4-H instructors from project group to project group, movie, television, or other media releases containing historical characters or settings, world events, or the maturity level of the respondent. Each factor may influence the respondent’s interest in history independent of participation in the 4-H Western Heritage Project particularly if occurring during the study itself.

Every effort has been made to strengthen the validity of the survey instrument through peer review, pilot testing, and qualitative inquiry into the meanings of the self-reported data. Other possible validity threats are somewhat mitigated by the fact that the respondents live in different states, attend different schools, and have families with different leisure time preferences. Therefore, few respondents have the same influences to shape their perceptions as they might if a similarity of participant experiences away from the 4-H Western Heritage Project existed.

**Data Collection Procedures**

After IRB approval at Montana State University in Bozeman, Montana, the state 4-H office at the Land Grant University in each participating state was contacted to gain approval for participation. Nationwide familiarity with Extension Service colleagues is a true advantage when conducting research within the opuses of the Land Grant University and 4-H youth development system.

The state 4-H shooting sports coordinator served as the point of contact in each state due to their knowledge of both the 4-H Western Heritage Project and programs operating under their direction. With appropriate university endorsement, the state 4-H
shooting sports coordinator then disseminated, via email, IRB approved consent forms, the survey instrument, and written instructions to 4-H Western Heritage Project instructors within their state.

For the sake of convenience for the instructors and participants, consent forms and surveys were administered immediately following a regularly scheduled project meeting of the 4-H Western Heritage Project group. This allowed for both youth and parental review of the consent forms as well as an avenue for instructors to address any questions about the survey or the research purpose.

Once consent forms were signed and instructions made clear, the survey was read aloud to accommodate younger members with lower reading levels. Each respondent was reminded not to put his/her name on the survey and to record his/her opinions honestly without fear of disappointing any 4-H instructors, his/her parents, or the researcher. Upon completion, the surveys were gathered by the instructor and placed in a sealed envelope, and mailed to the Montana 4-H Center for Youth Development.

Completed survey instruments were coded numerically in the order of arrival and stored in a locked file cabinet in the Montana 4-H Center for Youth Development whenever data was not being recorded or analyzed. Computer files containing survey data and analysis were password protected through the study period.

Data Analysis

All data was recorded in an Excel spreadsheet with respondents coded numerically without relation to any information provide on the survey instrument. Any
cell within the spreadsheet representing a lack of response on the survey was left blank. All data was examined by the researcher to identify errors or irregularities.

With all the responses recorded, data was transferred to SPSS Version 23 for statistical analysis. Information identifying state of residence, age, years in the 4-H Western Heritage Project, gender, and race was utilized for categorical grouping only.

Descriptive statistics were run on data from the first section of the survey where no retrospective responses were required. The mean, range, and standard deviation of the data from each statement provided insight into the rating of PLH teaching methodologies contained within the 4-H Western Heritage Project.

The second section of the survey required a paired samples t-test analysis to determine significant differences between post-test responses and retrospective pre-test responses. Effect size calculations lent further insight into data by indicating the amount of change attributable to participation in the 4-H Western Heritage Project and the teaching methodologies found therein. Further separating the data between students entering the 4-H Western Heritage Project with a low priori interest in learning history and those entering with a high priori interest and calculating t-tests for each group proved unnecessary for significant differences between the means. Similar categorization and comparisons between respondents of different ages and between respondents with various years of experience in the project was not possible due to sample size. Such categorization could have assisted in making inferences as to whether or not the influence of PLH methodologies differ by gender and by years of experience. Further research is needed to discover factors related to any differences between groups. Finally,
correlational analysis investigated methodologies that have the greatest association with post-test responses of liking history and seeing the relevance of historical education.

**Methodology Summary**

The purpose of this study was to investigate changes in interest in learning history among youth 9-19 years old after experiencing PLH instruction. The study utilized a survey instrument designed specifically for use within PLH settings. The instrument underwent pilot testing, qualitative analysis, and statistically analysis to determine internal validity and reliability. The sample included 68.9% of the members of the 4-H Western Heritage Project with at least one year of experience with PLH methodologies in states with a functioning 4-H Western Heritage Project. Responses included only Montana and Missouri youth. The survey data was analyzed to produce descriptive statistics and paired samples t-tests. Correlational analysis examined the effective instructional approaches in PLH and student changes in interest in learning history.

Education research indicates a general dislike for learning history among youth when taught through lecture, textbook reading, and rote memorization (Perricelli, 2008; Taylor & Duran, 2006; Wade 2002; Zhao & Hoge, 2005), while the use of experiential methodologies may increase student interest in history (Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991). Limited research is available, however, to support the influences of PLH methodologies on changes in interest (Chilcoat, 1996; Daniels, 2010; Morris, 2002, 2009). The intent of the research conducted for this
dissertation is to add to the literature related to teaching history through the experiential methodologies of PLH.
CHAPTER FOUR

RESULTS

Introduction

Educational research suggests a non-formal, experiential learning approach to history education may increase student interest in social studies (Hidi & Renninger, 2006; Perricelli, 2008; Zhao & Hoge, 2005) while the traditional methodologies of lecture, textbook reading, and memorization are often uninspiring to students and may contribute to their perception of history as unimportant and irrelevant (Perricelli, 2008; Stodolsky et al, 1991; Taylor & Duran, 2006; Wade, 2002; Zhao & Hoge, 2005).

When applied to history education, experiential methodologies such as role-playing historical characters, group discussion, relating history to current events, providing authentic experiences, and active learning may enhance interest (Brophy, 2007; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008). Students with an interest in a subject often exhibit higher levels of attention, comprehension, memory, achievement, and in-depth analysis (Ainley, 2006; Hidi & Harackiewicz, 2000).

One form of experiential history education and the focus of this study is participatory living history (PLH) where learners develop a persona of a historical figure through dress, accessories, and tools as well as adopted vocational skills, social status, and family life. While PLH approaches to learning history have found limited use in formal and non-formal settings (Morris, 2009), little empirical research exists (Chilcoat, 1996; Daniels, 2010; Morris, 2009).
The purpose of this study was to investigate changes in interest toward learning history among youth engaged in PLH for at least one year in the 4-H Western Heritage Project. The 4-H Western Heritage Project is a comprehensive, experiential study of the frontier American West from 1860-1900 where PLH is an overarching approach to historical learning.

This chapter presents results from data collected and analyzed in order to answer two research questions:

After participating in a PLH approach to learning history for at least one year;

1. Do youth report changes in interest in history?

2. What elements of PLH do youth identify as most relevant to their interest in history?

**Preliminary Analysis**

Of the approximately 200 youth enrolled nationwide in the 4-H Western Heritage Project, only 90 were determined eligible to respond to the survey based on participation for one year or more. Of the 90 eligible members, 62 returned surveys for a return rate of 68.9%.

Typical response rates of mail surveys range from 5 to 10% with a return rate over 30% considered rare (Alreck & Settle, 2004). Even with the return rate of this study at 68.9%, concerns regarding non-response bias exist with a sample size of 62 respondents from a relatively small population of 90 subjects.
In an attempt to increase the sample size and decrease the chance of non-response bias, both 4-H faculty and 4-H leaders in each state were contacted four to five times with follow-up emails, text messages, and personal phone calls requesting completed surveys. Using multiple reminders urging participant response is a commonly accepted practice in survey research (Dillman, 1991). This raises a few ethical questions, however. When does coaxing and persuasion become coercion in the mind of the subject when the subject consent form clearly states participation is voluntary? At what point do nonresponsive subjects feel their right to anonymity is violated? And at what point will pressuring a response cross the line and cause the researcher to dishonor his or her pledge to responsible social and behavioral conduct in research? From the viewpoint of validity, will repeated coaxing and the expressed importance of completing a survey influence the responses of the subject? The answers to these questions are beyond the scope of this study. Although potential participants were not directly encouraged to respond by the researcher, one has to wonder if an overzealous quest to increase response rates, through the coaxing of intermediary adults, reflects poorly on the ethics and validity of the research.

Studies have found that those not responding to a survey may not necessarily represent a non-response bias (Dey, 1997; Dillman, 1991; Krosnick, 1999; Sax, Gilmartin, & Bryant, 2003). Hutchison, Tollefson, and Wigington (1987) surveyed the attitudes of three groups of freshmen enrolled in an English composition class at a moderately sized mid-western university. The first group was surveyed in class with a response rate of 100% of those in attendance. The second group received a survey by
mail with a response rate of 35%. The final group, selected from the non-respondents in the mail survey group, received the survey by telephone with an 83% response rate. Analysis of the mean attitudes of the respondents in each group found no significant differences regardless of response rate or sample size.

