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Walden University

2010

ABSTRACT

Integrating Equine-Assisted Activities and Therapy (EAAT) into a Higher Learning

Institution

by

Gary Mullen

M.S., Colorado State University, 1977B.S., California State Polytechnic University, 1975

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Administrative Leadership for Teacher Learning

Walden University

December, 2010

Abstract

Collegiate equestrian programs are costly to operate, and cost often exceeds revenue from tuition. The local problem in this project study was the need for supplemental revenue to support a cost-intensive equestrian program, without cutbacks or raising student fees. The study examined the integration of an equine-assisted activities and therapy (EAAT) program for additional income, while capitalizing on existing institutional resources at a Midwestern university in the United States. Research questions explored how to implement an EAAT program to close the budgetary gap at the project site. Systems theory formed the conceptual framework for analyzing the relationship between program characteristics and budgetary adequacy, as well as promising points of intervention in the systemic relationship between program and budget. A mixed methods design included a quantitative survey of all U.S. post-secondary institutions (37) with EAAT programs. Survey data were expanded and validated through open-ended interviews using a panel of five experts selected from the survey group. Data analysis included the constant comparative method, member checking, and triangulation procedures. Focus groups provided feedback on analyzed data regarding application to the project site. Results revealed dominant themes: collaborations; the relationship with administration; finances; staffing; scheduling; and employability. A three-option proposal was created to integrate EAAT, which included students providing community EAAT services to enhance their professional skills, and program revenue. Beyond addressing the financial issue, the social change implications of this study include preparing college graduates for servicebased careers that advance a culture of equity and diversity in the workplaces to which they will bring the values learned in the EAAT program.

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Acknowledgments

I was blessed with phenomenal support throughout this study. My children, Genni, Carly, Lindsay, Jordan, Katie, and Ryanne, consistently gave me words of encouragement and a reason to succeed. My elderly mother, Gloria Mullen, patiently served as a sounding board for my ideas, and a cheerleader for my victories. My academic dean at William Woods University, Dr. Sherry McCarthy, daily demonstrated the leadership principles I learned in my Walden studies, and she built me up as a person and practitioner. Dr. Miller, my methodologist inspired me with his disciplined lifestyle, his eye for detail, and his pleasant, personable teaching style. Lastly, I want to acknowledge my doctoral chair, Dr. Kathleen Lynch. I was absolutely impressed by her depth of knowledge; her clear and positive instruction; her willingness to help at the most inopportune times; and her wonderful illustrations and sense of humor. Dr. Lynch not only taught me about becoming a scholarly practitioner, she showed me how to be one.

Table of Contents

List of Tables	iv
List of Figures	v
Section 1: The Problem	1
Introduction	1
Definition of the Problem	3
Rationale	8
Definitions	9
Guiding/Research Questions	13
Review of Literature	14
Introduction	14
The Problem	15
Historical Background	19
Pedagogical Foundation	35
Methodology	51
Implications	52
Summary	53
Section 2: Methodology	
Introduction	55
Explanation for Mixed Methods Design	56
Description and Justification of Setting and Sample	57
The Role of the Researcher	58

Protective Measures for Participants		
Data Collection and Analysis Sequence		
Reliability and Validation Procedures		
Data Collection and Analysis.	66	
The Quantitative Data	66	
The Qualitative Data: The Expert Panel	79	
The Qualitative Data: The End-Users	106	
Section 3: The Project		
Introduction	116	
The Review of Literature	118	
The EAAT Terminology Problem	118	
Relationships with EAAT Organizations	121	
The Legitimacy of EAAT	126	
The Employability of EAAT Graduates	129	
EAAT Finances	134	
Implementation of the Project	140	
Needed Resources, Existing Supports, and Potential Barriers	141	
Proposal for Implementation	144	
Project Evaluation	146	
Implications Including Social Change	148	
Conclusion	149	

Section 4: Reflections and Conclusions

Introduction	151
Project Strengths	151
Recommendations for Remediation of Limitations	152
Scholarship	153
Project Development and Evaluation	155
Leadership and Change	156
Analysis of Self as a Scholar	157
Analysis of Self as a Practitioner	158
Analysis of Self as a Project Developer	159
The Project's Potential Impact on Social Change	160
Implications, Applications, and Directions for Future Research	161
Conclusion	162
References	164
Appendix A: The Project	184
Appendix B: The Quantitative Survey.	218
Appendix C: Selection Criteria for Expert Panel	223
Appendix D: The Qualitative Questions	224
Curriculum Vitae	226

List of Tables

Table 1. General Description of Each Expert Panel Institution	. 79
Table 2. EAAT Program Overview of the Expert Panel Institutions	. 81
Table 3. Expert Panel Responses Regarding Their Institutions' EAAT Program Collaborations	. 83
Table 4. Expert Panel EAAT Center Characteristics	. 86
Table 5. Expert Panel Responses Regarding the EAAT Program Relationship with the Traditional Equine Program	. 87
Table 6. The Expert Panel Responses Regarding the Relationship Between the Institutions' EAAT Program and the Administration	. 90
Table 7. Financial Insights from the Expert Panel	. 92
Table 8. Insights from the Expert Panel Regarding EAAT Staffing	. 96
Table 9. EAAT Scheduling Insights from the Expert Panel	. 99
Table 10. Expert Panel Insights Regarding the Employability of EAAT Graduates	. 102
Table 11. Qualifications of End-User Group I	. 105
Table 12. End-User Group I Highlighted Response to the Interview Question One	. 106
Table 13. End-User Group I Highlighted Response to the Interview Question Two	. 107
Table 14. End-User Group I Highlighted Response to the Interview Question Three	. 108
Table 15. End-User Group I Highlighted Response to the Interview Question Four	. 109
Table 16. End-User Group I Highlighted Response to the Interview Question Five	. 110
Table 17. End-User Group I Highlighted Response to the Interview Question Six	. 111
Table 18. End-User Group I Highlighted Response to the Interview Question Seven	. 112

List of Figures

Figure 1. Reinforcing Loop Diagram	5
Figure 2. Balancing Loop Diagram.	7
Figure 3. The Research Sequence.	62
Figure 4. General Demographics of Participants.	67
Figure 5. Levels of EAAT Involvement	68
Figure 6. Means of Community Outreach.	69
Figure 7. Populations Served.	70
Figure 8. Internal Institutional Collaborations	71
Figure 9. Shared Institutional Resources.	72
Figure 10. EAAT Modes.	74
Figure 11. Primary Sources of Financial Support	75
Figure 12. EAAT Program Perspectives	76
Figure 13. Growth from Prior Academic Year	77
Figure 14. Funding Formula for Proposed EAAT Program	133

Section 1: The Problem

Introduction

William Woods University (WWU) in Fulton, MO has been the home to one of the oldest and finest equestrian programs in the United States, since 1924. It is, however, not exempt from the arduous task of balancing three primary components that guide equine programs---the areas of administration, academic rigor, and equestrian knowledge. Administrative focus is acutely directed towards the business, financial side of these costintensive equine programs which utilize a "living curriculum"---horses---in a university setting. Academic rigor is primarily concerned with curriculum, teaching methods, standards, and enriched learning experiences. The equestrian knowledge component consists of concerns that reach beyond traditional pedagogy to include discipline-specific factors, such as rider safety, equine care, and training methods. When one of the three primary components is out of balance, the entire equine program is adversely affected. At the local level for WWU, the financial component is out of alignment with academic and equestrian goals as is common with most equine programs. Therefore, establishing equilibrium for this trichotomy was the problem addressed in this project study. As the equine division chair at WWU, my approach to the project was to research promising ways to equalize the program components by supplementing and/or maximizing existing resources to sustain the costly program in a manner that lead to enriched, quality learning. Specifically, I researched the ways and means of integrating equine-assisted activities and therapy (EAAT) into the university, using existing institutional resources.

In the past 10 years, EAAT programs have become increasingly popular in equine-related programs in higher education. Both entities can be mutually benefited by this relationship which has the potential to achieve significant social change. Enriched learning opportunities, via an EAAT program, can be provided through experiential learning, service learning, and entrepreneurial learning. This use of equines in EAAT programs as valuable therapeutic tools for those with physical and mental disabilities is undisputable, according to the literature (Brouilette, 2006; Foley, 2008; North American Riding for the Handicapped [NARHA] 2009; Shultz, Remick-Barlow & Robbins, 2006; Trotter, 2008). A myriad of creative and innovative equine therapies are now practiced using horse vaulting, horse driving, horse riding, or just horse handling on the ground (NARHA, 2009). Besides equine therapy for common mental and physical disabilities, EAAT programs are experiencing treatment success with issues related to post-traumatic disorders, eating disorders, obsessive compulsive behavior, criminal rehabilitation, children at-risk, ineffective leadership, dysfunctional relationships, and a plethora of other disorders (Esbjorn, 2006; Graham, 2007; Koch, 2008; NARHA, 2009; Ridding, 2005; Sole, 2006).

Additional social change could be experienced by the growing EAAT movement which has struggled to establish credibility and optimal quality because of its newness.

EAAT programs could potentially gain credibility and enriched quality through the higher learning collaboration. In turn, equine programs might be able to maximize the use of their horses and resources to provide a better return on their financial investment---an integral factor in this study.

Section 1 further identifies the problem; the rationale for the problem; the special terms associated with the problem; and the guiding research questions. The section also includes a critical perspective of why the study is important to the local context and to the larger educational context, the review of current literature that relates to the problem, and the implications for possible project directions based on anticipated findings of the data collection and analysis. The section concludes with discussion of the project, which is a multi-option proposal to integrate an EAAT program into an existing equine department in a university setting.

Definition of the Problem

The local problem that prompted this study was the need for supplemental revenue to aid in the sustenance of the cost-intensive equine program at WWU as evidenced by the institutional financial reports from the Chief Financial Officer (CFO) (Fessler, 2009). Financing of education is a major concern, which often leads institutions to seek additional revenue streams to meet the need for supplementation beyond the allotted fiscal budgets (Mazurek & Winzer, 2006). This concern, based on the WWU financial reports (Fessler, 2009), incited the WWU president to request division chairs to investigate ways to become more cost-effective in their programs. A creative way to address this problem is to maximize resources and get a better return on investment (e.g. existing horses, facilities, faculty, and institutional resources). This premise inspired the WWU president to request the academic dean and division chairs to investigate the potential for incorporating a veterinary technician program into the equine division in collaboration with the science division (McCarthy, personal communication, May 8,

2009). The triad of overarching components that influence decision-making in the equine division---administration, academic rigor, and equestrian knowledge---came into play when the president made this request. The administration component involved the academic dean, the science division chair, the equine division chair, and the biology professor meeting to discuss how the veterinary technician program could align with the academic rigor component and the equestrian knowledge component at WWU. After much discussion in the meeting, it was the consensus of the division chairs that a veterinary technician program was not compatible with the needs and capabilities of WWU. Therefore, the academic dean, in an effort to fulfill the president's request for investigation of new and innovative programs, opened the discussion to alternative ideas. The discussion led to a well-received concept by the division chairs and the academic dean for the potential development of an EAAT program that would involve a collaboration of various divisions with the equine department. The academic dean then requested that I, as the equine division chair, work on developing a proposal that would include various options on the ways and means of incorporating an EEAT program into the institution (WWU meeting minutes, May 11, 2009).

The problem for this project study arose out of the university president's request for divisions to become more cost-efficient (McCarthy, personal communication, May 8, 2009). The problem is finding a way to secure additional income to sustain a quality level of instruction, without making negative cutbacks or raising student fees. Senge (2006) explains how *systems thinking* can be applied to this problem where a balancing process is needed to reduce a gap between what is desired and what exists (p. 87). In this case, the

gap is between the budget necessary to support a high quality equestrian program and the income needed to support the budget. Senge describes how reality is made up of cycles, and any influence on a system has both a cause and effect (p. 73). Causal loop diagrams based on Senge's approach (Figures 1 and 2) show the major interrelationships underlying the problem which can lead to new insights into what might be done to solve the problem (p. 72).

Figure 1. Reinforcing loop diagram

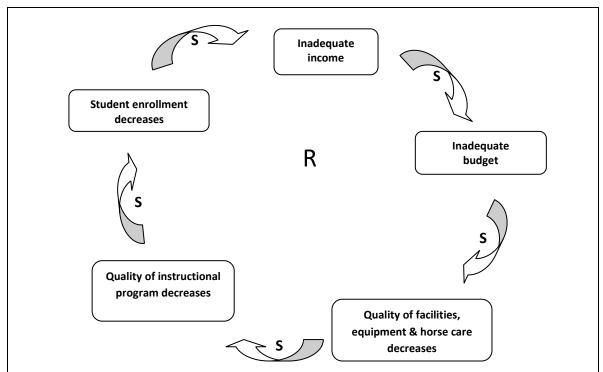


Figure 1. This causal loop diagram has a reinforcing (R) feedback loop. The feedback continues in a cyclical direction reinforcing the same (S) effect. Inadequate income leads to demands to make budget cuts or raise student fees. This negative feedback leads to a reduction in the quality of instructional equipment, facilities, and horse care, which in turn leads to decreased instructional quality in the equine program. Diminished program quality contributes to decreased student enrollment. Reduced enrollment means less income.

Figure 1 illustrates the income/budget gap for WWU as a reinforcing (R) causal loop, which Senge (2006) describes as a "vicious cycle" (p.80). The causal relationships are self-sustaining unless a deliberate intervention is introduced. For an equine division chair, the problem is to find an intervention that can secure additional income to sustain a quality level of instruction, without making cutbacks that negatively affect programs or facilities, and without raising student fees. The approach to the problem was to research promising ways and means of incorporating EAAT into the university, using existing resources. The intent was to use this EAAT intervention as a means of turning the "vicious cycle" into a "virtuous cycle," as described by Senge (p. 81). Figure 2 is a balancing loop diagram that demonstrates the stabilizing effect that an EAAT program will have on the negative feedback cycle.

Figure 2. Balancing loop diagram

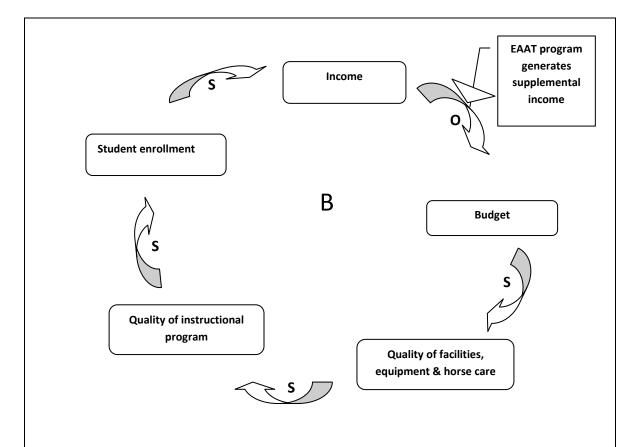


Figure 2. This causal loop diagram has a balancing (B) feedback loop. The integration of an EAAT program will utilize existing higher learning resources, and improve income generation. This feedback creates an opposite (O) effect on the gap between income and budget. The positive effect on income will lead to a more substantial division budget, which is conducive to increased quality of facilities, equipment, and horse care. Then, overall instructional program quality increases, and more students are attracted to the program and retained. Increased enrollment leads to an increase in revenue.

The original impetus for this project study was business/administration related (McCarthy, personal communication, May 8, 2009); however the problem extends to two other program components---educational and equestrian. All three perspectives have existing commonalities, but their emphases are dependent on their goals, values, and beliefs. Whereas, administrators may be more focused on financial and managerial

aspects, educators may center on curriculum and sound pedagogy. Equestrians typically have special concerns about safety, horse care, and horse training methods. This project study researched these three perspectives in an attempt to understand and reconcile the tensions that exist within these concepts as they relate to an intervention in the income/budget phase of the causal loop, which was described in Figure 1.