To strengthen the argument against non-response bias, it is helpful to compare characteristics of respondents to those of non-respondents (Dey, 1997; Whitehead, Groothuis, & Blomquist, 1993). This is often difficult, however, since the characteristics of non-respondents are seldom known (Dillman, 1991; Dey, 1997). Even so, in the case of this study, the population largely shares similar characteristics. All are 4-H members with ages ranging from 10 to 19 years old, residents of rural or small town communities as indicated by 4-H enrollment data, well connected and comfortable with their 4-H leadership as witnessed anecdotally at state and national events, and accustomed to providing feedback (a routinely encouraged practice in the 4-H program).

If possible, distinguishing those not responding due to inaccessibility from those not responding due to refusal also assists in determining non-response bias. Those refusing to return a survey often harbor characteristics different from both those who did respond and those who were inaccessible (Stinchcombe, Jones, & Sheatsley, 1981). Based on input from 4-H faculty in each state, non-response was due to inaccessibility such as project groups not meeting during the research period or a lack of immediate importance to the respondents. No eligible 4-H member or their family expressed a refusal to respond to the 4-H faculty or volunteers assisting in this study.
As another strategy to investigate non-response bias, some researchers suggest comparing the data of early responders to that of late responders who returned surveys only after multiple appeals. These late responders are more likely to have characteristics similar to non-responders (Hutchison, Tollefson, & Wigington, 1987; Stinchcombe, Jones, & Sheatsley, 1981). To determine if significant differences exist between early and late respondents, the Statistical Package for Social Sciences version 23 (SPSS) was used to calculate independent sample t-tests on the means of the first ten respondents compared to the means of the last ten respondents on a selection of statements. Chosen statements included 1-7, due the focus on learning approaches, and statements 8, 9, 15, and 23 addressing an overall perception of learning history. The analysis produced no significant differences between the means of early and late responders (t < 2.101). The fact that all early responders were from Montana and all late responders were all from Missouri, and no significant differences were found between the means, only strengthens the argument against the presence of non-response bias. Results of the analysis are shown in Table 1.

Table 1 – Independent T-test for Non-response Bias of Early and Late Responders.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Respondents</th>
<th>n</th>
<th>df</th>
<th>Sig (2-tailed)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is important to me to pick my own topics to learn more about.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.703</td>
<td>.387</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I learn from the activities in the project.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.591</td>
<td>-.548</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My friends in the project help me learn.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.259</td>
<td>-1.168</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1 – Independent T-test for Non-response Bias of Early and Late Responders - continued.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Respondents</th>
<th>n</th>
<th>df</th>
<th>Sig (2-tailed)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. I can use my creativity when studying history in the project.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.613</td>
<td>-.514</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.514</td>
<td>.514</td>
</tr>
<tr>
<td>5. Playing the role of a historical character helps me learn history.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.610</td>
<td>-.519</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.519</td>
<td>.519</td>
</tr>
<tr>
<td>6. Wearing old-fashioned clothes helps me learn history in the</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.873</td>
<td>-.162</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.162</td>
<td>-.162</td>
</tr>
<tr>
<td>7. My 4-H leader in the project inspires me to learn history.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.385</td>
<td>.889</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.889</td>
<td>.889</td>
</tr>
<tr>
<td>8. History is important to me.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.785</td>
<td>-.277</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.277</td>
<td>-.277</td>
</tr>
<tr>
<td>9. History is “real” to me.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>1.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>15. I can relate to Old West lifestyles.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.818</td>
<td>-.234</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.234</td>
<td>-.234</td>
</tr>
<tr>
<td>23. I like history.</td>
<td>Early</td>
<td>10</td>
<td>18</td>
<td>.552</td>
<td>.605</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>10</td>
<td>18</td>
<td>.605</td>
<td>.605</td>
</tr>
</tbody>
</table>

The potential indicators of non-response bias identified in educational research appear absent. While not absolute, the homogeneity of the population and the lack of significant difference between the mean responses of early and late responders suggests the presence of non-response bias is unsubstantiated. The response rate of a future study, however, could increase if data were collected over a longer span of time allowing more clubs to meet during the survey period or during a national 4-H Western Heritage event where many surveys could be simultaneously collected.
Unfortunately, further investigation of the raw data through a factor analysis was not possible due to 23 statements, 16 of which required two responses, and only 62 returned surveys. Guidelines suggest 30 participants are required for the first response and 10 per each following response (Urdan, 2010). An analysis for internal consistency of responses, however, indicated high reliability (Cronbach’s α = .920).

**Description of the Sample**

Of the 62 respondents, Montana youth supplied 43 surveys and Missouri youth returned 19. Oklahoma 4-H had two eligible members who did not respond after five combined contacts by their State 4-H Shooting Sports Coordinator and 4-H leader. The Colorado, Oregon, Kansas, and Texas programs were found to be in the pilot stages of the project with 4-H Western Heritage groups just beginning. The lack of one year’s experience made 4-H members from these states ineligible to respond. The number of respondents by state is summarized in Figure 1 below.

![Survey Respondents](image-url)  
*Figure 1 – Respondents by State.*
The majority of the respondents identified themselves as male at 69.4% (n = 43), while females made up 30.6% of the sample (n = 19). Montana youth were 67.4% male (n = 29) and 32.6% female (n = 14). Missouri youth reported at 73.7% male (n = 14) and 26.3% female (n = 5). Response by female participants was below the overall female participation level of 35% as reported in 4-H enrollment data.

Ages ranged from 10 to 19 years old with a mean of 15.21, a median age of 15, and a mode of 17. Just under half the members could be considered elementary or middle school age at 45% of the sample while members considered high school age contributed to 55% of the sample. As indicated by the mode, 17 year old youth were most common at 21% of the total sample. A representation of complete age data is displayed in Figure 2 below.

Figure 2 – Respondents by Age.
Participant years as a 4-H member ranged from 1 to 13. Most 4-H members reported five years of membership making up 22.6% of the sample (n = 14). Four-year members contributed 16.1% of the sample (n = 10). The distribution of years as a 4-H member was positively skewed with 56.5% (n = 35) enrolled for five years or less and 43.5% (n=27) spread across 6 to 13 years of enrollment.

Data related to years enrolled in the 4-H Western Heritage Project were also positively skewed and ranged from 1 to 7. Ten 4-H members had completed just one year of 4-H Western Heritage accounting for 16.1% of the sample. Those with two years’ experience (n = 24) made up 38.7%. A slight minority, 45.2%, had three or more years’ experience in the project. Of those participants, 19 had 3-4 years’ experience, 8 had 5-6 years’ experience, and one had 7 years’ experience. Considering the 4-H Western Heritage Project is seven years old and newly introduced in many 4-H programs, it is logical that youth with fewer years of participation would make up a majority of project membership. Descriptive statistics related to years enrolled in 4-H and years enrolled in the 4-H Western Heritage Project are summarized in Table 2.

Table 2 – Descriptive Statistics of Years in 4-H and Years in the Western Heritage Project.

<table>
<thead>
<tr>
<th>Years in 4-H</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.84</td>
<td>5.00</td>
<td>5</td>
<td></td>
<td>1</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years in Western Heritage</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.82</td>
<td>2.00</td>
<td>2</td>
<td></td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>
Descriptive Statistics of Statements Related to Learning Approaches

Following the demographic section of the survey, the next section asked participants to rate seven PLH learning approaches utilized within the 4-H Western Heritage Project related to factors of interest as identified in the educational research literature. These factors include self-directed learning, experiential learning, group learning, individual creativity, role playing, and the enthusiasm of their instructor (Covington, 1999; Haladyna, Shaughnessy, & Redsun, 1982; Kobrin, Abbott, Ellinwood, & Horton, 1993; Ormrod, 2011; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991).

The distribution of responses to each statement were negatively skewed due to the overall high rating of each instructional approach. A normal distribution, however, is not necessary for the calculation of descriptive statistics (Urdan, 2010).

The statement, “I learn from the activities in the project” rated highest in scores with a mean of 6.39 on the 7-point scale. One respondent marked the neutral response of neither agree or disagree while all other respondents marked slightly agree or higher. Those strongly agreeing made up 53.2% of the responses.

The second highest rated statement, “My 4-H leader in the project inspires me to learn history”, had mean score of 6.31 despite one respondent reporting a score of strongly disagree, two slightly disagreeing, and one neutral. Those reporting slight agree to strongly agree made up 93.5% of the responses. It is unclear whether those
disagreeing with the statement were assessing their own 4-H leader or assessing the role of a leader. A clarification of this statement may have benefited the study.

The statement “I can use my creativity when studying history in the project” had a mean score of 6.06 with 74.2% of respondents reporting agreeing or higher. Three respondents were neutral and 13 slightly agreed. None of the respondents disagreed with the statement.

“Wearing old-fashioned clothes helps me learn history” had a mean score of 5.95 while respondents scored “Playing the role of a historical character helps me learn history” at a mean of 5.94. Two respondents disagreed and two slightly disagreed with each statement. The frequency of neutral scores was four and two respectively. Wearing period clothing and playing the part of a historic persona are both key elements of PLH that appear not to appeal to all 4-H members in the project. Anecdotal parental feedback supports the notion that a few 4-H members feel embarrassed when in period dress and fear ridicule from peers not in the project. Additionally parents of shy youth have commented during 4-H Western Heritage events that the attention draw when role-playing is not desirable by some youth.

The statement most closely connected to self-directed learning, “It is important to me to pick my own topics to learn more about”, scored second to lowest with a mean of 5.72. Most respondents agreed with the statement (n = 28) while 13 slightly agreed and 12 strongly agreed. Eight responses were neutral, one respondent did not provide an answer, and none disagreed at any level. The lower mean score relative to the other statements may represent the perceptions of the inexperienced 4-H members in the
project. At this point in their participation, they may not have yet developed interests of their own. The correlation, however, between years in the 4-H Western Heritage Project and scores reported on picking my own topics was not significant ($r = -.143, p > .05$).

The lowest scoring statement, “My friends in the project help me learn”, reported a mean score of 5.59. One respondent disagreed with the statement, two slightly disagreed, and nine neither agreed nor disagreed. Three participants did not respond while 47 responded with slightly agreed or higher. Similar to the statement regarding the inspiration provided by the 4-H leader, those disagreeing with the statement may be assessing their friendships in the project and not group learning. A clarification of this statement might also have improved the study. Another possibility is that the club or clubs where those disagreeing with the statement participate may not engage in much group learning, thus group work has little effect on learning.

None of the seven statements received scores of strongly disagree. Four statements, “My friends in the project help me learn”, “Playing the role of a historical character helps me learn history”, “Wearing old-fashioned clothes helps me learn history”, and “My 4-H leader in the project inspires me to learn history”, however, did receive scores of disagree even though the overall mean of the statement was on the agreement side of the scale. Three statements, “It is important to me to pick my own topics to learn more about”, “I learn from the activities in the project”, and “I can use my creativity when studying history in the project”, received scores no lower than neutral.

It is important to point out that participants were not asked to rank the seven statements. Each statement was assessed independently of the others. Therefore, any
attempt to conclude that respondents as a group like one instructional approach more than another is pure speculation. What can be said is that most individuals agree with each of the PLH learning approaches while a very few do not embrace instructional approaches like role playing and wearing period clothing. The perception of those disagreeing that their leader provided inspiration and their friends help them learn is unclear. A summary of descriptive statistics for statements 1-7 is displayed in Table 3.

Table 3 – Descriptive Statistics Instructional Approach Data.

<table>
<thead>
<tr>
<th>Statement</th>
<th>n</th>
<th>Missing</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>sd</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is important to me to pick my own topics to learn more about.</td>
<td>61</td>
<td>1</td>
<td>5.72</td>
<td>6</td>
<td>6</td>
<td>.933</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>2. I learn from the activities in the project.</td>
<td>62</td>
<td>0</td>
<td>6.39</td>
<td>7</td>
<td>7</td>
<td>.754</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>3. My friends in the project help me learn.</td>
<td>59</td>
<td>3</td>
<td>5.59</td>
<td>6</td>
<td>6</td>
<td>1.233</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>4. I can use my creativity when studying history in the project.</td>
<td>62</td>
<td>0</td>
<td>6.06</td>
<td>6</td>
<td>6</td>
<td>.855</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>5. Playing the role of a historical character helps me learn history.</td>
<td>62</td>
<td>0</td>
<td>5.94</td>
<td>6</td>
<td>7</td>
<td>1.240</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>6. Wearing old-fashioned clothes helps me learn history</td>
<td>62</td>
<td>0</td>
<td>5.95</td>
<td>6</td>
<td>7</td>
<td>1.273</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>7. My 4-H leader in the project inspires me to learn history</td>
<td>62</td>
<td>0</td>
<td>6.31</td>
<td>7</td>
<td>7</td>
<td>1.065</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>
Data Analysis of Repeated Measures Statements

The final portion of the survey included 16 retrospective statements where 4-H members were asked to respond in two ways. First, each reported his or her perceptions of history education after at least one-year’s participation in the PLH learning approaches in the project and second, each recalled his or her perceptions before exposure to the PLH learning approaches in the 4-H Western Heritage Project. The scale used in both responses was the same seven-point scale, strongly disagree to strongly agree, utilized in the descriptive section of the survey.

Descriptive statistics were calculated with SPSS to provide an overview of the participant data and assist in determining the distribution of this data both after one year’s experience in the 4-H Western Heritage Project and before enrolling in the 4-H Western Heritage Project. Descriptive statistics for each statement are displayed in Table 4.

Table 4 – Descriptive Statistics of Retrospective Changes in Interest Data.

<table>
<thead>
<tr>
<th>Statement</th>
<th>n</th>
<th>Mean</th>
<th>Std Er of Mean</th>
<th>Median</th>
<th>Mode</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. History is important to me.</td>
<td>62</td>
<td>4.77</td>
<td>.244</td>
<td>5.00</td>
<td>7</td>
<td>1.920</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.32</td>
<td>.123</td>
<td>7.00</td>
<td>7</td>
<td>.971</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>9. History is “real” to me.</td>
<td>62</td>
<td>5.16</td>
<td>.212</td>
<td>5</td>
<td>7</td>
<td>1.671</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.52</td>
<td>.102</td>
<td>7</td>
<td>7</td>
<td>.805</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>10. I have a favorite history topic I want to look into.</td>
<td>61</td>
<td>4.62</td>
<td>5.90</td>
<td>5</td>
<td>4</td>
<td>1.714</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>61</td>
<td>5.90</td>
<td>.134</td>
<td>6</td>
<td>7</td>
<td>1.044</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>11. I can see a connection between the past and today.</td>
<td>62</td>
<td>5.02</td>
<td>.170</td>
<td>5</td>
<td>5</td>
<td>1.337</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.32</td>
<td>.112</td>
<td>7</td>
<td>7</td>
<td>.883</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Statement</td>
<td>n</td>
<td>Mean</td>
<td>Std Err of Mean</td>
<td>Median</td>
<td>Mode</td>
<td>sd</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>-----------------</td>
<td>--------</td>
<td>------</td>
<td>-------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>12. My family history is important to me.</td>
<td>62</td>
<td>5.02</td>
<td>0.215</td>
<td>5</td>
<td>7</td>
<td>1.694</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.13</td>
<td>0.146</td>
<td>6</td>
<td>7</td>
<td>1.152</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>13. I have in-depth conversations with adults in my life.</td>
<td>62</td>
<td>4.97</td>
<td>0.233</td>
<td>5</td>
<td>7</td>
<td>1.837</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>5.71</td>
<td>0.177</td>
<td>6</td>
<td>7</td>
<td>1.395</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>14. I feel I can learn history.</td>
<td>62</td>
<td>5.29</td>
<td>0.202</td>
<td>5</td>
<td>7</td>
<td>1.593</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.56</td>
<td>0.085</td>
<td>7</td>
<td>7</td>
<td>0.668</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>15. I can relate to Old West lifestyles.</td>
<td>62</td>
<td>4.68</td>
<td>0.221</td>
<td>5</td>
<td>5</td>
<td>1.744</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.32</td>
<td>0.138</td>
<td>7</td>
<td>7</td>
<td>1.083</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>16. I understand issues between racial groups such as whites, Native Am.,</td>
<td>60</td>
<td>4.47</td>
<td>0.191</td>
<td>5</td>
<td>5</td>
<td>1.478</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>60</td>
<td>5.97</td>
<td>0.126</td>
<td>6</td>
<td>6</td>
<td>0.974</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>17. I can relate to the roles of women and minority groups such as Native</td>
<td>60</td>
<td>3.98</td>
<td>0.198</td>
<td>4</td>
<td>5</td>
<td>1.535</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>60</td>
<td>5.38</td>
<td>0.195</td>
<td>6</td>
<td>6</td>
<td>1.535</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>18. I like visiting museums and historic sites.</td>
<td>62</td>
<td>5.31</td>
<td>0.23</td>
<td>6</td>
<td>7</td>
<td>1.834</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>6.27</td>
<td>0.155</td>
<td>7</td>
<td>7</td>
<td>1.217</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>19. I use the internet to find information about historic subjects I like.</td>
<td>62</td>
<td>4.47</td>
<td>0.244</td>
<td>5</td>
<td>5</td>
<td>1.922</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>5.79</td>
<td>0.177</td>
<td>6</td>
<td>7</td>
<td>1.392</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>20. I read books and magazines about history.</td>
<td>62</td>
<td>4.00</td>
<td>0.224</td>
<td>4</td>
<td>4</td>
<td>1.765</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>62</td>
<td>5.24</td>
<td>0.193</td>
<td>5</td>
<td>5</td>
<td>1.522</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>21. I watch television shows about history topics.</td>
<td>61</td>
<td>4.84</td>
<td>0.260</td>
<td>5</td>
<td>7</td>
<td>2.035</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>After</td>
<td>61</td>
<td>5.77</td>
<td>0.226</td>
<td>7</td>
<td>7</td>
<td>1.764</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>
Response to the first retrospective statement, “History is important to me”, revealed 54.8% of respondents (n = 62) slightly agreed, agreed, or strongly agreed history was important to them before enrolling in the project. This figure rose to 95.1% after at least one year in the 4-H Western Heritage Project. Four participants strongly disagreed that history was important to them before participating in the project, while only one disagreed after at least one years’ exposure to PLH learning approaches. Nineteen respondents indicated no change in their perception of the importance of history. All 19 agreed or strongly agreed that history was important to them before and after participating in the project.