The multi-dimensional problem is complicated by the fact that the incorporation of EAAT into higher learning is a relatively new concept. These popular new programs are diverse in design with limited available models and data. Thus far, approximately, only 40 of 185 U.S. equine institutions have implemented EAAT (Almos, 2009; NARHA, 2009). This project study was designed to research and expand the sparse higher learning/EAAT knowledge base. Information gleaned was related to the program needs and capabilities of WWU, with the intent of resolving the tension that exists among the three overarching components of the equine department at WWU---administration, academic rigor, and equestrian knowledge.

Rationale

An intervention is needed to break the cycle of inadequate income leading to inadequate budgets for the equine division at WWU (Fessler, 2009; McCarthy, personal communication, May 8, 2009). The integration of EAAT will serve as an intervention to reduce the tension that exists among administration, academic rigor, and equestrian knowledge in the equine division at WWU. The tension is caused by the lack of adequate funds for the cost-intensive program, and it is amplified by a current depressed economy. Figure 2 illustrates how stabilization of the various equine division components could

occur when an EAAT program is implemented with existing institutional resources, rather than making negative budget cutbacks or raising student fees. The increased revenue will enhance the capability of the budget to provide adequate facilities, equipment, and equine care. In turn, overall equine program quality will be sustained and fortified. Enhancement will come in the form of service learning and entrepreneurial learning in the EAAT program that provides social justice to those who are unique learners that desire an affordable degree program in equine education. Significant social justice will extend to the local community with disabilities. The improved program will increase the likelihood of attracting more students and retaining them. Increased enrollment feeds additional revenue into the equine division's operational budget, and the positive "virtuous cycle" continues (Senge, 2006, p. 83).

The entire process of addressing the problem at the local level will provide stakeholders with an opportunity to grow as a learning community of practice (Lunenburg and Ornstein, 2004; Senge, 2006) through the introduction of systems thinking as it applies to the university as a whole system made up of interrelating parts that have cause and effect. The solution to the problem also has significance that extends beyond the local level. The EAAT prototype(s), in addition to the related decision-making model, could be useful to other institutions that are in need of cost-efficiency and improvement analysis in their equine programs (Scott, 2009).

Definitions

It is noteworthy that the EAAT movement has undergone rapid growth in the past two decades, and terms have evolved due to treatment innovations and the development

of politically correct language. To illustrate this point, two major organizations are currently in the process of name changes. The North American Riding for the Handicapped Association (NARHA) is working on a new organization name to eliminate the word *handicapped* (Strides Magazine, NARHA, 2009), and the Federation of Riding for the Disabled International (FRDI) is working on a new name to remove the word *disabled* (FRDI, 2010).

Following are some special terms associated with the problem in this project study:

Causal loop diagram (CLD) provides a language for expressing understanding of the dynamic, interrelated variables in our world. CLDs use arrows to connect variables in a way that illustrates how one variable affects another. The arrows are labeled with an S or an O. An arrow between variables labeled with an S means when the first variable changes, the next variable changes in the same direction. If an arrow between variables is labeled with an O, when the first variable changes, the following variable changes in the opposite direction. A reinforcing loop is observed when feedback increases the impact (positive or negative) of a change. A balancing loop is observed when feedback reduces the impact of a change to provide equilibrium (Senge, 2006).

Equine assisted activities (EAA) is a term often used interchangeably with the term therapeutic horsemanship, which provides opportunities for motivational, educational, and/or recreational benefits through riding, driving, vaulting, and ground work with horses (Macauley, 2006; NARHA, 2010). EAA has a recreational/competitive focus (Macauley, 2006).

Equine assisted activities and therapy (EAAT) is an umbrella term that includes most forms of equine/ human activities (e.g., riding, vaulting, driving, ground work) for motivation, educational, and recreational benefits, in addition to therapeutic treatments for those with mental and physical disabilities. The term is often used interchangeably with the terms therapeutic riding, therapeutic horsemanship, and hippotherapy (Macauley, 2006, p. vi; NARHA, 2003, p. 7).

Equine assisted therapy is designed to promote improvement in a person's physical, social, emotional, and/or cognitive functioning (NARHA, 2003, p.7). EAT has a medical/rehabilitative focus (Macauley, 2006, p. vi).

Equine facilitated learning is a term used by the Equine Facilitated Mental Health Association (EFMHA). It is an educational approach that includes equine facilitated activities incorporating the experience of equine/human interaction in an environment of learning or self discovery. EFL encourages personal explorations of feelings and behaviors to help promote human growth and development (Ewing, MacDonald, Taylor & Bowers, 2007, p. 60).

Equine facilitated mental health is a term inclusive of equine assisted activities and therapies with a focus on mental health issues (Macauley, 2006, p. x).

Equine Facilitated Mental Health Association (EFMHA) is an association within NARHA (formerly known as North American Riding for the Handicapped Association). In October of 2009, these two organizations merged (Strides Magazine, NARHA, 2009).

Equine facilitated psychotherapy (EFP) is a term often used interchangeably with equine assisted psychotherapy (EAP). The term is used accurately by the Equine

Facilitated Mental Health Association as experiential psychotherapy that involves equines. It may include, but is not limited to, such mutually respectful equine activities as handling, grooming, longing, riding, driving, and vaulting. EFP is facilitated by a licensed, credentialed mental health professional working with an appropriately credentialed equine professional. EFP may also be facilitated by a mental health professional that is also credentialed as an equine professional (EFMHA, 2010).

Entrepreneurial learning involves the virtues of creativity, leadership, and sustainability (Wasley, 2008; Wessels, 2005).

Equine: "relating to the horse" (Merriam-Webster, 2006).

Equestrian: "Adjective---relating to horseback riding. Noun---horseback rider" (Merriam-Webster, 2006).

Experiential learning, also termed activity learning, is accomplished as students work directly with equines and riders in a hands-on setting (Tracey & Morrow, 2006).

Hippotherapy (HPOT) is a physical, occupational, or speech therapy treatment strategy that utilizes equine movement. With a licensed therapist present, this strategy is used as part of an integrated treatment program to achieve functional outcomes.

Hippotherapy has been shown to improve muscle tone, balance, posture, coordination, motor development as well as emotional well-being (American Hippotherapy Association, 2010).

NARHA was once an acronym for the National American Riding for the Handicapped Association, but now it is solely a name for the organization (due to political correctness issues with the term handicapped, the fact that the organization is

now international, and the fact that riding is no longer the only mode of activity and therapy). This organization is an accrediting agency for instructors and centers. It is also the mother organization for the Equine Facilitated Mental Health Association. The two entities merged as one organization in October, 2009. Due to this transition, the NARHA name is currently under study for a potential name change that is more accurate and politically correct (Strides Magazine, NARHA, 2009, p. 2).

Service learning incorporates academic course work with civic responsibility, such as an EEAT program providing educational and therapeutic benefits, fortified with social equity for those with disabilities (Macfarlane, 2007; Thomsen, 2006).

Guiding Research Questions

The two guiding research questions are: (a) Among higher learning institutions, to what extent are internal and external resources used to integrate EAAT as an intervention to close the gap between income and the budget needed for a quality equestrian studies program? and (b) How is an EAAT program compatible with the needs and capabilities of the institution, WWU? Past research identifies how EAAT programs are excellent mediums for service-learning and experiential learning, profoundly benefiting people with or without disabilities (Brouillette, 2006; Esbjorn, 2006; Foley, 2008; Graham, 2007; Koch, 2008; NARHA, 2009; Ridding, 2005; Schultz, Remick-Barlow & Robbins, 2006; Sole, 2006; Trotter, 2008). These EAAT programs have existed for more than 75 years, but incorporating them into higher education is a relatively new concept. Thus far, approximately 40 of 185 equine institutions in the United States have implemented EAAT (Almos, 2009; NARHA, 2009). It is problematic that these popular new programs

are diverse, designed with limited access to models and data. Still, little is known about the ways and means for utilizing existing institutional resources to effectively operate an EAAT program in a cost-effective manner. A quantitative survey, expert panel interviews, and end-user interviews addressed the guiding questions and reveal the nature of EAAT programs within higher learning. The resulting information was analyzed and synthesized into a proposal that includes model options of varying levels for possible implementation of an EAAT program at WWU or other institutions.

Review of the Literature

Introduction

This literature review builds on a framework that constitutes a relationship between an EAAT program and an institution of higher learning. The development of the relationship is overshadowed by the theories of *constructivism* and *systems thinking* as they relate to the three influential components of an equine program---administration, academic rigor, and equestrian knowledge. These three components permeate this literature review relative to the problem, historical background, pedagogical foundation, and methodology. The problem section focuses on general and local issues. The historical background section includes insights into local administration, local academic rigor, equine education, the equine industry, and the EAAT movement. The pedagogical foundation and the methodology sections includes the review of constructivism and systems thinking relative to service learning, entrepreneurial learning, experiential learning, curriculum development, and leadership.

The Problem

The problem on which this project focuses is the self-reinforcing cycle of income that is inadequate to meet the budget needs of the equine program at WWU, which negatively affects student enrollment and leads to continued inadequate income. The project was designed to show how an EAAT program might serve as an intervention to balance the relationships among the variables that include income, budget, program quality, and enrollment. On the local level, at WWU, an administrative concern is that the business/financial side of the equine program is out of balance (Fessler, 2009; McCarthy, personal communication, 2009). The problem was to find a way to secure additional income to sustain a quality level of instruction, without making financial cutbacks or raising student fees. Equilibrium of program components needs to be established, as is the case in most institutions of higher learning. According to Mazurek and Winzer (2006), a financial crisis has gripped the world's school system" (p. 18). This problem especially applies to equine departments in higher learning, which have the overwhelming task of managing a budget to provide for equines, the cost-intensive "living curriculum" (Bump, 2009; Matte, 1994; Parmenter, 1978; Rudolph, 1979). This curriculum cannot be stored on a bookshelf, and it must be fed and cared for under a recessed national economy that is affecting colleges across the nation (Fain, 2009). Green-based initiatives, which promote environmental and human welfare, have led to dramatic increases in food prices which negatively affect the affordability of an equine program. Biofuel research has led to large volumes of food crops (horse grains) being shifted into bioethanol and biodiesel production (Rosengrant, 2008).

Even in the 1970s, the primary struggles for equine programs were indentified as "insufficient funds, inadequate facilities, and lack of administrative support" (Rudolph, 1979, p. 11). Unfortunately, this dilemma still holds true for current times, and the time gap has not been filled with substantial solutions. Equine educator and researcher, Karen Bump (2009), explained,

Despite the apparent growth in student interest in the discipline, there is consistent discussion that equine departments, equine courses, and equine research receives less funding and less support than many other animal based disciplines, particularly in land-grant universities. (p.13)

Equine division chairs are feeling this pressure. Two surveys of different equine programs revealed that the number one concern of equine education leaders was finances (Bump, 2004; Mullen, 2008).

Mazurek and Winzer (2006) explained how the changed state of the global economy has impacted educational systems, requiring them to learn new ways to cope with the change. One coping mechanism is for institutions to seek additional revenue streams beyond the allotted fiscal budgets. If an institution, such as my workplace, does not become creative in producing additional revenue streams, negative impact might be observed in the form of increased student fees or reduced program quality. The ramifications can potentially extend to enrollment size. Gardner (2008), in a discussion of the creative mind in corporate America, explains:

Those corporations that do not embrace innovation will almost inevitably be muscled out by those that do. Indeed, insufficient attention to innovation may be

the principal reason that many of the leading American corporations of 50 years ago (think Sears Roebuck, American Motors, Pan American Airlines, and Westinghouse) have either shrunk in size or gone out of business altogether. (p. 78)

With more than 40 higher learning institutions already incorporating EAAT into their equestrian programs (NARHA, 2010), the competition for enrolling prospective students has increased. Therefore, innovation is being embraced by WWU to avoid being muscled out by the competition. The concept of financial supplementation through the innovative use of resources prompted the WWU president to mandate meetings between the academic dean and division chairs to research ways and means of balancing the financial aspect of the costly equine program (McCarthy, personal communication, 2009). One promising concept was the integration of higher learning resources into the development of an EAAT program at WUU. Per approval of the academic dean (McCarthy, personal communication, 2009), this project study will research this concept and culminate in a multi-option proposal for the integration of an EAAT program into the existing equine division. When endeavoring to be innovative, however, it is probable that conflict will ensue, related to an institution's cultural issues that are political, legal, historical, social, and economic in nature (Campbell-Jones, Lindsey & Roberts, 2005). All points of conflict must be resolved with the overarching school mission in mind, with the leader as the steward of the mission and unifying purposes (Reeves, 2009, p. 38). Lapovsky (2008) recognizes that schools must determine which "expensive" policies and practices actually contribute to the overall mission of the institution. It is problematic to lack courage and a commitment to mission when dealing with such weighty matters.

An equine division must also balance academic rigor and equine knowledge with the administrative/business component. Bump (2009) stated, "the challenges to address new emerging and contemporary issues within the curriculum must be faced by equine affiliated academic programs just as they must be faced by all other degree programs" (p.14). This involves attention to the credibility problem for equine educational programs within higher learning. According to Bump (2009),

By all informal reports, university programs affiliated with equine studies have struggled for recognition within their academic departments. . . perhaps it is the emotional connection to the horse that has left it less than respected by other animal science disciplines. It is seen as more frivolous and less deserving of serious attention---despite the increased interest of society for all things horsey. (p.13)

In today's society, there is an emotional connection with the horse that is not commonly observed in other farm animals. Horses now have a different purpose than other farm animals as they are used more commonly for service (i.e., recreation, sport, therapy, work force) and less commonly for food (NAEAA, 2009). It is important to realize that emotional connection is foundational to the use of the horse in equine-assisted activities and therapy (NARHA, 2010).

The credibility issue is also a concern for independently operated EAAT programs. Holt, Brown, Spink and Tebay (1994) were among the first to recognize that,

We are at a stage of maturity in therapeutic riding where, in order for this discipline to be fully accepted as having therapeutic merit, and the personnel involved in it to be considered true professionals, education and training needs to be of the highest caliber and at the highest level. (p.1)

Karol (2007) recognizes the unfortunate fact that few EAAT programs utilize the expertise of psychologists, clinical social workers, or psychiatrists at the master's and doctoral levels. The integration of an EAAT program into an existing university equine program, as proposed in this study, may help to mutually enhance the caliber of academic rigor, thereby adding credibility to both entities (NARHA Higher Education Committee, 2005).

Historical Background

Historical insights into the equine industry. Throughout the ages, horses have assumed a vital role in work, warfare, art, literature, sport, and religion (Shultz-Rathbun, 2009). For most of recorded human history, the horse has been especially effective as a desirable mode of transportation, a fact that changed with the advent of mechanized transportation (Shultz-Rathbun, 2009).

In the early 1900s, approximately half of all Americans lived on farms and used horses to contribute towards economic sustenance (Rudolph, 1979). At that time, approximately 17 million horses fulfilled working and transportation roles (Bump, 2009). As a result of the industrial revolution, the horse population in the United States dwindled down to a mere 4.5 million by 1959 (Parmenter, 1978). Horses at that time were finding a more significant role in sporting venues such as competition and racing. Horseracing, the

primary component of the 1970s industry, was soon surpassed by recreational riding and competitive horse showing (Deloitte, 2006). Bump (2009) sums up the horse industry in the 1970s and the 1980s:

A shift in the use of the horse began in the late 1960s as Americans found the recreational pleasure of the horse on an individual level. What was once a relationship based primarily on economic need now was growing into a relationship based on emotional connections and recreational satisfaction. In the 1970s the weekend horse show arrived . . . in the 1980s the horse show "circuit" arrived and a new equine industry was truly born. (p. 9)

Use of the horse for recreational satisfaction and emotional connection eventually lead to the establishment of the first equine-assisted activities and therapy programs in North America in the early 1970s (NARHA, 2010).