Similar data distributions were found in each of the remaining 15 statements. All mean scores were higher after participating in the 4-H Western Heritage Project compared to mean scores before participating. This mean change occurred despite some respondents reporting no change in perceptions regardless of participation.

The 12 statements, “History is important to me”, “History is real to me”, “My family is important to me”, “I have in-depth conversations with adults in my life”, “I can
relate to Old West lifestyles”, “I understand issues between racial groups …”, “I can relate to minority roles of groups…” “I like visiting museums and historic sites”, “I use the internet to find information about historic subjects I like”, “I read books and magazines about history”, “I watch television shows about history topics”, and “There is something new to learn about history”, each had at least one respondent strongly disagreeing, disagreeing, or slightly disagreeing with the statement after one or more years’ experience in the project. For example, one participant strongly disagreed with the statement “I like visiting museums and historic sites” before participating in the 4-H Western Heritage Project and continued to strongly disagree after participating in the project. In each of the 16 statements, however, fewer respondents strongly disagreed, disagreed, or slightly disagreed after participating in the 4-H Western Heritage Project than before participating.

Comparing the before participation scores to the after participation scores in Table 5 provides an representation of scores moving toward the higher end of the scale after participation in PLH methodologies. The frequency distribution of two key statements regarding interest in history, “History is important to me” and “I like history” are also graphically represented in Figures 3 and 4 respectively.
Table 5 – Frequency of Scores of Retrospective Changes in Interest Data.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Before</th>
<th>Disagree</th>
<th>Neither A/D</th>
<th>Agree</th>
<th>St. Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. History is important to me.</td>
<td>St. Disagree</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>History is “real” to me.</td>
<td>Disagree</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>9. History is “real” to me.</td>
<td>Neither A/D</td>
<td>11</td>
<td>13</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>10. I have a favorite history topic I want to look into.</td>
<td>St. Agree</td>
<td>11</td>
<td>9</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>I can see a connection between the past and today.</td>
<td>Agree</td>
<td>12</td>
<td>19</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>12. My family history is important to me.</td>
<td>Neither A/D</td>
<td>St. Agree</td>
<td>8</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>I have in-depth conversations with adults in my life.</td>
<td>Agree</td>
<td>16</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I have in-depth conversations with adults in my life.</td>
<td>Neither A/D</td>
<td>12</td>
<td>11</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>My family history is important to me.</td>
<td>St. Agree</td>
<td>17</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I feel I can learn history.</td>
<td>Neither A/D</td>
<td>St. Agree</td>
<td>5</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>I can relate to Old West lifestyles.</td>
<td>Agree</td>
<td>17</td>
<td>18</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>15. I can relate to Old West lifestyles.</td>
<td>Neither A/D</td>
<td>St. Agree</td>
<td>9</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>I understand issues between racial groups such as whites, Native Am.,</td>
<td>Agree</td>
<td>14</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I understand issues between racial groups such as whites, Native Am.,</td>
<td>Neither A/D</td>
<td>St. Agree</td>
<td>30</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>St. Agree</td>
<td>30</td>
<td>18</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
### Table 5 – Frequency of Scores of Retrospective Changes in Interest Data - continued.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Before</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Neither Agree/Disagree</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. I can relate to the roles of women and minority of groups such as Native Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>Before</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>13</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>18. I like visiting museums and historic sites.</td>
<td>Before</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>19. I use the internet to find information about historic subjects I like.</td>
<td>Before</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>13</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>20. I read books and magazines about history.</td>
<td>Before</td>
<td>8</td>
<td>4</td>
<td>9</td>
<td>19</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>21. I watch television shows about history topics.</td>
<td>Before</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>22. There is something new to learn about history.</td>
<td>Before</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>23. I like history.</td>
<td>Before</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>12</td>
</tr>
</tbody>
</table>
A paired samples t-test was conducted using SPSS Version 23 for each statement to test for significant difference between the means of participant responses after at least one year of PLH experience in the 4-H Western Heritage Project and retrospective
responses when recalling perceptions before enrolling in the project. The distribution of data of most responses was negatively skewed due a disproportionate number of responses on the high end of the scale. The paired samples t-tested analysis, however, is robust and does not require a normal distribution to indicate significance particularly when \( n > 30 \) as described by the central limit theorem (Alreck & Settle, 2004; Urdan, 2010). A \( t \) value was calculated from the standard error of the means of each paired samples t-test to further address the non-normal distributions and also account for the small sample size (Urdan, 2010).

The paired samples t-test produced a significant \( t \) value \((t > 3.551, p < .0001)\) for each of the 16 statements even though some respondents recorded no change in perception. Degrees of freedom ranged from 59 to 61 due to one missing response to statement 10, two missing responses to both statement 16 and 17, and one missing response to statement 21. To provide further statistical rigor, the more restrictive \( t \) value at 40 degrees of freedom \((t >3.551)\) was used to determine significance.

A 99% confidence interval was also calculated for each statement. The confidence interval for each statement consistently measured around ±.5. The confidence intervals, \( t \) values, and \( p \) values of the two-tailed paired samples t-test are displayed in Table 6.
Table 6– Significant Differences Between After Enrollment and Before Enrollment.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Diff.</th>
<th>sd</th>
<th>Std Er of Mean</th>
<th>Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. History is important to me.</td>
<td>1.548</td>
<td>1.544</td>
<td>.196</td>
<td>1.027 2.070</td>
<td>7.898</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>9. History is “real” to me.</td>
<td>1.355</td>
<td>1.368</td>
<td>.174</td>
<td>.893 1.817</td>
<td>7.797</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>10. I have a favorite history topic I want to look into.</td>
<td>1.279</td>
<td>1.462</td>
<td>.187</td>
<td>.781 1.777</td>
<td>6.831</td>
<td>60</td>
<td>.000</td>
</tr>
<tr>
<td>11. I can see a connection between the past and today.</td>
<td>1.306</td>
<td>1.236</td>
<td>.157</td>
<td>.889 1.724</td>
<td>8.323</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>12. My family history is important to me.</td>
<td>1.113</td>
<td>1.427</td>
<td>.181</td>
<td>.631 1.595</td>
<td>6.141</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>13. I have in-depth conversations with adults in my life.</td>
<td>.742</td>
<td>1.173</td>
<td>.149</td>
<td>.346 1.138</td>
<td>4.982</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>14. I feel I can learn history.</td>
<td>1.274</td>
<td>1.405</td>
<td>.178</td>
<td>.800 1.748</td>
<td>7.143</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>15. I can relate to Old West lifestyles.</td>
<td>1.645</td>
<td>1.494</td>
<td>.190</td>
<td>1.141 2.150</td>
<td>8.669</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>16. I understand issues between racial groups such as whites, Native Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>1.500</td>
<td>1.372</td>
<td>.177</td>
<td>1.029 1.971</td>
<td>8.471</td>
<td>59</td>
<td>.000</td>
</tr>
<tr>
<td>17. I can relate to the roles of women and minority groups such as Native Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>1.40</td>
<td>1.330</td>
<td>.172</td>
<td>.943 1.857</td>
<td>8.152</td>
<td>59</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 6 – Significant Differences between After Enrollment and Before Enrollment – continued.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Diff.</th>
<th>sd</th>
<th>Std Er of Mean</th>
<th>99% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I like visiting museums and historic sites.</td>
<td>.968</td>
<td>1.355</td>
<td>.172</td>
<td>.510</td>
<td>5.625</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>19. I use the internet to find information about historic</td>
<td>1.323</td>
<td>1.423</td>
<td>.181</td>
<td>.842</td>
<td>7.318</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>20. I read books and magazines about history.</td>
<td>1.242</td>
<td>1.411</td>
<td>.179</td>
<td>.766</td>
<td>6.933</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>21. I watch television shows about history topics.</td>
<td>.934</td>
<td>1.493</td>
<td>.191</td>
<td>.426</td>
<td>4.888</td>
<td>60</td>
<td>.000</td>
</tr>
<tr>
<td>22. There is something new to learn about history.</td>
<td>1.161</td>
<td>1.591</td>
<td>.202</td>
<td>.624</td>
<td>5.748</td>
<td>61</td>
<td>.000</td>
</tr>
<tr>
<td>23. I like history.</td>
<td>1.419</td>
<td>1.685</td>
<td>.214</td>
<td>.851</td>
<td>6.634</td>
<td>61</td>
<td>.000</td>
</tr>
</tbody>
</table>

Only the statements, “I have in-depth conversations with adults in my life”, “I like visiting museums and historic sites”, and “I watch television shows about history topics” reported a upward mean difference less than one point higher on the 7-point scale.

Agreement with all other statements increased one point or more in mean difference from before participating in the PLH methodologies of the 4-H Western Heritage Project to after participating for at least one year.

In order to vigorously examine any changes in means related to participation in the project, effect sizes were determined in two different calculations through an online effect size calculator (AI Therapy: Statistics for Psychologists, 2015) First, Cohen's d
was calculated using the more conservative pooled variance of the means. An effect size
measures the effect one variable has upon another, such as how much participation in this
project influenced respondent changes (Urdan, 2010). An effect size below .20 is
considered small, moderate if between .25 and .75, and large when .80 or more (Urdan,
2010).

Secondly, effect sizes utilizing Pearson's \( r \) correlation coefficient were calculated.
Effect size is consider small with an \( r \) of .20 or less, moderate at .30, and large at .50
(Cohen, 1992). Each calculation assumed a normal distribution as suggest by the central
limit theorem with \( n > 30 \) (Alreck & Settle, 2004; Urdan, 2010). Resulting effect sizes
for each statement are shown in Table 7.

Pearson’s \( r \) effect sizes proved to be the more liberal of the two calculations with
all statements receiving large effect sizes. Cohen’s \( d \) calculations were more subdued
with moderate and large effect sizes.

The statement, “I understand issues between racial groups…”, produced the
largest effect size \( (d = 1.198) \), followed by “I can see a connection between the past and
today” \( (d = 1.153) \), “I can relate to Old West lifestyles” \( (d = 1.133) \), “I feel I can learn
history” \( (d = 1.043) \), “History is real to me” \( (d = 1.033) \), and “History is important to me”
\( (d = 1.018) \).
Table 7 – Effect Size Calculations.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Cohen's d</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. History is important to me.</td>
<td>1.018</td>
<td>.711</td>
</tr>
<tr>
<td>9. History is “real” to me.</td>
<td>1.033</td>
<td>.707</td>
</tr>
<tr>
<td>10. I have a favorite history topic I want to look into.</td>
<td>.901</td>
<td>.661</td>
</tr>
<tr>
<td>11. I can see a connection between the past and today.</td>
<td>1.153</td>
<td>.729</td>
</tr>
<tr>
<td>12. My family history is important to me.</td>
<td>.768</td>
<td>.618</td>
</tr>
<tr>
<td>13. I have in-depth conversations with adults in my life.</td>
<td>.455</td>
<td>.532</td>
</tr>
<tr>
<td>14. I feel I can learn history.</td>
<td>1.043</td>
<td>.675</td>
</tr>
<tr>
<td>15. I can relate to Old West lifestyles.</td>
<td>1.133</td>
<td>.743</td>
</tr>
<tr>
<td>16. I understand issues between racial groups such as whites, Native Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>1.198</td>
<td>.741</td>
</tr>
<tr>
<td>17. I can relate to the roles of women and minority groups such as Native Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>.920</td>
<td>.728</td>
</tr>
<tr>
<td>18. I like visiting museums and historic sites.</td>
<td>.622</td>
<td>.584</td>
</tr>
<tr>
<td>19. I use the internet to find information about historic subjects I like.</td>
<td>.788</td>
<td>.684</td>
</tr>
<tr>
<td>20. I read books and magazines about history.</td>
<td>.754</td>
<td>.664</td>
</tr>
<tr>
<td>21. I watch television shows about history topics.</td>
<td>.491</td>
<td>.534</td>
</tr>
<tr>
<td>22. There is something new to learn about history.</td>
<td>.826</td>
<td>.593</td>
</tr>
<tr>
<td>23. I like history.</td>
<td>.897</td>
<td>.647</td>
</tr>
</tbody>
</table>

Another statement regarding race, “I can relate to minority roles of groups…” received a large effect size ($d = .920$), as did the statements, “I have a favorite history
topic I want to look into” \((d = .901)\), “I like history” \((d = .897)\), and “There is something new to learn about history” \((d = .826)\).

Statements addressing internet use \((d = .788)\), importance of family history \((d = .768)\), and reading printed materials on historic topics \((d = .754)\), all had moderate effect sizes. The effect size for each of these statements was just below the standard of a high effect size \((d = .80)\).

Lower moderate effects were calculated for the statements concerning the appeal of museum visits \((d = .622)\), watching television shows about historical topics \((d = .491)\), and having in-depth conversations with adults \((d = .455)\). Referring back to Table 5, 77.4\% of respondents slightly agreed/agreed/strongly agreed to liking museums visits, 59.7\% marked agreed or higher concerning watching television shows about history, and 62.9\% responded on the agreement side of the scale to having in-depth conversations with adults in their life before enrolling in the 4-H Western Heritage Project. With a majority of the respondents indicating a predisposition of agreement with the three statements, it is reasonable that PLH experiences would only moderately influence changes in perceptions.

**Comparisons between States and Correlations**

A comparison of responses of Montana and Missouri participants may have raised some questions for future study if significant differences were found between the means of the two groups. Previous analysis for possible non-response bias, however, found no significant differences between the means of Montana and Missouri youth. The lack of
significantly different means and the disproportional sample sizes between Montana (n = 43) and Missouri (n = 19) warranted no further investigation.

Correlational analysis using the Statistical Package for Social Sciences version 23 (SPSS) also produced no significant results. No relationship was found between any of the first seven statements in the survey, representing seven PLH learning approaches utilized within the 4-H Western Heritage Project, and the statement “History is important to me” or the statement “I like history” after participating for one year or more (r < .20, p > .05). Although not designed as a correlational study, it was a bit of a surprise to see no relationship between learning approaches and liking history.

**Summary**

The results from this study demonstrate that youth enrolled in the 4-H Western Heritage Project report an increased interest in history after participating for at least one year in a participatory living history approach to learning. Consistent with the literature, this study also exhibits that youth identify self-directed learning, experiential learning, group learning, individual creativity, role playing, and the enthusiasm of their instructor as favorable elements of the PLH approach (Covington, 1999; Haladyna, Shaughnessy, & Redsun, 1982; Kobrin, Abbott, Ellinwood, & Horton, 1993; Ormrod, 2011; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991).