Since the 1990s, horses have been used primarily for recreation, competition, and leisure, with a smaller percentage used for farm work, police mounts, and tools in equine-assisted activities and therapy (EAAT). This change in usage is verified by American Horse Council (AHC) reports, which span a 30 year time period (American Horse Council, 1979-2009). The shift accompanies a rejuvenated horse population with a stronger economic impact. According to Bump (2009), the horse population in the early 1900s was close to 17 million. In the late 1950s, the horse population was at a low point with approximately 4.5 million horses (Parmenter, 1978, p. 6). By the late 1970s, the horse population had increased to 8.5 million (Rudolph, 1979, p. 2). Most recently, 30

years later, according to a 2009 report by the American Horse Council, the horse population expanded to approximately 9.2 million.

Current uses for the horse are ranked as: 1) recreation, involving approximately four million horses, 2) showing, involving approximately three million horses, 3) other uses, such as rodeo, carriage driving, work, polo, therapeutic riding, and parades, involving approximately 2 million horses, and 4) racing, involving approximately 1 million horses (AHC, 2009). The modification in the use of the horse is also observed within the world of competition. A survey conducted by the magazine *Equus* (LanGrish, 2006), revealed the following membership increases in major equine organizations between 1995 and 2005: the American Driving Society (21%), National Reining Association (90%), National Cutting Horse Association (26%), and the United States Equestrian Federation (38%). The article also cited how certain horse breed registration numbers and popular equine organizations have experienced decreases. These factors influence the nature of the equine education movement, the focus of this study.

Today's equine industry contributes approximately \$102 billion to the country's annual gross domestic product (GDP), providing nearly 144,000 full time equivalent jobs (AHC, 2009). It is, however, imperative to recognize that the recently depressed economy has placed the horse industry, including equine education and EAAT programs, into a chaotic and challenging situation (Fain, 2009). The increased cost of feed and services, in conjunction with the 2007 closing of all slaughter houses in the United States (Messier, 2009), has prompted the labeling of many horses as *unwanted*. Due to the closing of slaughter houses for humane reasons, fewer horses are being

slaughtered and more horses are maintained alive. The current number of cases involving abuse, neglect, and abandonment are unprecedented (Heleski, 2009). According to Bump (2009) in a presentation at the USDA/AHC Forum on the Unwanted Horse,

There seems to be no disagreement on the fact that there is a significant problem at hand with unwanted horses---some might even say it is a crisis, but there is real disagreement and understanding of the underlying factors, causes, and solutions. (p. 27)

These conditions will need to be considered when pursuing an innovative venture such as an EAAT program.

Historical insights into equine education. Agriculture-based studies have been a presence in higher education since 1862, even though the programs, enrollment trends, and types of students that enroll have changed (Bump, 2009, p. 7). The horse industry has undergone some major transformations leading into the twenty-first century that have affected the mission statements and practices of today's equine programs. Rudolph (1979) described these changes:

In 1915 horse numbers peaked 26 million due to their use in the work force and as a source of transportation. Colleges and universities offered horse production courses which directly related to the use of working draft horse and mules. Due to mechanization and automation, horse numbers dipped to their lowest levels in the 1960s. After that date, the horse population reversed it downward trend, and the "light horses" became more popular for racing, pleasure riding, and show competitions. In 1966, 4-H horse projects exceeded beef cattle projects for the

first time, and horse racing continued as America's leading spectator sport. Horse production courses again started showing up as part of many college and university curriculums in the late 1960s and early 1970s. (p. 2)

Rudolph (1979) revealed approximately 48 equine programs were in place in U.S. colleges and universities, in 1971, and by 1979 there were 112 equine programs. Equine programs were primarily vocational in nature, focusing on horse related careers for graduates. "Technical training and horsemanship were the guiding values of the curriculum at the time, as students were being prepared for hands-on work in the horse industry in positions such as managers and horse trainers (Bump, 2009, p.12). Equine courses were located in either animal husbandry programs in departments of agriculture, or in physical education departments (Parmenter, 1978). A recent study by Bump (2009) revealed 148 equine-affiliated undergraduate programs.

Bump (2009) cited data showing enrollment trends to be positive with an "explosion of expansion and growth both in terms of educational facilities and course offerings" (p. 14). McClaren's (2007) dissertation about online equine education revealed several domains of knowledge that are common to undergraduate programs of study in equestrian education. The domains include an introduction to theoretical foundations of horse selection, horse health management, stable management, equestrian business practices, riding instruction, and horse training (p. 5). Program types and curriculum are, however, more diverse than ever, indicative of the current horse industry and the trends that characterize it. Bump (2009) recognizes that there is a general agreement among animal scientists that training in contemporary issues is an appropriate goal of the

curriculum in order to accommodate the changing interests of students and the changing needs of their future employers(p.7). Contemporary equine educational trends as described by Almos (2007) in the book entitled *Horse Schools* include equine assisted therapy, massage therapy, natural horsemanship, race track management, homeopathic therapy, business management, online education, equine marketing, equine technologies, web design, management software, reproduction, health care, nutrition, equine journalism, pre-veterinary medicine, and more (pp. 15-40).

Almos (2007) separated equine schools into categories, two of which are traditional schools and specialty schools. Traditional schools are those college and universities that offer some form of an equine-related undergraduate or graduate degree, often in conjunction with a liberal arts based curriculum. This category includes junior colleges. Specialty schools are those that primarily offer certifications for a specific facet of the horse industry such as equine massage therapy, horseshoeing, and natural horsemanship (p.2). These categories are not all inclusive, as some universities, public and private, provide certifications and specialized training that accompany 4-year degrees. Many community colleges and private institutions and vocational-technical schools are now offering 2-year degrees and short-term certification programs for a plethora of "specialties" (pp. 15- 40).

Schools that offer full majors in equine science are a minority, with most of schools only offering equine-related degrees in the form of minors, concentrations, or emphases (Almos, 2007). These typically include equine management, business, science; riding instruction; horse training; pre-veterinary medicine; and, more recently therapeutic

riding. Those schools, most of which are private, that do offer a full major in equine studies typically have one or two majors entitled *equine science* (also termed *equine studies*, *equestrian studies*) or *equine administration* (also termed *equine management, equine business*). Private schools, which are often not research-directed, appear to be more "broad spectrum" than public institutions, delving into more of the competency based components of an equine curriculum (pp. 15 - 139).

Equine concentrations, minors, and emphases are especially prevalent in land-grant institutions where the equine programs are a part of the animal science or agriculture departments, in accordance with the Morrill Land Grant Act of 1862 (Bump, 2009). Majors in these research institutions often relate to veterinary medicine and reproduction, rather than equine studies or equine administration (Almos, 2007).

Internships, optional or required, are a common component of most degree programs, allowing for additional intensive, specialized, hands-on learning (Almos, 2007, p.2). McClaren (2007) explained how equine education follows a tradition of face-to-face, master-apprentice models of instruction, typically introducing theoretical knowledge in the classroom, followed by hands-on experience in the stables. McClaren likened equine education to art education with a history of hands-on, master-apprentice types of learning (p. 4). Matte's (1994) dissertation on equine programs alluded to the fact that practicum-based, entrepreneurial activities are often incorporated into many equine programs. These activities can range from campus boarding operations; public horse training and riding lessons; horse breeding and sales; hosting of clinics and horse shows, for example. Matte shared how Colorado State University in Fort Collins

incorporates activities such as horse breeding farms and veterinary hospitals, for the primary purpose of providing professional experiences for students, with the added value of reduced cost for instruction through earned revenue (p. 17).

In the past twenty years, a major force in equine education has been the Intercollegiate Horse Shows Association (IHSA). This organization, started in 1999, attracts involvement by more than 300 colleges and universities, including those that offer very limited, or no equine education (IHSA, 2009). Students may major in traditional degree programs while at the same time maintaining their passion for equestrian competition. Similar to campus sports teams, these IHSA programs are often considered a wise recruiting tool. The collegiate level is a potential all- star player in horse sport marketing. Even Ivy League schools are joining this movement (Almos, 2008, p. 3). Another collegiate organization, Varsity Equestrian, is working towards gaining National Collegiate Athletic Association (NCAA) status. The concept is gaining popularity in more than 200 middle schools and high schools that now have their own interscholastic equestrian leagues (Interscholastic Equestrian Association, 2009). Scholarships are becoming more prevalent and promoted, as evidenced by equine scholarship websites (Equestrian College Recruiter, 2008).

Equine affiliated inter-institutional cooperation is on the upswing. According to the mission statement of the Equine Science Society (ESS), "The ESS strives to establish effective communication among researchers, teachers, extension, and production personnel regarding equine nutrition and physiology" (ESS, 2009, p. 1). The National Association of Equine Affiliated Academics (NAEAA) was established in 2009, with a

focus specifically on the equine academic discipline. This new organization serves to support and assist in program development, evolvement, and assessment (Bump, 2009). The founding of the organization was prompted by a survey (Bump, 2004) of 175 colleges, revealing the need of an inter-institutional exchange. The participants, equine educators, revealed the following ranked order of concerns:

- 1. Equine specific fess above tuition (83%),
- 2. Revenue-generating activities (80%),
- 3. Financial costs of running programs (76%),
- 4. Job placement for graduates (75%),
- 5. Internship practices (74%),
- 6. Degree requirements (74%),
- 7. Enrollment trends (71%),
- 8. Facilities (69%),
- 9. Student/faculty ratios (65%),
- 10. Student tuition (57%),
- 11. Student/animal ratios (55%),
- 12. Horse donation practices (51%), and
- 13. Horse culling practices (41%).

Historical insights into equine-assisted activities and therapy (EAAT).

Kachelmeier (2008) described a systematic study of therapeutic riding tracing back to a French physician in 1875. Deliberate use of Equine activities for the disabled is believed to have begun in Europe in the late 1950s (Schultz-Rathbun, 2009). In the early 1960s,

therapeutic horseback riding debuted in the United States, accompanied by the formation of the North American Riding for the Handicapped Association (NARHA) in 1969 (Kachelmeier, 2008). When the Cheff Center for the Handicapped opened in 1970, it provided a catalyst for the subsequent nationwide development of riding programs (NARHA, 2009).

A plethora of innovative EAAT applications (Macauley, 2006; Morrison, 2007) are creating a profound impact on the equine industry and equine education . In addition to treatment benefits for the more common physical and mental disabilities (Hamill, Washington & White, 2007; Silkwood-Sherer & Warmbier, 2007; Snider, et al.2007), research studies reveal significant benefits of EAAT for:

- Special education (Bass, Duchowny & Llabre, 2007; Brouillette, 2006);
- Eating disorders (Helm, 2009);
- Language-learning disorders (Macauley, 2004);
- Fitness and exercise (Dhindsa, Barnes, Devan, Nualnim & Tanaka, 2008);
- Occupational therapy (Engel & MacKinnon, 2008);
- At-risk children (Foley, 2008) and at-risk adolescents (Trotte, Chandler, Goodwin-Bond, and Casey, 2008);
- Emotionally disturbed children (Ewing, MacDonald, Taylor & Bowers,2007;
 Gasalberti, 2006);
- Intra-family violence (Froeschle, 2009; Schultz, Remick-Barlow, & Robbins, 2006);
- Sufferers of catastrophic loss (Graham, 2007; Yorke, Adams & Coady, 2008);

- Emotional well-being of women (Koch, 2008; Porter-Wenzlaff, 2007);
- Self-efficacy beliefs (Sole, 2006; Traeen & Wang, 2006);
- Cancer survivors (Haylock & Cantril, 2006);
- Couples therapy (Russel-Martin, 2006);
- Psychotherapy (Esbjorn, 2006);
- Resiliency in adolescents (Hayden, 2005);
- Models for leadership (Ridding, 2005);
- Post-war trauma (NARHA, 2009); and
- Rehabilitation in prisons (Strimple, 2003).

NARHA currently boasts more than 800 centers, serving more than 38,000 individuals with physical, mental, behavioral, and learning disabilities (NARHA, 2009). The organization offers training and certification for instructors and centers. Instructor certification categories include riding, driving, and vaulting. The newly formed NARHA Higher Education Committee focuses on the rapidly emerging relationships between EAAT centers and institutions of higher learning. As of 2009, at least 28 colleges and universities have some form of a relationship with EAAT and NARHA (NARHA, 2009).

At least three organizations offer training and certification in the field of equine mental health. A branch of NARHA is the Equine Facilitated Mental Health Association (EFMHA), which was formed in 1996 to serve the growing field of equine facilitated learning (EFL) and equine facilitated psychotherapy (EFP) (NARHA, 2009). In October 2009, the two branches merged as one entity with the proposal to make a name change for the new organization in the near future (Strides, 2009). According to Shultz-Rathbun

(2009), 3 years after the EFMHA was established, the formation of another nonprofit organization came into existence, the Equine Assisted Growth and learning Association (EAGALA). In 2002, a third organization joined the equine mental health field, called the Equine Guided Education Association (Shultz-Rathbun, 2009).

Higher learning and EAAT collaborations are emerging at a rapid pace, whether it is in the form of affiliation or incorporation. Some institutions use nearby EAAT centers for volunteer work in a hands-on setting. Some institutions have EAAT as a class, a concentration, or a minor. Very few schools have EAAT as a major. Some institutions run their own EAAT center, have a complete EAAT major, and have been accredited by NARHA as a certified training center for instructors (NARHA, 2009). This later scenario is the ultimate goal of the proposal for this project study.

Historical insights into WWU. The WWU Promotional Manual (WWU, 2009), developed by the Office of University Relations, provides historical insights into the university. Throughout its history, William Woods was known as The Female Orphan School (1870 - 1899), Daughters College (1899-1900), William Woods College (1901 - 1992), and William Woods University (1993 until the present time). Situated in mid-Missouri, the scenic 170-acre campus is approximately 100 miles west of St. Louis and 150 miles east of Kansas City. The Missouri state capital and the Lake of the Ozarks are nearby. William Woods University is located in historic Fulton, MO, a growing professional community of approximately 12,000 people (p. 7).

WWU is a coeducational, independent, professions-oriented institution of 3,000 students, representing most states and approximately 20 foreign countries. The university

offers undergraduate and graduate degrees in a variety of disciplines in both campus and outreach settings. WWU is accredited by the Higher Learning Commission and is a member of the North Central Association. Unique programs of study include an internationally recognized equestrian studies program, a 4-year American Sign Language Interpreting program (one of only 25 in North America), the first juvenile justice degree in the state and a criminal justice degree with homeland security emphasis (WWU promotional manual, 2009, p. 8).

The Board of Trustees has approved the following mission statement for WWU: An independent voice in higher education, William Woods University distinguishes itself as a student-centered and professions-oriented university committed to the values of ethics, self-liberation, and lifelong education of students in the world community (WWU promotional manual, 2009, p. 14).

The University's affirmative action statement allows for the incorporation of EAAT activities on the WWU campus, as noted in this excerpt:

Equal opportunity shall be provided for all employees and applicants for employment, on the basis of their demonstrated ability and competence without discrimination on the basis of their race, color, religion, sex, national origin, age, status as Vietnam era veteran, protected physical or mental disability, medical condition, sexual orientation, or any other characteristics, protected by law. This also applies to the administration of personnel policies and procedures. (WWU promotional manual, 2009, p. 14)

With regards to governance, according to the WWU Faculty Handbook (WWU, 2009), the institution has been under the leadership of twelve different presidents. The current leader is Dr. Jahnae Barnett, the first female president at William Woods, who began her service in 1990. The area of academic affairs is headed by the vice president of academic affairs (academic dean), who is the chief academic officer of the university, appointed by and reporting directly to the president. Faculty members are organized into divisions, each of which is headed by a division chair. The chair is the senior academic officer of the division and is responsible to the academic dean for the effective and efficient administration of all human, fiscal, and material resources of the division. Chairs are appointed by the academic dean with the concurrence of the president. An academic council consists of all division chairs to serve in an advisory capacity to the academic dean "on all matters pertaining to the academic operations and well-being of the university" (p. 5).

The 1940 Statement of Principles of Academic Freedom is followed at the university, and faculty participation in the management of the university is a respected tradition. "Faculty members are expected to manage the university curriculum and to be involved with the review of their peers. The sharing of responsibility between the faculty, the academic dean, and the president provides a system of checks and balances for the university's management system, yet recognizes the final authority of the president and the board of trustees" (WWU Faculty Handbook, 2009, p. 3). This project study will probably require dialogue and decisions at many levels of university governance. At one point or another, the process could involve the president, the board of trustees, the

academic dean, the division chairs, the curriculum committee, and the equestrian studies division faculty members.

Historical insights into the WWU equine program. The Higher Learning Commission (HLC) program review for the equestrian division (WWU HLC, 2006) provides an overview of the equestrian program, past and present. The WWU riding program began in 1924 when the institution was a women's college. Later, in 1972, WWU became the first university in the U.S. to offer a bachelor's of science degree in equine science. After becoming a co-educational institution, an equine administration (EQA) major was incorporated into the equestrian studies program in 1992. The educational philosophy of the equestrian studies program is to expose students to a microcosm of the equine industry through experiences with horses, philosophies, and traditions outside their own specializations (pp. 2 - 6).

The major in equestrian science (EQS) was designed specifically for those students who intend to pursue careers in the equine industry as instructors, trainers, equine managers, and riders. Students are exposed to a broad range of theoretical and practical equestrian experiences. They are required to ride at least one semester in three of the four disciplines taught at WWU---hunt seat, western, saddle seat, and dressage. They also complete a six semester sequence of teaching applied riding. EQS majors must pass a proficiency examination in order to officially declare the major. EQS majors are encouraged to take advantage of horse competition opportunities with the university. Showing allows riders the opportunity to have their skills assessed by industry

professionals outside of William Woods University. It also lays the foundation for future internship and employment opportunities (WWU HLC, 2006, p. 10).

The major in equine administration was designed specifically for those students who intend to pursue career opportunities within equine industries and business organizations functioning as professional leaders, facility managers, administrators, and equine entrepreneurs. Students complete coursework in the techniques of horse management, horse industry overview, techniques of facility management, equine law and taxation, and equine entrepreneurship. A solid business foundation is added to horse management skills through the blending of resources available in the university's business program, management information systems program, and the legal studies program (WWU HLC, 2006, p. 11).

The university specializes in four distinct riding disciplines: dressage, hunter/jumper, saddle seat and western. Each of these riding seats maintains its respective group of lesson horses. Each seat has beginner to advanced horses, with the advanced horses being suitable for showing in open competitions. The students, under faculty supervision, through their required coursework and work-study assignments and under faculty supervision, provide all care and conditioning of the horses. During their educational experience, students care for more than 200 horses representing a variety of breeds and disciplines. All horses, many of which are former world and national champions, are received through tax-deductible, charitable donations (WWU HLC, 2006, p. 10).

There are currently 152 equestrian science majors and 54 equine administration majors, making the equestrian studies division the largest program on campus (WWU registrar record, 2010). Seven full-time faculty members teach theory courses and applied riding courses in four disciplines—hunter/jumper, dressage, western, and saddle seat. On campus, the university's multi-million dollar equestrian facilities encompass a city block, with 150 large box stalls in four heated barns, two heated indoor arenas, a lighted outdoor arena, one round pen, a 40-acre cross country jump course, and an office/educational complex with two classrooms. Additional properties include a nearby 5-acre stable annex (school-owned) and two 10-acre pastures (leased) where horses go for rest and/or health rehabilitation (WWU HLC, 2006).

Pedagogical Foundation

Systems thinking. Gardner (2008) in his book, "Five Minds for the Future," relates how today's learners must have "conceptual agility" when dealing with a topic or problem, so as to avoid single, narrow perspectives which can stifle understanding and creativity (p. 34). This open-minded approach is consistent with *systems thinking*, a discipline that stresses the importance of seeing the whole picture (Senge, 2006, p. 68). *Systems thinking* focuses on the interrelationships between parts and their relationship to a functioning whole (Dutta & Roy, 2005; Guttierez, Shasha & Coruzzi, 2005; Senge, 2006; Trochim, Cabrera, Milstein, Gallagher & Leischow, 2006). It can prevent the putting of a complex, dynamic, and circular world (or organization) into linear, isolated segments, which may result in a total misreading of the very reality that is sought to be understood (The Systems Thinker, 2010). The problem in this project study will focus on

integrating an EAAT program into a whole system, a university, which is comprised of interrelationships between departments, faculty, beliefs, values, goals, history, economics, and a host of other variables.

In the 1930s and 1940s, biologist Bertalanffy, the father of the *general systems* theory, developed system thinking principles which lead to contributions in biology, medicine, psychiatry, history, sociology, education and philosophy (Davidson, 1983). Bertalanffy (1975) clarified that the systems approach is as old as European philosophy and is just a contemporary expression of thoughts that have been recognized for centuries. According to Bertalanffy,

Since the fundamental character of the living thing is its organization, the customary investigation of the single parts and processes cannot provide a complete explanation of the vital phenomena. The investigation gives us no information about the coordination of parts and processes. Thus the chief task of biology must be to discover the laws of biological systems (at all levels of organization). We believe that the attempts to find a foundation for theoretical biology put a fundamental change in the world picture. This view considered as a method of investigation, we shall call *organismic biology*, and, as an attempt at an explanation, *the systems theory of an organization*. (p. 152)

This investigative process is used for solving the problem in this project study---finding an intervention to close the budget/income gap at WWU through an intervention (EAAT program) that will have a profound positive effect on the entire organism, the institution.

Bertalanffy's *general systems theory*, with its biological perspective, became influential in other fields of study. In the mid-1950s, computer pioneer Jay Forrester, became the founder of *system dynamics* (Homer & Hirsch, 2006). In his book, "Industrial Dynamics," Forrester described the complex behavior of social and organizational systems as the result of ongoing interaction between people, information, material, financial matters, and biological or psychological states, accompanied by both balancing and reinforcing feedback mechanisms (Forrester, 1961; Homer & Hirsch, 2006).

Originally, Forrester used *system dynamics* for modeling electro-mechanical processes, but today it is being used to model social, economic, organizational, biological, and other types of systems (Toole, 2005). This concept of an interactive system was further developed by Forrester (1973) in his book, "World Dynamics," where he presents a world model that uses *system dynamics* as a vehicle for interdisciplinary communication to show how present policies lead to future consequences in the interactive areas of ethical, political, technical, physical, social, and economic forces.

In the late 1940s, sociologist Lewin contributed to the development of systems thinking relative to resolving social-psychological conflicts (Lewin, 1948). Lewin promoted the concept of *causality* to determine why a given situation in a particular environment has a certain result, based on a system's history and its present dynamics of integral parts. He identified the cause of an event as a series of causal chains at a point of convergence (Lewin, 1966, p. 32). Understanding causal relationships can aid in determining how to institute change, but one must understand the rich interplay between environmental forces (protocols, rules, structures, systems) and personal psychological

forces (aspirations, thoughts, desires, needs, fears), according to Lewin (Scott, 2009). Lewin's *change model* explains that if an organization wants to make a change that is successful, it must involve the gatekeepers of the system. Restraining forces are reduced when gatekeepers are involved in defining the "change challenge," and designing the solution (Scott, 2009).

Senge further developed this systemic approach to organizations and business systems in the 1990s (Senge, 2006; Sundstrom & Hollangel, 2006). Senge (2006) describes a *learning organization* as one that is ever-learning, collaborative, and working towards a shared vision. A *learning organization*, however, consists of a culture that is ever-changing, contingent on guiding ideas; theory, methods and tools; and innovations in organization infrastructure (285). In regards to efficiency improvements, cost-reductions, management of supply chains, Senge (2006) stresses that it is required for the stakeholders in an organization to see the larger system that they are creating and discover innovating new ways of operating together (p. 352).

Systems thinking is always associated with visual tools (diagrams, graphs, models, and simulations), which serve as a language to clarify an organization's circular dynamics, and the cause-and-effect relationship of all variables involved (Mind Tools, 2010; Toole, 2005). From these tools, causal loop diagrams (CLDs) can be used to provide a visual understanding of the circular feedback as it relates to the problem (Magnuszewki, Sendzimir & Kronenberg, 2005; Toole, 2005). These tools can be used for the problem in this project study -- finding a way to sustain a quality equestrian program at WWU, without making budget cutbacks or raising student fees. To solve

system problems, external factors can be introduced to impact and improve the systems model (Mind Tools, 2010). In this study, an external factor (i.e. an EAAT program) can be applied as an intervention to positively balance the WWU system model. Causal loop diagrams (figures 1 & 2 on pages 10 & 11) show the major interrelationships underlying the problem of this study which can lead to new insights into what might be done to solve the problem (Magnuszewki et al., 2005; Senge, 2006; Toole, 2005). If financial cutbacks, or the raising of student fees, were implemented as a solution to the problem, it could be a "quick fix" without a full understanding of the long term ramifications. Such remedies may appear "obvious," because they are close at hand, but in actuality they may be irrelevant to the real problem, and they may worsen matters (Forrester in Senge, 2000). *Systems thinking* will be used to avoid this "quick fix" mentality when it comes to dealing with the problem in this study.

Constructivism. Constructivists believe knowledge is not static, but rather dynamic; not a thing, but rather a process; not an object, but rather a pattern of action, according to Gagnon & Collay (2006, xv). A foundational principle of constructivism is that students create or construct their own knowledge rather than learning through the absorption of facts, and they are not recorders of knowledge, but rather designers or builders of knowledge structures (Goodman, 2008, p. 259). When addressing change, adults in a community can collaborate in ways to construct individual and collective meaning and knowledge structures (Gagnon & Collay, 2006; Kinchole, 2005; Marlowe & Page, 2005; Goodman, 2008).

In addition to systems thinking, constructivism is an overarching theory that guides this project study which culminates in a proposal for integrating an EAAT program into a university setting. Constructivism theory permeates the entire program design process relative to context, collaboration, curriculum, leadership, and methodology.

Constructivism and context. Contexts are not static, controllable entities. They are dynamic and complex, and they are embedded within larger cultural, historical, and political frameworks that must be considered as programs are planned (Kincheloe, 2005). Just because an educational program works in one setting, does not necessarily mean it will work in a different setting. Nahas (2005) believes that in many countries, higher education is suffering from a lack of contextualization, referencing the fact that many countries import academic programs only to eventually realize that the programs do not meet their needs or expectations (p. 227). Constructivism addresses this problem of insufficient contextualization. "Construction" refers to a foundation upon which, or a context in which knowledge is built by the individual (Cobern, 2004). Cobern (2004) explains that contextual constructivism is about the understanding of fundamental, culturally-based beliefs that both learners and leaders bring to a setting, and how these beliefs are supported by culture (p. 41). Mohr (2004) explains the role of context in research:

Teacher research requires description of the context for teaching and learning.

Rather than attempt to control variables, teacher researchers strive to define,

articulate, and elucidate the context as a whole, to reveal the assumptions at work

within the context, and to uncover connections as well as tensions among elements of that context. (p. 25)

Program development, such as the EAAT program in this study, must be addressed within the context of an institution's mission, values, and beliefs. Mission should drive the curriculum, not vice versa. "A program is effective only if its outcome is strongly linked to an institutional goal," according to Franz and Morrison (2005, p. 14). The mission serves as the common purpose to unite an organization. Groccia & Miller (2005), however, express the concern that mission statements in higher education are too broad, and that a clear vision of the future is needed (p.5). Therefore, leaders continuously struggle to develop a binding and solid agreement that represents a value system for living together and forms the basis for decisions and actions (Gagnon & Collay, 2006, p. 26).

Strategic planning is affected by an institution's historical context. Context can be described as a culturally and historically situated place and time (Kincheloe, 2005, p. 2). Existing educational cultures have a history, and these cultures are constituted by their past. They are "communities of memory" which do not forget their past. Nahas (2005) believes that changes in curricula are often constrained by their preset frameworks, closely tied to their historic development (p. 227). History, therefore, constitutes a vital part of the meaning construction and reconstruction that goes on in schools (Gagnon & Collay, 2006; Kincheloe, 2005).

Curricular changes need to be viewed within the context of the industry which graduates will service. It is vital that curriculum reviews include evaluation of industry

changes as they pertain to the current job market, as voiced by Matte (1994, p. 25). Institutions have an ethical obligation to provide an education that properly prepares graduates for employability (Sergiovanni, 2005). Curriculum analysis is needed to address advancements in technology, medicine, and the globalization of the equine industry. This is consistent with Tyler's model of curriculum development which implements the analyses of changing society at the local, state, or national level, so it could be determined what goals (and also what subject matter) are most important (Lunenburg & Ornstein, 2004, p. 486). Bump (2009) confirms that there seems to be general agreement among animal scientists that training in contemporary issues is an appropriate goal of animal science curriculums (p. 4). Grumet, Anderson, and Osmond (in Gallagher, 2008) express that curriculum development is also contingent on relative themes that extend beyond the local, state, and national level, reaching a global context.

It is prudent for strategic planning to consider the context of economics. Guskin and Marcy (2005) believe that budgetary problems in higher education are likely to be deep and long-lasting, and that these problems will require significant transformation in the way institutions operate (p. 3). Lapovsky (2008) recognizes that schools must determine which "expensive" policies and practices actually contribute to the overall mission of the institution. Franz and Morrison (2005) advocate strategic planning to offer "a framework for understanding which innovative programs merit attention and continued support, focusing institutional actors on the mission and overall direction of the institution" (p. 14). Spring (2008) revealed how a 1920 Spaulding study evaluated the economic value of different parts of the curriculum based on a formula. The study's

purpose was to show that educational administrators needed to determine the cost and educative value of the subjects taught so that scientific decisions could be made about a curriculum's cost-efficiency.

Constructivism and collaboration. Collaboration, a major tenet of constructivism, embraces the concept of "collective intelligence." Sergiovanni (2005) states, "collaborative cultures mean collective brain power, and that should be our motto" (p. 134). Locally and globally, collaborations can exist at all levels. Marshall (2006) reveals how success with social issues depends on multiple approaches and collaboration among many partners, including agencies, professional associations, higher education, policy makers, and coalitions of various interest groups (p. 118). As this project study evolves into a proposal to integrate an EAAT program into a local university setting, many levels of collaboration will be encountered.

Within the institution, all stakeholders have the ability to significantly contribute to the planning of an EAAT program. Relating the constructivist theory to educational leadership, program development should be reviewed with the involvement of most stakeholders, including administrators, faculty, staff, students, parents, and alumni (Gagnon & Collay, 2006; Kincheloe, 2005; Marlowe & Page, 2005; Goodman, 2008). Willis (2007) introduces instructional design that is rooted in constructivist theories of learning, based on artistic and scientific reflective practice that includes problem framing, improvisation, and understanding of the context in which the professional work takes place. This approach "involves participation rather than just specialists or experts with unchallenged authority and power . . . a partnership between implementers and users . . .

and everyone takes responsibility for the success of the project" (Willis, 2007, p. 272). Patton, Wesley, and Zimmerman (2006) explain how these collaborative efforts lead to a wonderful sense of "collective ownership," and the participants feel this is their project or cause, and their time to change the world (p. 130).