A sample of 62 youth returned surveys for this research study from a population of 90 eligible members with one or more years of participation in the PLH methodologies of the 4-H Western Heritage Project for a response rate of 68.9%. The sample consisted
of 43 Montana youth and 19 Missouri youth. The majority of the respondents were male at 69.4% (n = 43) and 30.6% were female (n = 19). Ages from 10 to 19 years old with majority being 13, 14, and 17 years old. Length of participation in the 4-H Western Heritage Project ranged from 1 to 7 years with a majority 4-H members participating for one to two years.

From the indication of means scores, most 4-H members slightly agreed to agreed that picking their own topics to study was important to them, their friends helped them learn, and role playing a historical character and wearing period clothing helped them learn history. Most agreed or strongly agreed that they learned from the experiential activities in the project, could use their creativity when studying history in the project, and that their 4-H leader inspired them to learn history.

A paired samples t-test was calculated to analyze data from the 16 repeated measures post-test/retrospective pre-test statements of the survey. Significant increases were seen in mean scores of all 16 statements ($t_{(59-61)} > 3.551, p < .0001$) from before participating in the PHL methodologies of the 4-H Western Heritage Project to after participating for one year or more. Effect sizes ranged from moderate to high for each statements. The key statements central to increased interest in history such as “History is important to me”, “History is real to me”, and “I like history” all had high effect sizes. Statements of relevance, “I can see a connection between the past and today” and “I can relate to Old West lifestyles” also had large effect sizes.

Notably, changes in perceptions of understanding both racial issues and minority roles improved in agreement with large effects sizes. Only the importance of family
history, having in-depth conversations with adults, visiting museums, and conducting history research on the internet, reading printed materials about history, and watching television shows about history had moderate effect sizes.

Clearly the PLH learning methodologies incorporated in the 4-H Western Heritage Projects changed 4-H members’ perceptions for the better. Respondents not only agreed with the PHL learning methodologies they experienced, but also found learning history more important and relevant than they previously believed.
CHAPTER FIVE

CONCLUSIONS

Introduction

While many American youth receiving their history education through the traditional methodologies of lecture, textbook reading, and memorization show little interest in learning history (Salk & Glaessner, 1991; Zhao & Hoge, 2005), rate history as one of their least liked subjects (Schunk, Pintrich, & Meece, 2008; Taylor & Duran, 2006; Zhao & Hoge, 2005), and perceive social studies as irrelevant to their daily lives (Shaughnessy, 1985; Stodolsky, Salk & Glaessner, 1991), research suggests that a non-formal, active learning approach elevates student interest in learning history (Haladyna, Shaughnessy, & Redsun, 1982; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991; Zhao & John Hoge, 2005). Active learning approaches are often found to be challenging, fun, and personally relevant to students (Zhao, & Hoge, 2005).

Participatory Living History (PLH) is an experientially focused active learning method where learners become living history interpreters through dress, accessories, tools, and character while creating a historical persona. PLH approaches to learning history are seldom utilized in formal and non-formal settings (Morris, 2009) and few studies exist that explore the effectiveness of this teaching methodology (Chilcoat, 1996; Daniels, 2010; Morris, 2009).

The 4-H Western Heritage Project, an experiential inquiry into the history of the frontier American West from 1860-1900 centered on a PLH approach, provides the
setting for this study to investigate changes in interest toward learning history among youth engaged in PLH for at least one year. This research was an analytical effort to provide insights into the elements of PLH that youth identify as most relevant to their interest in history.

The quantitative survey developed for this study was based on interest indicators identified in the literature as well as informal observations and verbal feedback provided by 4-H members enrolled in the Montana 4-H Western Heritage Project over the past six years. The identified indicators of increased interest in history include self-directed study, voluntary visits to museums and historic sites, self-motivated reading, interviews of elderly family members, and personal pursuit of historical authenticity in clothing and accoutrements and relate to the educational research literature as student preferred methods of learning history (Cervone, 1983; Fink, 2001; Haladyna, Shaughnessy, & Redsun, 1982; Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991; Zhao & Hoge, 2005).

The descriptive and repeated measures post-test/retrospective pre-test survey underwent both quantitative and qualitative pilot testing previous to this study. Validity concerns were also addressed through an examination of the literature and expert review.

Answers to Research Questions and Contributions to the Literature

The focus of this study was to investigate PLH methodologies contained within the 4-H Western Heritage Project, an experiential history education program for youth ages nine to nineteen years old, to measure student self-perceived changes in interest in
history and identify the specific teaching approaches youth find most relevant. Through descriptive statistics and the comparison of before participation and after participation mean scores, findings attempted to answer the following two research questions.

After participating in a PLH approach to learning history for at least one year;

(1) Do youth report changes in interest in history?

(2) What elements of PLH do youth identify as most relevant to their interest in history?

Data analysis demonstrates that positive changes in interest in history were exhibited in 4-H youth having participated in PHL learning approaches for at least one year. It is reasonable to assume that youth already interested in history would be attracted to a participatory living history project. Data indicated this to be true. Most respondents reported liking history and feeling history is important to them before enrolling in the 4-H Western Heritage Project and indicated no change in interest after participating for at least one year. Those who did not like history or perceived history as unimportant before experiencing PLH learning methodologies, however, reported considerable increases toward the strongly agree end of the scale (See Figures 3 & 4).

Data analysis did not exclude 4-H members with high prior interest in history or perceptions that history was important and reported no change. Nevertheless, significant results of increased interest were calculated. This is an indication of the powerful effect PLH methodologies had on 4-H Western Heritage Project members with little prior interest in history and those initially perceiving history as unimportant.
Educational research suggests many students find history education useless and irrelevant to their daily lives (Taylor & Duran, 2006; Zhao & Hoge, 2005). Students often perceive historical figures as flat and lifeless without human emotion and do not feel a connection to people of the past (Cervone, 1983). Members exposed to PLH learning methodologies for at least one year, however, report history is “real” to them, they can see a connection between the past and today, they can relate to Old West lifestyles. Data from this study indicates PHL learning methodologies establish history as relevant and connected to the people and events of today. Wearing period dress, shooting historically correct firearms, investigating personal family history, and engaging in historic activities may provide a sense of realness and connection to the lifestyles, challenges, and issues of past generations.

Another connection to the past with relevance to the present for 4-H youth participants may have evolved from a deeper understanding of historical race issues and roles of minority groups in the frontier American West. Societies around the world continue to struggle with issues of racial equality, clashes between cultures, human rights, and religious freedom. Many of the racial and minority issues faced by the United States today stem from a long and turbulent history. The study of Native American cultures and values, the plight of slavers and the challenges for freed slaves, foreign labor in mining, railroad construction, and industry, the influence of Mexican cattle raising techniques, and the roles of women and families on the frontier all contribute to gaining perspective of how we arrived at today’s challenges in immigration and equality.
Student yearning for relevance when studying history can also be satisfied by allowing self-directed learning so that topics can be pursued according to the student’s personal interest (Kobrin, Abbott, Ellinwood, & Horton, 1993; Schunk, Pintrich, & Meece, 2008). Participants in this study exhibited significantly more agreement that they have a favorite topic they want to look into after enrolling in the 4-H Western Heritage Project for at least one year. One or more of the many topic ideas for historical research found in the young activity guide curriculum may have triggered a personal interest among participating youth.

PLH learning approaches moderately influenced youth having in-depth conversations with adults in their lives. Most survey participants reported having in-depth conversations with adults before exposure to PHL learning approaches. This may be a reflection of the tight family unit many 4-H members grow up in. There is a potential, however, that topics of conversation may have been altered from school, friends, and sports to family history. One can only speculate. It is encouraging, however, that the youth in this study who did not engage in many in-depth conversations with adults before participating in PLH learning approaches agreed with the statement at a higher level after enrolling in the 4-H Western Heritage Project. Supplying a topic of conversation (history) may aid in narrowing the chasm between generations for some youth.

Educational research has found that many young people equate learning history to reading a text book and memorizing facts (Taylor & Duran, 2006; Zhao & Hoge, 2005) and a majority of American students have little knowledge of U.S. history (NAEP, 2010).
Interestingly, youth in the 4-H Western Heritage Project report a stronger feeling that they can learn history after participating in PLH methodologies for at least one year. Self-directed learning, experiential activities, group learning, and role playing all offer an alternative to teacher centered methodologies and may have contributed to 4-H member perceptions that history can be learned.