Bump (2009) recognized that issues facing society are exceedingly complex and require interdisciplinary teams to work on solutions (p. 35). Because this study involves integrating many university departments into an EAAT program, collaboration will also become cross-disciplinary. Nahas (2005) believes that cognitive-based approaches, based on constructivism, require a drastic review of teaching strategies and curriculum design policies, and the development of cross-disciplinary programs (p. 238). Equestrian science is considered the ultimate crossover discipline because it goes together with so many things (Bump, 2009).

Beyond the local setting, this project study will involve collaborations with other institutions and agencies. According to Lunenburg and Ornstein (2004), in reference to Tyler's curriculum model, "by consulting with subject "specialists," helpful decisions could be determined about skills, and tasks to be taught in various subjects" (p. 486).

Bump (2009) explains how the newly formed National Association of Equine Affiliated Academics (NAEAA) serves as an inter-institutional cooperative association to provide maximum resources for the development, evolvement, and assessment of interdisciplinary programs related to many fields, including the therapeutic riding industry. The NARHA Higher Education Committee (2005) is another agency of collaboration which unites EAAT programs with higher learning to promote shared goals

and resources. Approximately thirty U.S. schools have already formed ongoing collaborations with EAAT programs, combining their resources and goals (NARHA, 2009). Some schools offer EAAT programs (partial or complete) through their equine departments, health profession departments, or other departments; whereas some schools have collaborations with full-service EAAT centers that independently operate off campus (NARHA, 2009).

Constructivism and curriculum. When developing curriculum for an EAAT program, it is essential to consider the relationship of curriculum to learning theory. Tracey (2006) considers John Dewey (1859 -1952) to be one of the first American Constructivists. His *inquiry learning* philosophy of education involved learners making hypotheses, testing them, drawing conclusions, and reflecting to a high degree. The philosophy was constructivist in nature, in that it emphasized the role of the environment in education, problem-based learning, and social collaboration (p. 49). Dewey's philosophy is consistent with the constructivist theory which stresses the importance of acknowledging prior experiences, constructing knowledge, and applying knowledge to new situations (Kincheloe, 2005; Goodman, 2008; Marlowe & Page, 2005). Tracey (2006) explains that constructivist learning occurs when the learner is actively involved in the learning process as they integrate new knowledge with existing knowledge (p. 47). Tracey (2006) further explains constructivism with the following three theoretical components: (1) learning is not observable to the external viewer because learning takes place through internal mechanisms, (2) learning often results from hypothesis-testing experiences by the learner, and (3) learning results from the process of "inferencing,"

which is known as "filling in the gaps" and "reading between the lines" by the learner (p. 48).

Schema theory is a constructivist component that suggests that people organize everything they know into schemas, or knowledge structures such as schemas for language, schemas for skills, schemas for beliefs. These existing knowledge structures are constantly changing (Tracey, 2006, p. 52). Snow (2005) explains how constructivist instructional practice capitalizes on this private experience and encourages students to come to their own understanding of the concept at hand (p. 10).

In regards to curriculum development, Nahas (2005) explains how the cognitive approach, based on constructivism, is a promising framework for enhancing productivity through substantial curricular changes. Nahas (2005) suggests that this approach should lead to a serious review of teaching strategies and curriculum design policies and the development of cross-disciplinary programs (p. 238). In the development of an EAAT program, as proposed in this project study, attention will be given to these foundational principles relative to experiential learning, service learning, and entrepreneurial learning.

Experiential learning. Experiential learning is often closely associated with hands-on learning (Shultz-Rathbun, 2009). Wessels (2005) defines experiential learning as an extension of formal education with the aim of facilitating learning in the real workplace (p.11). Wessels uses the term cooperative education to describe an integrated curriculum that combines the formal academic component with the experiential training component. Experiential learning can assume various forms (Wessels, 2005). Two examples of experiential learning approaches are the studio concept and the constructivist

learning design (CLD). Cummings (2005) describes the studio approach which integrates lecture, laboratory experience, and problem solving skills. Students work collaboratively on in-class tasks for a time period of 110 minutes (p. 303). Gagnon and Collay (2006) describe the *constructivist learning design* (CLD) as a natural process where education is carried out by the individual through experiences upon the environment. They consider CLD to be a process involving a "learning episode" versus a "lesson" because of the focus on active engagement by the student rather than instruction by the teacher (p. 1). This learning design is similar to what Anfara and Mertz (2006) describe as the transformational learning theory which is rooted in constructivism and it is seen when learners construct meaning of their life situation and, in turn, this meaningmaking impacts their development (p. 26). An EAAT program in a higher learning setting has potential to provide students with many of these benefits. The benefits of experiential learning, however, can also extend to community participants who are serviced by the students. In Klontz's (2007) study, equine activities were integrated with the theory and techniques of experiential learning, revealing significant reductions in psychological distress and enhancement of psychological well being for the students.

Entrepreneurial learning. Masterson (2009) revealed how research, inventions, and entrepreneurial programs produce income for higher education as a partial solution for a recession-battered economy, indicating a bright future for those institutions that are inventive and entrepreneurial. One way to minimize financial pressure is through supplementation of allotted fiscal budgets through college enterprises (Young, 2008). Matte's (1994) dissertation on equine programs also alludes to the fact that sometimes

additional funds may be derived through sales and services related to an academic department. Matte cited how Colorado State University incorporates activities such as horse breeding farms and veterinary hospitals, "primarily for the purpose of providing professional experiences for students. The activities' earnings are incidental to the educational function, but may serve to reduce the cost of instruction" (p. 17).

Should higher learning's need for increased revenue be the driving force for instituting entrepreneurialism in a curriculum? Macfarlane (2007) uses a term entrepreneurial service and expresses that academicians can look disdainfully at conducting activities labeled *entrepreneurial service* that profit the university. Macfarlane believes a re-assessment is needed of the underlying reasons for such activity and the contribution the activity makes to service (p. 84). Entrepreneurialism, per constructivism, needs to be aligned with the institutional missions, values, and beliefs (Franz and Morrison, 2005). Entrepreneurial virtues that could align are identified by Mars (2006) as advancing social change agendas, economic development efforts, the preparation of students, and the innovation of programmatic models" (p. 640). Wasley (2008) identified how some institutions are expanding the entrepreneurial concept beyond the traditional business programs to the fine arts where entrepreneurship teaches undergraduates to tap into the virtues of creativity, leadership, and sustainability. The Consortium for Entrepreneurship Education (2006) compiled many of the benefits to learners in entrepreneurship education programs which include opportunity to exercise creative freedoms, higher self-esteem, and greater sense of control over their own lives (Cannon, p. 26). Fisher (2008), in an article about the role of colleges in economic

development, identifies that some universities are revamping their curriculum in an attempt to graduate more lateral-thinking or "entrepreneurial" students. Cannon (2008) described the constructionist attributes of innovative thinking and decision making as the hallmarks of entrepreneurship (p. 25).

Service learning. Witmer, Silverman, and Gaschen (2009) identified service learning as one of ten promising "high impact" activities for engaging students and improving learning, according to a report from the Association of American Colleges and Universities (AACU, 2007). Service learning incorporates course content with civic responsibility, accompanied by reflection activities (Macfarlane, 2007). Service learning is distinct from volunteerism because of the integrated academic component (Thomsen, 2006). According to Brady (2005) service learning, which is an experiential approach founded on reciprocal learning, is a rapidly growing form of active learning in higher education with many positive effects on students. At Texas Tech University in Lubbock, they use a service-based learning approach to an elective course within the agriculture curriculum, called *principles of therapeutic riding*. Post course evaluations from four semesters showed students had greater understanding about disabilities, a better understanding of what families with disabled children face, and felt that they had changed as a result of the course (Brady, 2005, p. 1).

Incorporating an EAAT program into a local university setting is consistent with the study done by Jenkins and Sheehey (2009) which found that service learning is an effective instructional strategy for teaching course content and social values in conjunction with courses in a special education teacher training program. In an EAAT

program, service learning can extend to sororities, fraternities, and majors outside of an equine department. Service-learning is not necessarily organized around professional skills, such as in practica or internships, and therefore can involve a larger population of students with diverse background and goals (Thomsen, 2006; Macfarlane, 2007).

The time these courses take to set up and teach is a drawback in designing a service-based learning course at the university level (Brady, 2005). There is a need for universities to provide stronger frameworks and patterns for service-based learning curricula, so more professors will envision a role of service in varied disciplines including agricultural sciences (Brady 2005). The service learning study of Jenkins and Sheehey (2009) revealed the need for attention to syllabi relative to course goals and objectives, the use of reflection activities, and the development of evaluation rubrics.

Constructivism and leadership. The intended outcome for this study is the blending of two communities (EAAT and higher learning) into one entity, metaphorically similar to weaving whole cloth from threads of different textures, colors, and lengths. Using constructivist leadership principles, the leader must work with stakeholders to construct knowledge that aligns with the values and goals of both EAAT and higher learning. Donaldson (2006) explains how leaders build a belief in "action-in-common" through demonstrating values that reinforce the importance of collective responsibility and collaborative work (p. 107). Constructive leadership involves active problem solving and "sense building" through the pooling of human resources and the fostering of collegial values, leading to shared purposes of the school (Sergiovanni, 2005, p. 38).

Murphy (2005) alludes to constructivism by suggesting that the time is ripe for effective

leadership that is shared, redistributed, collegial, enabling, entrusting, empowering, and not heavily dependent on a particular person or position (p. 29).

Leaders have experienced success when adopting a questioning attitude in the workplace, thereby fostering stakeholders to become open to new experiences, new constructions of meaning by engaging in a reciprocal relationship that involves the pursuit of critical reflection, innovation, and transformative learning (Greyling, 2008). Successful constructivist leadership, however, depends highly on the leader having the capacity to foster strong relationships through reciprocal trust and respect (Donaldson, 2006, p. 137). This premise is especially important when the decision maker is amidst a network of environmental influences that affect rational decision making, such as organizational life, internal and external politics, requirements for conflict resolution, power distribution, and limitations of human rationality. Grumet, Anderson, and Osmond in Gallagher (2008) also allude to leadership challenges that can be encountered when constructing knowledge for curriculum research---"the distractions of tradition; the desire for approval; the influence of ideology; and the boundaries that separate discourse communities" (p. 155). These leadership challenges are an integral part of this doctoral study, as it focuses on the three diverse components that drive an equine program--administration, academic rigor, and equestrian knowledge.

Methodology

In this mixed-methods project study, a quantitative survey precedes the qualitative portion that involves interviews of an expert panel and WWU end-users. The descriptive data from the survey can help to identify frequencies and correlations among

the EAAT phenomena (Gravetter and Wallnau, 2008). The interviews will report the multiple realities of different individuals (Creswell, 2007). The paradigm stance of this study is constructivism. In this worldview, the researcher relies as much as possible on the participants' view of the situation (i.e., EAAT and higher learning) based on social, political, and historical contexts. Open-ended questions help the participants to construct meaning, all of which is interpreted by the researcher, who is also influenced by personal experiences and beliefs (Creswell 2007, pp. 17 - 21).

Systems thinking principles and modeling will be used for understanding this project study's problem which involves a whole unit, the university and its interacting parts (the faculty, divisions, values, beliefs, goals, and history). According to Lewin's change model, successful change requires the gatekeepers of the problem at hand to be involved in the change process, because their interacting backgrounds and beliefs have a causal effect on the whole system (Scott, 2009). Therefore, in this project study, gatekeepers will participate in the quantitative survey, the expert panel interviews, and the end-user interviews.

Implications

Anticipated findings from the survey of EAAT affiliated schools include the revelation of varying degrees of integration within higher learning. Some schools may reveal collaborations with independently operated, off-campus EAAT centers, whereas others might express involvement in a modified to full-scale EAAT program on campus. It is anticipated that some creative ideas will be discovered on how to integrate equine and non-equine departments, programs and resources. The implications for possible

project direction involve a proposal for some level of EAAT integration into my local university setting, with high expectations that it could be at the level of a major, on campus. The proposal could include modified options for various levels of EAAT involvement.

Summary

At the local level, a gap exists between the income and the budget necessary to operate a quality equestrian program. The problem addressed is finding an intervention to bridge the income/budget gap. This project study will research the ways and means of integrating an EAAT program into the institution, as an intervention. The study will culminate in a project that is a multi-option proposal for EAAT integration. Significance could be derived in the form of increased revenue that leads to an adequate budget for providing quality equipment, facilities, and horses. This boost can lead to increased program quality, which helps to attract and retain students. Enhanced student experience is gained through the inclusion of service learning, experiential learning, and entrepreneurialism. Further significance is observed when an EAAT program serves community members with disabilities. The mixed methods research approach will include a preliminary survey to discover frequencies and descriptive data for EAAT phenomena, followed by individual, open-ended interviews of an expert panel and WWU end-users which can lead to constructed meaning and knowledge to use in the development of the project. The entire study is guided by the overarching *constructivist* theory and systems theory. Per the constructivist principle of history as a part of understanding, historical insight is considered relative to the equine industry, EAAT

programs, and equine education. Contextual relationships, curriculum development, leadership approaches, and research methodology are viewed through the lens of constructivism and systems theory

Section 2: Methodology

Introduction

This project study was designed as a challenge in constructivist leadership culminating in a proposal of a multi-option plan to integrate existing institutional resources into an equine-assisted activities and therapy (EAAT) program at William Woods University (WWU). The challenge was mandated by the university president and the academic dean, in an effort to address the problem of equalizing the misaligned business/financial component of WWU equine division with the other two major program components -- academic rigor, and equestrian knowledge (Fessler, 2009; McCarthy, 2009). The two guiding research questions for the mixed methods project study are as follows: (a) Among higher learning institutions, to what extent are internal and external resources used to integrate EAAT as an intervention to close the gap between income and the budget needed for a quality equestrian studies program? and (b) How is an EAAT program compatible with the needs and capabilities of the institution, WWU? The quantitative component was in the form of a one-time survey to all identified U.S. higher learning institutions (37) that have an EAAT emphasis, minor, or major. The survey addressed the descriptive portion (ways and means) of the guiding research question. Research on how to align the survey data with WWU's "needs and capabilities" was done in the multi-faceted qualitative design involving five phone interviews involving experts (selected school administrators) and individual phone/e-mail interviews with two enduser groups (WWU equine division faculty; and select WWU division chairs). After all the quantitative and qualitative information was compiled and analyzed, it was further

refined into prototypes for various levels of EAAT involvement at WWU, and a written, multi-optioned proposal was developed. The draft was sent for member checking by the expert panel and end-user groups. After final review of all data, the multi-optioned proposal was refined and put into presentation format for the WWU the academic dean to consider for implementation at WWU.

Explanation for the Mixed Method Design

The sequential explanatory strategy was used in this mixed methods approach. According to Creswell (2009), this strategy has two distinct collection phases with the quantitative collection and analysis preceding the qualitative phase. This study began with a quantitative survey, followed by the individual interviews of the expert panel and then the end users. Justification can be made for the use of multiple forms of data collection and analysis. Multiple techniques of data collection enhance validity of findings (Creswell, 2007). The interviews were designed to clarify and build upon the themes discovered in the survey data. Priority could have been given to either phase of research, and in this case more time and attention was required for the multi-faceted qualitative portion.

The sequential explanatory strategy typically involves a theoretical perspective to guide the study. The theoretical perspective in this study involved *constructivism* and *systems thinking* because an expert panel and end-users with diverse perspectives would construct unified meaning out of the quantitative data in relation to the contextual setting at WWU (Senge, 2006). The sequential explanatory strategy is widely used by researchers because it is straightforward in nature, with clear stages that are easy to

describe and report (Creswell, 2003). A drawback may be the length of time involved in the data collection (p. 217), but it was my intent to be well-prepared and proactive in use of time.

Description and Justification of Setting and Sample

The quantitative survey population was drawn from U.S. institutions of higher learning. Per directory and marketing information, the population included all institutions that have an EAAT emphasis, minor, or major. There were only 37 identified institutions that fell into this category (Almos, 2009; NARHA, 2009). Because the population was relatively small, it was feasible to survey all institutions that meet the criteria. There was not a sampling, which helped to validate the findings as objective and representative of the entire population (Fink, 2006, pp. 45 - 47).

A purposeful sampling approach (Creswell, 2007) was used to select the expert panel for the five qualitative phone interviews. These participants consisted of equine program directors. These directors were selected based on the similarity of their institution to WWU, but they must have possessed some level of involvement in EAAT so reality-based information could be gleaned on the EAAT/higher learning relationship. Appendix C is a self-designed matrix that was used for a systematic approach to the purposeful sampling.

The two end-user groups were purposefully selected based on the three components that guide equine programs---administration, academic rigor, and equestrian knowledge. The first group, the six member equestrian faculty, was selected because they were end-users, and they could best provide the needed equestrian knowledge. The

second end-user group consisted of WWU division chairs and program directors--experts in academic rigor. They were selected after analyzing the initial survey and expert
panel interview data. With that information, the division chair/program director group
would only consist of those in programs with resources (curriculum, equipment, faculty,
etc.) that had potential for integration into an EAAT program.

The Role of the Researcher

I was the one gathering the information for the survey, expert panel interviews, and the end-user interviews. This role, in the qualitative interview phases involved the facilitation of a comfortable, nonjudgmental, safe environment (Rubin, 2005, p. 83). To appear less threatening, it was communicated that my role as a former equine division chair was similar to their role, and that we probably had some common interests and concerns (Rubin, 2005, p.84). Following a constructivist assumption, the researcher and the participants would develop some sort of co-constructed understanding about what was happening in the research context (Gagnon & Collay, 2006; Kincheloe, 2005; Marlowe & Page, 2005; Goodman, 2008).

Some form of a pre-existing relationship existed between the researcher and the members of the two end-user interview groups. The equine division group consisted of people who I daily supervised when I was their former division chair, three months prior to the data collection. At the time of the interviews, I had absolutely no responsibility or authority at William Woods University; however the nature of the previous superior/subordinate relationship could potentially create a bias as faculty members attempted to please or displease me. The second end-user group consisted of former

colleagues or peers. Again, credibility may have been affected by their desire to please or displease me and/or the administration that mandated the project.

Based on my experience and history, I held known and unknown biases which needed to be examined to offset prejudice (Rubin, 2005, p. 82). I have a passion for EAAT which developed through EAAT activities with my daughter who was born with Spina Bifida. I am a certified therapeutic riding instructor who has personally witnessed the benefits of EAAT. If allowed, this passion and belief in EAAT could taint my objective view of the data. Another bias is my desire to be on the "cutting edge" of innovation in equine education. All of these potential biases were counterbalanced through the processes of triangulation and member-checking of the multiple data sources. Triangulation involved corroborating evidence from the different sources to validate themes and perspectives (Creswell, 2007, p. 208). Member-checking involved periodically taking the data, analysis, and interpretations back to the participants for their perspective on the accuracy of the information (Creswell, 2007, p. 208).

Protective Measures for Participants

The research in this project study followed the guidelines of the Walden University institutional review board (IRB). These guidelines comply with the university's ethical standards as well as any applicable federal and international guidelines. Application was made to the IRB, and approval number 07-09-10-035963 was granted to conduct research.

The Walden University application (Walden, 2009) included the following safeguards for the welfare of participants:

- Describe participants' tasks;
- Submit data collection instruments with evidence of compliance with copyright holders' terms of usage, and permission for reproduction of instruments;
- Describe the participants in research;
- Submit a signed Letter of Cooperation from those helping with data collection;
- Submit a signed Data Use Agreement from organizations providing records;
- Describe a plan to share data with stakeholders;
- Describe potential risks and benefits to stakeholders and provisions to address them;
- Describe procedures to maintain confidentiality and integrity of data;
- Submit signed certificates of confidentiality for those accessing the data;
- Disclose potential conflicts of interest and a plan to manage them;
- Obtain and document informed consent from all participants; or parents, guardians and caregivers; and
- Submit unsigned consent documents.

Walden IRB guidelines were strictly followed, and pertinent information for participant protection was disclosed in the invitations and the informed consent documents. These forms were signed by the participants (Rubin, 2005). The assurance of confidentiality was restated prior to the start of each method of collection. Participants were informed of risks and benefits, and they were given the right to withdraw consent and discontinue participation (Fink, 2006, p. 41). They were made aware that they had the right to retract information, and they would be given the opportunity to read the final

manuscript prior to publication (Rubin, 2005, p. 97 - 107). After final project study approval, all surveys and transcriptions will be shredded (Fink, 2006, p. 41).

Data Collection and Analysis Sequence

In this project study, research began with the quantitative survey for all identified higher learning institutions (37) with an EAAT concentration, minor, or major. Surveys, which could be easily self-administered by hand or computer, were used to collect information to describe, compare, or explain knowledge, feelings, values, and behavior (Fink, 2006, p. 1). The survey for this study was used to secure the descriptive quantitative information needed to understand the ways and means of incorporating institutional resources into an EAAT program. Analysis of the survey data involved descriptive statistics which included counts, proportions, and measures of central tendency. No hypothesis was being tested in the quantitative survey. The survey was purely descriptive with no testing taking place. The descriptive statistics were needed to add insight and validity to the development of the EAAT prototype(s) and the future decisions to be made about them.

After the quantitative survey was completed and analyzed, an expert panel--program directors from five institutions similar to WWU---was selected from the original
survey group for individual phone interviews. *Interpretive constructivism* was involved
through the use of "responsive interviewing" which recognizes the interviewer and
interviewee in a relationship constructing meaning in a flexible manner (Rubin & Rubin,
2005, p. 30). In qualitative interviews, the breadth of focus can be narrow or broad, and
the subject of focus can be on meaning or description (Rubin, 2005, p. 5). This flexibility

in the focus of my interviews was conducive to healthy "responsive interviewing." The interviews also involved the process of "triangulation" leading to the investigation, clarification, and elaboration of the raw data from the surveys (Creswell, 2007).

Once the descriptive survey data had been analyzed and then clarified by the five phone interviews, the information was conceptualized into ways and means of incorporating an EAAT program at WWU, capitalizing on the use of the institution's existing resources. Various levels of EAAT involvement was then presented for discussion to WWU end-users, via individual interviews. The end-users included WWU faculty members who, at varying levels, would ultimately become involved in the proposed EAAT program. Here is where the theoretical aspect of the sequential explanatory strategy came into play. The theory of constructivism espouses collaboration and collective construction of meaning, meaning-making, in an educational community (Donaldson, 2006; Greyling, 2008; Murphy, 2005; Sergiovanni, 2005; Gagnan & Collay, 2006). The end-user participants were introduced to the data from the survey and five interviews for application to their contextual setting. Because these end-users were individuals with similar characteristics and/or similar shared experiences, they provided the advantage of interaction to produce data and insights in a relatively short period of time (Creswell, 2007, p. 133). The end-user participants included the WWU equine faculty, and select division chairs/program directors. Each group had unique perspectives regarding the logistics of incorporating an EAAT program at WWU. The equine faculty provided extensive equine knowledge to guide their meaning-making, and the division chairs/program directors provided perspective that is crucial to academic rigor.

The acquired insights from the end-user interviews were then analyzed to construct meaning out of differing viewpoints. Conflicts in values, goals, purposes and interests must be reflected upon and reconstructed from "messes" into "manageable plans" (Gagnon & Collay, 2006; Kincheloe, 2005; Marlowe & Page, 2005; Goodman, 2008). This constructed information was then put into the form of a written, multi-optioned proposal that was sent to the expert panel and end-user participants for further consideration and evaluation. This review, member-checking, is vital to the constructivist process (Creswell, 2007).

After member-checking and additional literature review, a formal proposal was written that included model options for incorporating an EAAT program into WWU. The written proposal was then presented to a chief administrator, the academic dean. Figure 3 provides an overview of the entire data collection and analysis sequence.

Figure 3. Process flow chart describing the process for data collection and analysis.

Research Sequence for WWU Multi-Option Proposal **Quantitative Survey** (General Practitioners) Administered to identified U.S. Institutions (37) with an EAAT concentration, minor, or major The analysis of survey data lead to the selection of five schools to comprise an Expert Panel that could provide member-checking with clarification and expansion of data. Phone Interviews (Expert Panel) **Equine Program Directors** The analysis and triangulation of the survey and interview data lead to the conceptualization of EAAT prototypes for end-users to discuss. Phone Interviews Phone Interviews (End-Users Group I) (End-Users Group II) WWU Equine Faculty Select WWU division chairs/program directors The repeated analysis and triangulation of all data lead to a written multi-optioned proposal for review by research participants. Member Checking (Expert Panel & End-Users) The final analysis of all forms of data took place. Research Ended & Project Began The project (a multi-option proposal for incorporating an EAAT program into a higher learning institution) was fully developed for presentation. Multi-option Proposal (For Decision- Makers) WWU Chief Administrator (See Appendix A)

Reliability and Validation Procedures

According to Robinson & Lai (2006), "the better your research design, methods, and analysis, the stronger the argument you can make for the validity of your research" (p.85). Fink (2006) agrees that the creation of well-designed, user-friendly surveys, as well as the conducting of pilot tests, can enhance reliability and validity. Therefore, in this study, a pilot test was administered to a respondent who was not participating in the actual survey, who had characteristics similar to the survey population. This person was able to critique the survey for user friendliness and clarity, so corrections could be made prior to utilizing the survey. The validity of the content is another point that was addressed. Content validity is usually established by content experts, assessing whether or not the content of the measurement technique is in consonance with the expert knowledge base (Singh, 2007). The knowledge experts in this project study included the pilot study participant and my doctoral chair, who has an extensive equestrian background.

The qualitative methods in this project study gained validation trough member-checking, triangulation, and peer-debriefing during the various stages of analysis. Data collected through the quantitative survey, the expert panel interviews, and the end-user interviews were triangulated along with data that include participants' institutional documents and website information; the North American Riding for the Handicapped Association (NARHA) standards of accreditation; and other pertinent artifacts. The use of different data sources in the triangulation process ensures greater data reliability (Creswell, 2007) and adds breadth and depth to the analysis (Portelli in Sikes and Potts,

2008). Data such as artifacts, documents, records, and archives are sources that are not directly connected to the researcher, so they are typically more objective in nature. Using this type of data is beneficial in the triangulation process because the data is somewhat removed from participant and researcher intervention (Creswell, 2007). The use of member-checking, or "respondent validation" (Robinson & Lai, 2006, p. 64) involves participant review of the researcher's data, analysis, and interpretation to determine its accuracy (Creswell, 2007). Peer debriefing was incorporated throughout all stages of analysis, using the consulting contributions of various colleagues and professionals who were not a part of the study. This peer debriefing helped to identify researcher bias and to control research quality (Rubin & Rubin, 2005; Creswell, 2007). Robinson & Lai (2006) refer to "audit trails" where others (peers and experts) are shown the original field notes, checklists, observations, notes, or sections of interviews. This results in the formation of an "audit trail" for others to check the validity of a researcher's interpretations, revealing a pattern of evidence to support the drawn conclusion (p. 61)

Data Collection and Analysis

The Quantitative Data

The survey instrument (see Appendix A) was original in design. The one-time survey was designed to take less than fifteen minutes to complete, in order to improve survey response. The data collected were to be completely objective, based on answers to closed-ended questions. The purpose of securing this quantitative data was to address the first guiding research question: (a) Among higher learning institutions, to what extent are internal and external resources used to integrate EAAT as an intervention to close the gap

between income and the budget needed for a quality equestrian studies program? The data would later be triangulated with qualitative data (via interviews) to aid in development of the project---a multi-optioned proposal for incorporating an EAAT program into an institution, primarily using existing resources (e.g., curriculum, facilities, faculty, equipment, and programs).

According to Fink (2006), well-designed, user-friendly surveys are conducive to reliability and validity. "A measurement procedure is considered reliable when it produces stable, consistent measurements" (Gravetter & Wallnau, 2008, p. 431). To get these consistent measurements, it may be advantageous to run a pilot test on the survey to enhance reliability (Fink, 2006, p. 6). An invitation for a survey pilot test was sent to two former equine department chairs who would not be involved in the actual survey; they did, however, have characteristics similar to the survey population. After sending a reminder invitation, only one of the two responded and took the pilot survey, providing a positive evaluation and no recommendation for changes.

The procedure for gaining access to the participants for the quantitative survey initially involved the identification of U.S. institutions that have an existing EAAT emphasis, minor, or major. That was accomplished through investigation of equine business directories, websites, and books such as "Horse Schools" (Amos, 2008). Once these schools (37) were identified, an invitation letter was electronically sent to all the program directors, requesting participation in a self-administered survey on SurveyMonkey.com.

Every researcher hopes for a good survey response rate because "failure to collect data from a high percentage of those selected is a major potential source of survey error" (Fowler, 2009, p. 49). "No matter how hard researchers try, there are always going to be people who will not participate in surveys . . . leading to a high non-response rate" (Singh, 2007, p. 68). Both Fowler (2009) and Fink (2006) agree that there is no set standard for minimum acceptable response rate. Fowler cited the extreme cases of the Bureau of Census typically getting a 95% response for in-person surveys, whereas many mail or e-mail surveys may only get a response rate of 5% - 20%. He suggested that most survey response lies somewhere between these extremes. Fowler did say that if the participants have a particular interest in the subject matter of the research, they are more likely to return mail questionnaires than those who are less interested. Fink (2006) agrees that the response rate can be enhanced if the participants are educated on the benefits of the research. Therefore, sending out informative invitation letters in advance, as well as making the survey request identifiable, the response rate might be enhanced (Fowler, 2009). The advance letters were identified as coming from the equine division of William Woods University, a name which is well known within the equine industry.

The desired response rate can at times be entirely subjective, and the general rule is "higher is better" (Fink, 2006, p. 7). In this study, a low response rate could mean fewer participants from which to select the expert panel for the five qualitative interviews. Fortunately, for my survey, the response rate was 25/37 (73%).

My first step in analysis involved a repeated reading of the completed surveys to identify commonalities, themes, and concepts for inquiry. Commonalities in best

practices and characteristics among institutions could be helpful in designing my project and giving it credibility. Notes were recorded in a journal, and the journal was always with me in case ideas spontaneously emerged throughout each day.

At the onset, I considered the major demographics of my 25 participants in order to gain insight into the perspectives from which the data originated (see Figure 4).

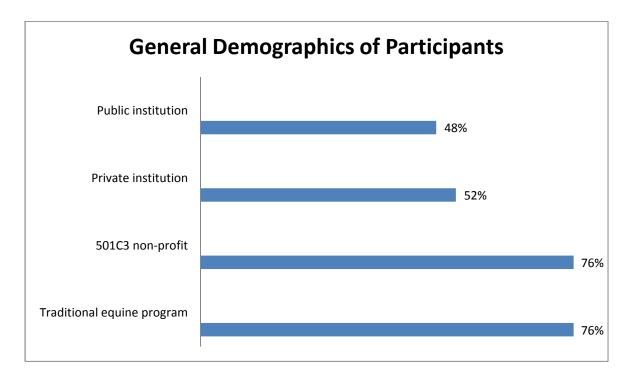


Figure 4. General demographics of institutions that participated in the survey.