PLH learning approaches might also have positively influenced members’ perceptions that there is something new to learn about history. Few may have considered sewing your own clothes, making felt by hand, cooking from scratch, or developing a historical persona as history education. Each of these PHL approaches demonstrate the challenges, hardships, and satisfaction of personal accomplishment without the benefits of today’s technology. Non-traditional, experiential learning strategies could open the eyes of participating youth to facets of history previously undiscovered.

More 4-H members agreed that they visited museum and historic sites, used the internet, read printed materials, and watched television shows about history after participating in PLH learning approaches. It is possible that some of this increase may be attributed to discovering a historical topic of personal interest and researching that topic. It is important to recognize, however, that a few 4-H members did not agree with these statements before or after participation in the project. Some respondents did not like visiting museums and historic sites before participating in PLH and apparently never will.

It is unclear if disagreement with internet use reflected a lack of enthusiasm for finding historical information online or a lack of internet access. It may also be wise for 4-H leaders to schedule a trip to the library as a fieldtrip for project groups to determine if
those disagreeing with reading printed materials simply do not have the skills to locate topic pertinent books and magazines. Lastly, similar to internet access, participants without cable or satellite television may not have a way to watch more historically oriented programming even if possessing the desire to do so.

Addressing the second research question, “What elements of PLH do youth identify as most relevant to their interest in history?”; respondents agree it was important to pick their own topics to learn about, they learned from the activities in the project, their friends helped them learn, they could use their creativity, playing a historical helped them learn, wearing old-fashioned clothes helped them learn, and their 4-H leader inspired them to learn. This is consistent with the educational research literature that indicates students report a higher level of interest and enjoyment in social studies when teachers allow students some independence through activities like role playing, groups discussion, cooperative learning, simulations, working on projects or reports, expressing personal opinion, and storytelling (Perricelli, 2008; Schunk, Pintrich, & Meece, 2008; Stodolsky et al, 1991).

One must consider each individual, however, when adopting PLH learning methodologies. Some 4-H participants did not agree that role playing a historic persona or wearing old-fashioned clothes helped them learn history. Role playing in mannerisms and dress is a learning approach unfamiliar to many young people and may force some outside their comfort zone. The fear of being made fun of and being embarrassed may cause a few members to shy away from this PLH approach and discontinue participation. In order to be successful, adult instructors should utilize a mixture of methodologies and
not demand all 4-H members participate in all aspects of PLH. With time, some hesitant members may become comfortable with role playing while others never will. Alienating reluctant youth does nothing to improve their interest in history.

Limitations of the Study

This study has two statistical limitations. First, the small sample size did not allow for a factor analysis to determine whether any statements in the survey aligned with one another in overarching factors. Factors could have included 1. Interest in history, 2. Relevance of history, and 3. PLH learning approaches. These factors, however, could not be established.

Secondly, when investigating a small population (n = 90), nearly all members of the population must respond to the survey in order to generalize findings to the entire population. While a response rate of 68.9% is high, the small population dictates a study with larger sample (Alreck & Settle, 2004). The potential ramifications of a small sample was mitigated by investigating non-responses bias. Discretion, however, must still be used when making larger assertions.

The response data from only two states narrowed the study to only 4-H Western Heritage Project participants in Montana and Missouri. Despite considerable effort by local faculty and club leaders, input from other participating states was absent. Montana and Missouri 4-H programs administer the longest standing 4-H Western Heritage Projects with strong leadership committed to PLH learning methodologies. Data from states with forming projects might have affected the significance of the findings.
While the reliability and validity of the survey instrument was rigorously tested, youth were asked to self-report their perceptions of history education both since participating in the 4-H Western Heritage Project and before participation. Participants may not have provided accurate information for various reasons. A portion might have wanted to compliment the 4-H leader administering the survey, others may have been affected by peer pressure, and some may not have recalled their previous perceptions objectively and without influence from years of participation. Some of this bias may have been mitigated by the anonymity of the respondent and the lack of consequences related to respondent answers.

After final analysis, some statements on the survey require clarification. It cannot be determined if disagreement to the statement “My friends in the project help me learn” stems from a dislike of group learning or if the participant simply had no friends in the project. Similarly, the statement “My 4-H leader in the project inspires me to learn history” may have been more of an evaluation of a particular leader and not the inspirational potential of enthusiastic leadership. Finally, the statement “I have in-depth conversations with adults in my life” could be altered to reference conversations about history. On the other hand, any indication of an educational approach that narrows the generation gap could be interpreted as advantageous to youth development.

Additional limitations must also be considered. This study relied on the educational research literature to establish levels of interest in youth in history among the general population of students and did not survey youth outside the membership of the 4-
H Western Heritage Project. No validated comparisons between 4-H members and for youth in general can be made.

The setting for this investigation was within a non-formal environment and not the traditional classroom. While implications for the classroom may exist, it is important to point out that there is little research on PLH learning approaches in a formal setting to bear this out (Morris, 2009).

Finally, the historical setting of the 4-H Western Heritage Project embraces the popular era of the American cowboy. This time period in American history is further romantically enhanced through the Western movie genre, books of fiction, and the continued endorsement of the “Spirit of the West” by many contemporary adults. Other periods of American history may not have a similar appeal to youth.

**Recommendations for Future Research**

After extensive review of the literature, this study appears to be exclusive in the attempt to investigate the effect of PLH learning methodologies on interest in history. It is the hope of the author that this study adds to the literature of experiential history education and provides the impetus for further research in the non-formal and formal educational realm.

As participation in the 4-H Western Heritage Project continues to increase across the country, an expanded inquiry of PLH may be possible in the coming years. Response from a wider demographic would strengthen these findings and provide a solid foundation for experimentation in the traditional classroom. To gain a better
understanding of the sample, such a study should include participant race, social economic standing, and an indication of basic political beliefs. From observation at state and national 4-H Western Heritage events as well as volunteer training courses, participants appear to be overwhelmingly white and spread economically across the lower middle class to middle-middle class. Due to the shooting sports component of the project and personal familiarity with many of the programs, participating youth appear to be from mostly politically conservative families. If these anecdotal observations are accurate, race, class status, and political beliefs could have little effect on the acceptance of multiple historic perspectives or understanding the roles of women and minorities in American history.

Much has been made of developing youth as living history interpreters throughout this study. Further investigation into whether these young people perceive themselves as historians is warranted. This would uncover the potential higher level thinking skills youth may assume when learning history. Research suggest that when students find a subject interesting, they engage in higher order thinking which promotes further learning (Schunk, 2008).

Those disagreeing that wearing period clothing and role-playing helps them learn history represent a portion the study sample who may feel uncomfortable or embarrassed by the attention this attracts from peers and the public. Parental feedback indicates that embarrassment is a factor for those rating these approaches on the low end of the scale. However, these parents also report that attending a national 4-H Western Heritage event assisted with the acceptance of this learning approach through widespread participation
by youth from several states. Future qualitative research may uncover interesting perspectives on how to address this issue and how educators can encourage all youth to participate in one form or another while not inadvertently excluding those uncomfortable with the practice. There may very well be alternative methods that can be utilized to reach the same learning goals.

Recommendations for Practice

While some K-12 teachers incorporate PLH learning approaches in their history education (Morris, 2009), there are also barriers to implementation (Barton & Levstik, 2003; Bruno-Jofre’ & Schiralli, 2002; James, 2008; Martell, 2011; VanSledright, 2008; Westhoff, 2012; Wineburg, 2001). First, history education touches a political nerve when alternative perspectives threaten the dominant culture (VanSledright, 2008; Wineburg, 2001). Textbooks provide a standardized, emotionless, and often neutral narrative (James, 2012) making textbook use less risky for teachers (Kincheloe, 2001). Issues such as race relations, war, politics, gender, and socioeconomic status are treated superficially in textbooks and lower the chance of prompting a visit from parents (James, 2012). At times, conflicts over alternative methods of teaching history education even garner national media attention as an emotionally charged issue raises the ire of both parental groups and legislators (VanSledright, 2008).