Figure 4 reveals that public schools (48%) and private schools (52%) are almost equally committed to participating in EAAT. Of these institutions, 76% already had a traditional equine program in existence before involvement in EAAT, suggesting that such a transition is more common for institutions that have existing equine-related resources (e.g., faculty, equipment, facilities, and equines).

Once the demographics were realized, I progressed to an understanding of the extent to which these institutions practiced EAAT (see Figure 5).

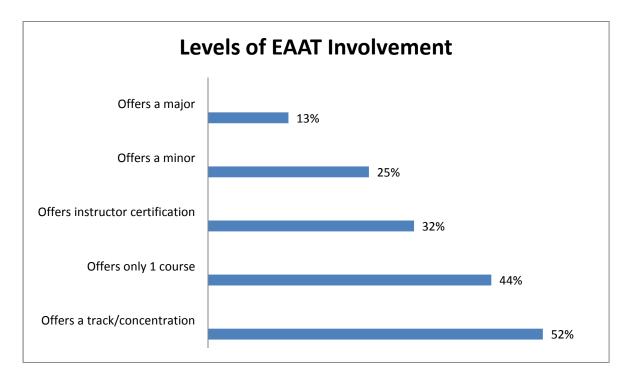


Figure 5. Levels of EAAT involvement by the survey participants.

All respondents (100%) had some form of EAAT participation. About half (52%) of the surveyed schools participated beyond offering just one EAAT course to the level of offering EAAT as at least a track, emphasis, or concentration, but fewer schools expanded to offering an EAAT minor (25%) or an EAAT major (12.5%), or instructor certification (32%). Some schools offered multiple levels of EAAT involvement. For example, the school that offered an EAAT major, also offered an EAAT minor.

EAAT involvement often extends beyond the institution to those in the community with disadvantages or disabilities, as described in Figure 6.

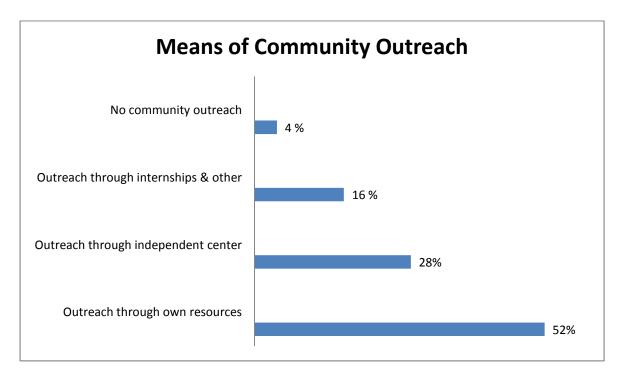


Figure 6. The means of community outreach that institutions use to serve those with disadvantages or disabilities.

Figure 6 reveals that 96% of the surveyed institutions see some type of value in using EAAT to serve those in the community with disadvantages or disabilities. The majority (52%) perform their community outreach using their own institutional resources (facilities, horses, faculty, equipment, etc.), whereas 28% conduct community outreach through association with an independent EAAT center. Internships or independent projects were used as a method of community outreach by 16% of the institutions.

Service-learning through community outreach is currently a prominent practice on many college campuses. Survey data indicate that 87.5% of the institutions integrate service-learning requirements for certain classes, Greek life, and student organizations into their EAAT programs.

The community outreach involved various EAAT populations that are served, as described in Figure 7.

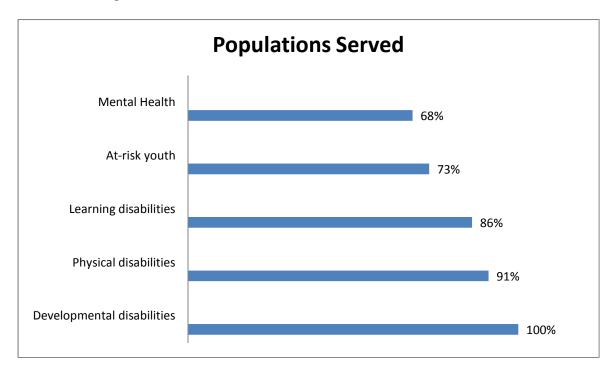


Figure 7. Community populations offered EAAT services by the surveyed institutions.

The majority of the institutions that provided community service reached out to those with developmental disabilities (100%), physical disabilities (91%), learning disabilities (86%), at-risk youth (73%) and mental health disabilities (68%). This information provided viable population options to serve for inclusion in my proposal, based on the needs and capabilities of my local institution, WWU. This would lead me to discover how WWU resources (e.g., faculty, departments, curriculum, and facilities) could align with these services. I also found it helpful to see how the participants used their resources for interdisciplinary collaborations (see Figure 8).

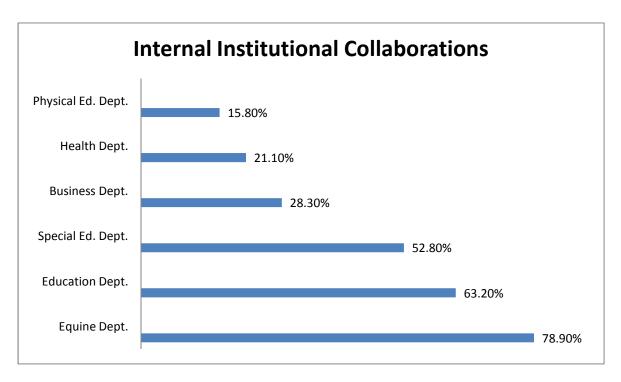


Figure 8. Interdisciplinary collaborations within surveyed institutions.

A collaboration is a joint effort (e.g., EAAT program) between two parties that might not be immediately connected. An institution's equine department is the most common department (78.9%) to form an EAAT collaboration, followed by the departments of education (63.2%), special education (52.8%), business (28.3%), health (21.10%), and physical education (15.8%). Data also revealed that some institutions had multiple collaborations. With these data and my project in mind, I planned to expand my literature review and delve into the specific course offerings that might align with the curriculum offerings at the local institution, William Woods University. Figure 9 also relates specifically to my project, and helps to answer both of my guiding research questions, (a) Among higher learning institutions, to what extent are internal and external resources used to integrate EAAT as an intervention to close the gap between income and

the budget needed for a quality equestrian studies program? and (b) How is an EAAT program compatible with the needs and capabilities of the institution, WWU?

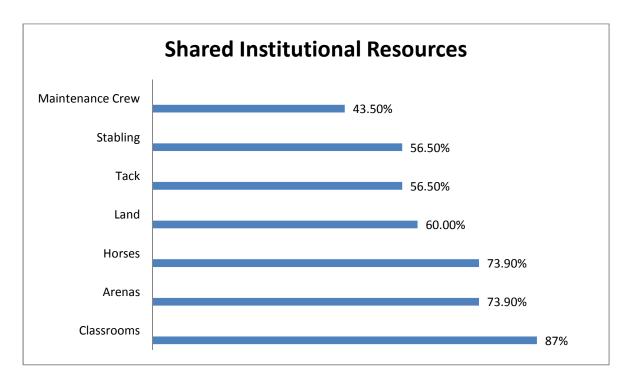


Figure 9. How institutions share resources with EAAT.

This chart shows how institutions share their existing resources with their EAAT program. In most cases there is mutual sharing, however some schools do not have or involve a traditional equine program, and they operate their EAAT program through off-campus collaborations with independent centers for service-learning, laboratory work, professional growth hours, independent study, or internships. Even though 87% of the institutions use their classrooms for EAAT courses, the classrooms are seldom shared by the independent centers; however, a few centers do hold EAAT workshops on a collaborating campus. As stated in chart 1, 76% of all institutions had an existing traditional equine program before their involvement in EAAT. The traditional equine

programs and the EAAT programs have similar needs and objectives which can be shared. Figure 9 shows that surveyed institutions shared arenas (73.9%), horses (73.9%), land (60%), tack (56.5%), stabling (56.5%), and the maintenance crew (43.5%). The logistics for the sharing of these resources would be addressed in the expert panel and end-user interviews.

Figure 10 reveals some of the details about EAAT that could be useful in the development of the project for my local institution.

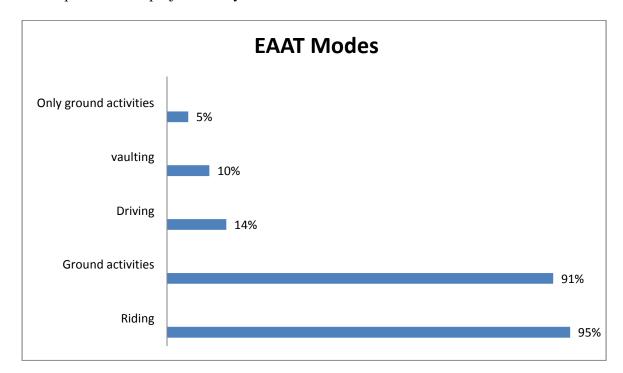


Figure 10. The modes of instruction and therapy that institutions use for providing EAAT.

Riding (95%) was the most commonly used mode for providing instruction or therapy in the surveyed institutions. Riding is used as a treatment for most forms of therapy and recreation. Most of the schools (91%) see the value of incorporating ground

activities (handling, grooming, and interacting with the horse on the ground) in conjunction with the riding. Driving (14%), which involves the use of a cart or carriage, and vaulting (10%), which involves doing gymnastic exercises on the horse, are modes that require more specialized training of the handlers and the horses. The schools (5%) that only provided EAAT on the ground were the ones that specialized in mental health treatments, and they did not deal with clients that had physical disabilities who could benefit from riding.

All of the previous charts and data could prove helpful in developing and presenting a proposal for implementation of an expanded EAAT program at WWU, but it was anticipated that the administration would have a logical concern about the financial side of the endeavor. Data in Figure 11 describe how the participants secured funding for their EAAT endeavors.

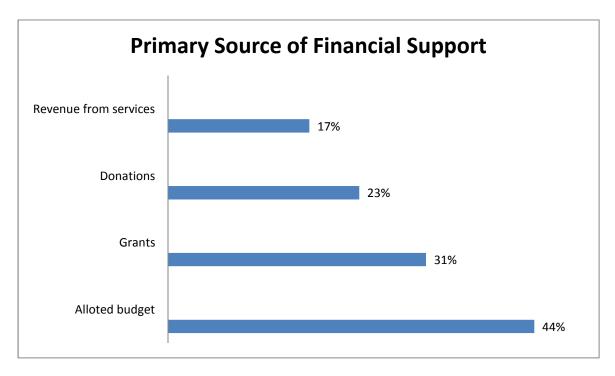


Figure 11. The top four sources of income for EAAT programs in surveyed institutions.

The primary source of financial support for 44 % of the surveyed EAAT programs is the allotted institutional budget, which is highly contingent upon the income from student enrollment. In 31% of the institutions, grants helped support the EAAT program. In 23% of the institutions, donations are a source of support. Revenue earned from providing EAAT services to the community provided some financial support in 17% of the institutions. So, if enrollment increased as the result of an EAAT program, and strong effort was put into securing grants and donations and providing EAAT community services, could an EAAT program be considered financially feasible and even successful? That question was asked of the participants, and 63% said they viewed their programs as financially successful. Figure 12 reveals other perceptions that the participants held in regards to the status of their EAAT programs.

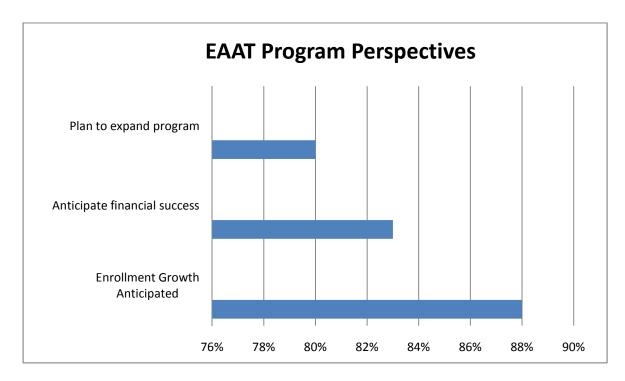


Figure 12. The perceptions of surveyed program directors.

Figure 12 was based on close-ended questions that required a "yes" or "no" answer. The percentages in the chart represent "yes" responses. As previously mentioned, only 63% of the participants viewed their EAAT programs as financially successful, but this chart shows that 83% anticipated financial success. This could be based on the fact that 80% were planning to expand their programs and 88% anticipated enrollment growth. What was it that these directors believed that warranted program expansion? Their understanding was probably contingent upon their history with EAAT, and this angle could be pursued in the expert panel interviews. Figure 13 shows the enrollment history of the participants.

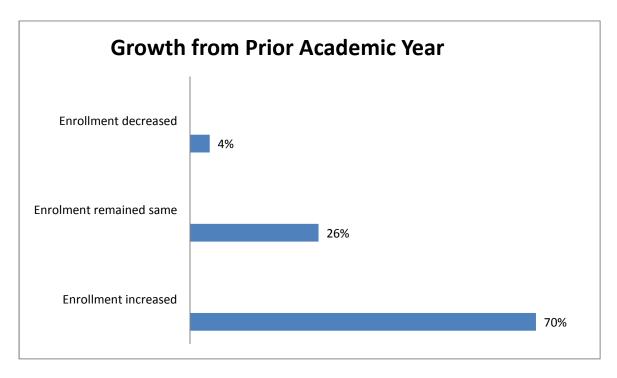


Figure 13. Enrollment growth from prior academic year of participating institutions.

The percentages in this chart represent "yes" responses to the survey questions regarding student enrollment. EAAT enrollment (from the academic year prior to the survey) increased in 70 % of the surveyed institutions, and it remained the same in 26% of them. Only 4% of the institutions noticed a decrease in enrollment. This trend could be cited to provide credibility to the project, the proposal to expand the EAAT program at WWU.

The Qualitative Data: The Expert Panel

At the end of the quantitative survey, participants were asked if they would be willing to participate in a thirty minute, follow-up phone interview. Because some participants may have felt threatened by helping "the competition," they were informed of their access to the data which could potentially benefit their institution. Using my self-created Matrix for the Selection of an Expert Panel (Appendix C), I selected five experts

(equine program directors) from the pool of those willing to participate in the phone interviews. Fortunately, 92% of the survey respondents agreed to participate in the interviews, giving me a substantial group from which to choose an expert panel.