Secondly, school teachers often feel uncomfortable offering varying perspective on periods in history. James (2012) found pre-service teachers felt young children were not developmentally or morally prepared to process multiple perspectives – particularly
those that put prominent historical figures in a bad light. A majority of pre-service teacher indicated that critical thinking skills could be employed after students comprehended the “basic facts” of a historical period (2012, 185). Pre-service teachers see these “basic facts” as the “truth” when represented in the textbook (James, 2012). Others indicated that multiple perspectives would confuse students and dampen their pride in their country. Shielding students or protecting them from upsetting or morally inappropriate content was a prominent factor in sticking with tradition (James, 2012). Even though many teachers find investigative history more interesting than memory and recall teaching practices, few were inclined to diverge from standard history education methodologies (Barton & Levstik, 2003; James, 2012). While not applicable to every area of a curriculum, PLH methodologies can be incorporated into school plays, class debates, experiential classroom activities, and special projects. Making felt from wool, naturally dying fabrics, or sewing projects may contribute to understanding the challenges of a historic period and lend authenticity and relevance to the experience. Using technology to map immigrant trails or cattle drives not only develops historical expertise within the student, put also enhances skills applicable to many educational assignments.

The potential certainly exists that PHL role-playing may introduce distributing racial content or expose inequality between social classes (Morris, 2009). When anticipated and controlled for by the teacher, however, such content can assist students in finding common ground and understanding the perceptions of others. Mock trials or political debates bring all sides of the issue to light. The significant changes found in this
study in participants understanding the issues between racial groups and relating to the roles of women and minorities is further testament that youth have the ability to appreciate and learn from multiple perspectives.

Teacher preparedness is a third factor in the lack of informal teaching methodologies reaching the formal classroom (Barton & Levstik, 2003; Bruno-Jofre’ & Schiralli, 2002; Kincheloe, 2001; Martell, 2011; Westhoff, 2012; Wineburg, 2001). Few undergraduate students in education indicate any understanding that historical perspectives can be developed through the lenses of culture and experiences (James, 2012). Much of this narrow vision is attributed to lack of content knowledge and a reliance on textbooks is a crutch to disguise gaps in historical knowledge (Barton & Levstik, 2003; Westhoff, 2012). In some cases, teachers simply see themselves as unworthy to make curriculum shifts and thereby decline to claim any authority as history educators (Westhoff, 2012).

Unfortunately, the skills needed for constructing history are often absent in teacher preparation courses allowing undergraduates to hold onto the view that history is made of facts and not narratives (Westhoff, 2012). Very few universities offer courses devoted to the effective teaching of history (Wineberg, 2001).

Lastly, student-centered teaching approaches have the potential to disrupt classroom management (Martell, 2011). Behavioral issues, overall classroom control, and time to cover a set amount of content material concern history teachers in a formal setting (Barton a& Levstik, 2003; Martell, 2011; Kincheloe, 2001). Lecture and textbook
reading maintains the orderly conduct and pace needed to encompass the predetermined curriculum expectations of schools.

Continued research may provide powerful indications that PHL learning approaches benefit students in a formal setting. As this research mounts, colleges and universities may begin preparing social studies teachers with PHL methodologies for the traditional classroom and make PLH approaches a component of teaching methods courses. Programs like 4-H, well versed in experiential learning, can assist in preparing teachers for the classroom and PHL presentations at inservice professional development trainings can share findings of PLH effectiveness in history education.

To further establish this evidence, research could be conducted at accessible educational settings such as history camps, museums, historical sites, and other living history facilities where visitors could participate rather than provide an audience for living history interpreters.

Summary

The effect of PLH learning approaches on youth interest in history appears to be powerful. This study answered both research questions through the analyzed data of 62 members of the 4-H Western Heritage Project in Montana and Missouri. After participating in a PLH approach to learning history for at least one year, youth reported increased in interest in history and agreed that picking their own topics to learn about, learning from experiential activities, group learning, using creativity, role playing, and the inspirational role of a 4-H leader are influential to their interest in history.
These findings have implications for museum education programs, living history sites, and history camps where the adoption of PHL methodologies are easily achievable. With more evidence supporting the effect of PHL on history education, components to the methodology could be incorporated into the curriculum of the formal classroom.

If nothing else, the Land Grant Universities that administer 4-H youth development programs now have research evidence supporting the effect of PLH learning approaches through the 4-H Western Heritage Project. This research may entice additional 4-H faculty and volunteer adults to introduce experiential history education into their youth development programming.

A narrow body of research now supports the effectiveness PLH methodologies in non-formal history education. While expanded and rigorous studies may or may not find value in PLH approaches in other periods of history or in other settings, the opportunity for future research both within and outside the 4-H program is nearly limitless. For 62 young people, however, PLH strongly influenced an increased interest in the history of the American frontier.
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APPENDIX A

PILOT SURVEY INSTRUMENT
4-H Western Heritage Project
Member Survey

Participation is voluntary, and you can choose to not answer any question that you do not want to answer, and you can stop at any time.

Please fill in the blanks below to describe yourself:

Age: _______ Gender: Male______ Female ______ Number of Years Participating in 4-H ______

Number of Years Participating in the 4-H Western Heritage Project ______

Please respond to the statements below by thinking back to before you participated in the 4-H Western Heritage Project and then since participating in the 4-H Western Heritage Project. Using the guide below, circle the number that best describes your opinion of each statement.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Before Participating in the 4-H Western Heritage Project</th>
<th>Since Participating in the 4-H Western Heritage Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree 1 2 3 4 5 6 7 8</td>
<td>Strongly Agree 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>History is important to me.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>History is “real” to me.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I have a favorite history topic I want to look into.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I can see a connection between the past and today.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>My family history is important to me</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I have in-depth conversations with adults in my life.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I feel I can learn history.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I can relate to Old West lifestyles.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I understand racial issues of the Frontier American West.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I can relate to minority roles in the Frontier American West</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Continue Back Page
Please respond to the following statements based only on your participation in the 4-H Western Heritage Project. Using the guide below, circle the number that best describes your opinion of each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like visiting museums and historic sites.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I use the internet to find information about historic subjects I like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I read books and magazines about history.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I watch television shows about history topics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>There is something new to learn about history.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I like history.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Thank you for participating in the 4-H Western Heritage Project Survey!!!
APPENDIX B

DISSERTATION SURVEY INSTRUMENT
4-H Western Heritage Project
Member Survey

Participation is voluntary, and you can choose to not answer any question that you do not want to answer, and you can stop at any time.

Please fill in the blanks below to describe yourself:

Age: ___________ Gender: Male______ Female ______

Number of Years Participating in 4-H _______

Number of Years Participating in the 4-H Western Heritage Project _______

Please respond to the following statements based on your participation in the 4-H Western Heritage Project. Using the guide below, circle the number that best describes your opinion of each statement.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Statement Since Participating in the 4-H Western Heritage Project

1. It is important to me to pick my own topics to learn more about. 1 2 3 4 5 6 7

2. I learn from the activities in the project. 1 2 3 4 5 6 7

3. My friends in the project help me learn. 1 2 3 4 5 6 7

4. I can use my creativity when studying history in the project. 1 2 3 4 5 6 7

5. Playing the role of a historical character helps me learn history. 1 2 3 4 5 6 7

6. Wearing old-fashioned clothes helps me learn history in the project. 1 2 3 4 5 6 7

7. My 4-H leader in the project inspires me to learn history. 1 2 3 4 5 6 7

Continued Back Page
Please respond to the statements below first since participating in the 4-H Western Heritage Project and secondly by thinking back to before you participated in the 4-H Western Heritage Project. Using the guide below, circle the number that best describes your opinion of each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Since Participating in the 4-H Western Heritage Project</th>
<th>Before Participating in the 4-H Western Heritage Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. History is important to me.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>9. History is “real” to me.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>10. I have a favorite history topic I want to look into.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>11. I can see a connection between the past and today.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>12. My family history is important to me</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>13. I have in-depth conversations with adults in my life.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>14. I feel I can learn history.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>15. I can relate to Old West lifestyles.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>16. I understand issues between racial groups such as whites, Native Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>17. I can relate to the roles of women and minority groups such as Native Am., African Am., Mexican Am., or Chinese in the frontier American West.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>18. I like visiting museums and historic sites.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>19. I use the internet to find information about historic subjects I like.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>20. I read books and magazines about history.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>21. I watch television shows about history topics.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>22. There is something new to learn about history.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>23. I like history.</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Thank you for participating in the 4-H Western Heritage Project Survey!!!