Selection was based on their institutional similarity to WWU, with preference to institutions that revealed creative and promising implementation practices. I did not show preference to whether or not the schools were private, but I did show preference to 501C3 status, as was my workplace. I selected and invited (via email) seven program directors instead of just five because many institutions were on summer break and some participants might be on summer vacation. I felt it was important to have at least five expert panel interviews with valuable, first-hand information on EAAT programs. To my surprise, all seven invitees were available and eager to participate. I decided to conduct all seven interviews, with the hopes of giving more credibility to my findings. For anonymity purposes, each of the seven participants was assigned a pseudonym based on a horse color. Following, in Table 1, is a general description of each institution:

General Description of Each Expert Panel Institution

Palomino	PAL is a northeastern, land grant institution with a science-based
University	curriculum. As of fall, 2010, graduates can earn a B.S. in Equine Studies
(PAL)	with a choice of three options: Equine Industry & Management,
	Therapeutic Riding, and Equine Science. On campus, they have a 40-
	year-old traditional equine program and a 20-year-old EAAT program
	that includes the operation of a NARHA Premiere Center.
Appaloosa	APP is a Midwestern land grant institution with a relatively new equine
University	program that offers a B.S. in Equine studies, a minor in Equine Studies
(APP)	and Therapeutic Horsemanship, and the option of a non-degree certificate
	program in Equine Studies or Therapeutic Horsemanship. Their 3-year-
	old Therapeutic Horsemanship program collaborates with an
	independently owned, off-campus EAAT center (which is seeking
	NARHA Premiere Center accreditation).
Roan	RO, a Midwestern public institution, has a traditional equine program and
University	an EAAT center (seeking NARHA Premiere Center accreditation), 14
(RO)	miles from campus. RO offers an Associate in Science Degree in Equine
	Studies. Their EAAT program is 11 years old.
Chestnut	CH is a southeastern, private college with a traditional equine program
College	that offers diverse interdisciplinary tracks leading to a four-year degree.
(CH)	CH has notable success in Intercollegiate Horse Show Association
	(IHSA) competitions. Their15-year-old EAAT program involves the
	operation of a NARHA Premiere Center which serves up to 120
	community clients per week. CH is one of the nation's only institutions to
	offer an EAAT major.
Bay	BAY is a southwestern, public institution that has a traditional equine
University	program and a 15-year-old EAAT program. They operate a NARHA
(BAY)	Premiere Center on campus, serving approximately 30 students per week.
	Students earn a B.S. in animal science with an equine emphasis.
Pinto	PIN is a southwestern, public institution with no traditional equine
University	program. The 11-year-old EAAT program was recently terminated.
(PIN)	Through the kinesiology department, an EAAT center was operated on
	leased property by PIN faculty and staff.
Buckskin	BUC is a private, northeastern institution with a traditional equine
University	program, on campus, that offers a B.S. in Equine Business Management.
(BUC)	Their EAAT emphasis involves certification through an internship with a
	36-year-old NARHA Premiere Center, located more than an hour from
	campus.
•	·

This table reveals that the seven selected institutions are diverse in location, governmental relationship, degree offerings, and EAAT program history. However, as

required in my Matrix of Selection of the Expert Panel (Appendix C), they all have in common a well-developed EAAT program that provides some level of student involvement in an EAAT center which serves the local community.

More detailed characteristics of each institution's EAAT program are shown in

Table 2

EAAT Program Overview of the Expert Panel Institutions

Table 2:

School	501	EAAT center	Off-campus	Age of	NARHA	Instructor	Highest
Code	C3	operated by	independent	EAAT	Premiere	Certification	EAAT
		institution	center	program	Center	Provided	Degree
				(yrs.)	accredited		Level
PAL	yes	yes	no	10	yes	yes	minor
APP	yes	no	yes	3	seeking	seeking	minor
RO	yes	yes	no	11	seeking	yes	emphasis
СН	yes	yes	no	15	yes	yes	major
BAY	yes	yes	no	15	yes	yes	none
PIN	no	yes	no	11	no	no	none
BUC	yes	no	yes	26	yes	yes	emphasis

All but one (PIN) of the expert panel institutions were of non-profit 501C3 status. I selected institution PIN because of its unique collaboration model and the fact that the program was recently terminated. I did want to better understand the two major types of EAAT collaborations, so I selected five institution-operated EAAT centers (PAL, RO, CH, PIN & BUC) which collaborated with on-campus departments, and two off-campus, independent EAAT centers (APP & BU) that collaborated with an institution. It was important to select institutions that had extensive EAAT experience to share, so all the selected institutions, except for one (APP), existed for ten or more years. The majority

(6/7) of the institutions were---or intended to be---accredited NARHA Premiere Centers with the ability to offer instructor certification. I purposefully selected institutions with diversity in the extent of their EAAT course offerings and degree levels, so I could understand various options for development in my project (proposal to expand EAAT at my local institution). Two institutions (BAY & PIN) offered only one course; two institutions (RO & BUC) offered an EAAT emphasis; two offered an EAAT minor (PAL & APP); and one (CH) offered an EAAT major.

In the expert panel interviews, I sought clarification of survey data and expansion of patterns and themes gleaned through my survey analysis. My project and guiding research questions would serve as my perspective of inquiry. After analyzing the individual survey responses and the group survey data, questions were developed to inquire about the following items of interest as they uniquely pertained to each expert panel institution: collaborations, shared resources, obstacles encountered, finances, staffing, EAAT services, teacher certification, and creative practices.

Each expert panel interview was held over the telephone and was tape recorded. Notes were taken during each call to compare to the tape recordings and serve as a backup source in the case of recorder failure. To ensure accuracy of information, the tape recordings were immediately transcribed, verbatim, while the information was fresh in my mind. All transcripts were reviewed multiple times and they were triangulated with the survey information. According to Creswell (2007), this process of taking data collection information and comparing it to emerging themes is called the *constant* comparative method of data analysis, a popular method when using the constructivist

approach to grounded theory studies (p. 64) Seven dominant themes that emerged, related to the project, include EAAT collaborations; the EAAT relationship with the traditional equine program; the EAAT relationship with the administration, finances; staffing; scheduling; and the employability of EAAT graduates.

Theme 1: EAAT collaborations. The quantitative survey revealed that 28% (7/25) of the institutions formed collaborations with an independent EAAT center, and 52% (13/25) had an EAAT program using their own institutional resources, often collaborating with other departments. These two scenarios are the most common forms of EAAT collaboration with higher learning. The selected expert panel institutions all fit within these two forms. Following, in Table 3, are the highlights of the expert panel responses:

Table 3

Expert Panel Responses Regarding Their Institution's EAAT Program Collaborations

Palomino University (PAL)

- PAL offers degrees in occupational therapy (OT), speech therapy (ST), and recreational therapy (RT) in their College of Health and Human Services. Students from these departments take advantage of the on-campus EAAT program to fulfill various requirements for their classes.
- Their NARHA Premiere Center can provide NARHA instructor certification for the PAL students, and the public (non-PAL students).
- Other departments that are involved with EAAT include the education department, special education department, and the traditional equine department.
- PAL has a service-learning program and a Greek Life program, both of which are highly involved in EAAT.

Appaloosa University (APP)

- APP, with an EAAT minor, formed a collaboration with an off-campus, independent center that is 25 minutes from the institution.
- The independent NARHA center is seeking NARHA Premiere Center accreditation to allow APP students to acquire NARHA instructor certification.
- APP is part of a tri-college system that consists of articulations with each other. All three colleges have pre-professional OT ant PT curriculum. The other two colleges could send students to APP to take advantage of the EAAT minor. Likewise, students from APP could go to the other two colleges to take courses which are not offered at their institution (special education, developmental adaptive physical education, and autism). "We want to tap into their strengths and resources," said the EAAT director from APP. Since this was a newly formed collaboration, the director plans on using this as a major marketing tool for support of the EAAT program.

Roan University (RO)

- RO has an EAAT program that shares a facility with their traditional equine program, 14 miles from the main campus.
- RO is a NARHA Premiere Center, and they are working towards offering NARHA instructor certifications to the RO students.
- They do not have any therapists on staff, but clients can bring their own licensed therapist. They started negotiations to form an articulation with a local university that has an OT and PT degree program.
- Three departments at RO are involved in the EAAT program--the traditional equine department, the education department, and the human services department.
- RO involves service-learning, in accordance with the requirements of individual campus classes and programs.

(Table continues)

Chestnut College (CH)

- CH has an on-campus NARHA Premiere Center that shares university-owned land with the traditional equine program. The property is 3 miles from the main campus.
- CH provides EAAT services to clientele from public schools and the local community. Serving up to 120 clients a week enables the CH students to learn in a practical laboratory and earn their NARHA instructor certification.
- CH departments that are involved in the EAAT program include education, equine, business, communications, health, and psychology.
- Sports teams get involved in EAAT to satisfy their service-learning requirements.

Bay University (BAY)

- BAY has an on-campus NARHA Premiere Center that is shared by the traditional equine program.
- BAY students can earn their NARHA instructor certification through the EAAT program.
- The departments at I-E that are involved in the EAAT program include education, physical education, special education, equine, and business.
- Students in the BAY certification programs in education, kinesiology, and psychology can earn their professional development points at the EAAT center.
- The business department instructor of Sports Advertising uses the EAAT center for a project in his class.
- According to the EAAT director, "the psychology department is involved, but not as closely as I would like them to be. It becomes a personality thing. Some instructors embrace the opportunity. Others just want to stay in the class room and lecture."
- The sociology department and student organizations require community service, and EAAT is one of their options.

Pinto University (PIN)

- PIN appeared unique in collaborations, among the 25 surveyed institutions. PIN did not have a traditional equine program, and the 11-year-old EAAT program was recently terminated.
- The EAAT program began with special funding. An EAAT director and teachers were hired by PIN, and they were provided offices on campus. PIN leased off-campus facilities to operate an EAAT center to serve those in the community with emotional and behavioral disabilities.
- The institution did not have an OT or PT program, but did have programs in speech therapy, kinesiology, counseling, and therapeutic recreation. Often, students from these programs would take the PIN course, Equine Therapy, and they would participate at the off-campus center.
- Termination of the program was a result of changes in the administration, accompanied by changes in vision and goals.

(Table continues)

Buckskin University (BUC)

- BUC has a long-distance collaborative relationship with a NARHA Premiere Center, which is 75 minutes away.
- BUC students are sent to the center to complete four to six month internships that culminate in NARHA instructor certification. BUC pays the center for teaching and supervising the internships.
- The relationship extends beyond internships. According to the director, "Sometimes they will bring a class for a field trip (such as equine facility design) and in the past we have gone there to do lectures, as guest lecturers."
- The center director also alluded to the fact that two additional universities have expressed interest in sending OT and PT students to their center for clinical supervision.
- The center has a staff member, an occupational therapist, who works at a local university. The director explained, "we are getting therapists who are wanting to specialize in hippotherapy (specialized equine-assisted physical therapy), and that is a nice liason." The staff member may soon be teaching a hippotherapy class at that university.

Analysis of theme 1 data. Relative to my problem, guiding research questions, and project, I analyzed the above expert panel data and triangulated it with the quantitative survey data to find elements that could align with the needs and capabilities of my local institution. This method is consistent with the "constant comparative method," described by Creswell (2007). My project, a proposal to expand the EAAT program at WWU, would be developed in consideration of the following forms of EAAT collaboration:

- The institution's EAAT program could be as simple as just one course offering, with or without the addition of internal and external collaborations, practicum experience, and community services.
- The program could include internal relationships as well as external relationships with EAAT organizations (i.e., NARHA, EAGALA & AHA), public schools, other colleges, government organizations, and those in the community who have disadvantages or disabilities. The institution's EAAT program could involve an

actual EAAT center that provides services to those in the local community with disadvantages and disabilities. Based on the expert panel data, the following table reveals combinations of characteristics that could typify an EAAT center:

Table 4

Expert Panel EAAT Center Characteristics

	Palomino	Appaloosa	Roan	Chestnut	Bay	Pinto	Buckskin
	University	University	University	University	University	University	University
University -owned	X		X	X	X	X	
Independently - owned		X					X
On-campus	X				X		
Off-campus		25 minutes	14 miles	3 miles		< 10 miles	75 minutes
NARHA Premiere Accreditation	X	seeking	seeking	X	X		X
NARHA Instructor Certification provided	X	seeking	seeking	X	X		X
Therapy services with licensed therapist						X	
Clinical supervision for therapists							seeking
Interdisciplinary relationships	X	X	X	X	X	X	
Involves service learning	X		X	X	X		

These combinations of EAAT center characteristics would be used to develop my proposal for the expansion of the EAAT program at WWU, which would include this concept of an operating EAAT center that could serve the local community.

Theme 2: The relationship with the traditional equine program. Five of the seven responding institutions collaborate with their traditional equine program, which is the case with the institution, WWU, the focus of this project study. Following, in Table 5, are the highlights of the responses from the expert panel:

Table 5

Expert Panel Responses Regarding the EAAT Program Relationship With the Traditional Equine Program

Palomino University (PAL)

- PAL operates its EAAT center on campus along with the traditional equine program.
- The programs share arenas and 8-10 beginning-level school horses.
- "We have facility issues. We have outgrown it. Our enrollment in equine program has tripled in 10 years. With scheduling everything already with just one indoor arena makes it so there is no room or time for expansion."

Appaloosa University (APP)

- AP collaborates with an independent, off-campus EAAT center, and it keeps its traditional equine facilities, tack, and equipment completely separate.
- The independent center benefits when AP students volunteer their time to meet AP course requirements.

Roan University (RO)

- RO has an EAAT center on the same premises as their traditional equine program.
- They share beginning-level school horses. "This [sharing of school horses] is mutually beneficial. Traditional riding classes keep the horses exercised and obedient, and the therapy horses are used for the beginning riders in the traditional program," according to the director. Problems encountered include things such as traditional equine instructors and EAAT instructors agreeing on the training and riding methods for the EAAT horses. An example would be whether or not to use riding spurs.
- Another problem is the proximity of the two programs. The director said, "the EAAT program requires privacy, so we had to move our center walking distance for the main center."

Chestnut College (CH)

- Originally, CH operated both the traditional equine program and the EAAT program on leased property off the campus, but they were kept separated.
- According to the director, "When I came on board, we received money from a foundation to build our facility which really started the growth of the full equestrian program." Today, the CH facilities have expanded to 300 acres which accommodates both the EAAT program and the traditional equine program.
- Originally, the two programs shared horses, but as the programs grew they didn't have time to share. The traditional program does, however, often borrow the EAAT horses for horse shows and other needs.
- The EAAT program does not operate in the summer, so horses are leased to various summer camps.
- "Sometimes, we are not recognized as the competitive part of the program, but the whole equestrian staff gets along really well."

(Table continues)

Bay University (BAY)

- I-E has both the traditional equine program and the EAAT program on the same campus.
- Their NARHA Premiere Center is in the middle of the "university farm" and they have an indoor arena; however, they take advantage of the total farm by using trails to take EAAT clients to visit dairy calves, pet the baby pigs, and etcetera.
- The horses are not typically shared by both programs; however, a few are used in the beginning horsemanship class and a few are used by the ground work class, prior to exposing the students to unpredictable yearlings. According to the director, "you have to be pretty restrictive [in sharing horses] because the EAAT horses tend to be old or have physical problems."
- The EAAT and the traditional equine programs have grown to the point where they need more help (a director) and expanded facilities.

Buckskin University (BUC)

- An independent center works with the BUC director to provide student internships.
- According to the independent center's director, "we collaborated with the equine director at BUC and provided input on what courses [for the BUC curriculum] we thought would be helpful for those wanting to get a career in EAAT."
- The BUC director refers people to the center who are interested in becoming EAAT instructors, but they aren't interested in a university degree.
- The center also benefits BUC by welcoming field trips and providing guest lectures on campus.

Analysis of theme 2 data. The following data could be applied to my multi-option proposal for the expansion of the EAAT program at WWU:

- Three of the five respondents from institutions that have their own operating
 EAAT center experienced enrollment growth in their overall equine program, to
 the point of needing more facilities and staffing (PAL, CH, & BAY).
- It may be possible to share facilities and arenas, but it may be best to keep them separated for various reasons, including scheduling conflicts (PAL, CH & BAY) and the privacy of the clients with disabilities (RO).

- It is common practice to share beginning-level school horses with the advantage
 of keeping the horse fit and obedient by the traditional program riders (PAL, RO
 & BAY). These horses can also be suitable for the beginning riders in summer
 camps (CH).
- Training differences (RO), horse health issues (BAY), and horse overuse (CH) should be considered when the two programs share horses.
- Independent centers can benefit from an institutional relationship by gaining volunteers, potential instructors, and referrals for their instructor certification programs (AP & BUC).
- In addition to providing internships, practicum experience, and teacher certifications, independent centers can provide adjuncts, field trips and guest lecturing to the institution (BUC).

Theme 3: The EAAT relationship with administration. Typically, institutions have chief administrators who are not knowledgeable in the equestrian field. To gain EAAT support, effective, educative communication is necessary between the equine faculty and the administration. From a constructivist leadership stance, and according to systems thinking, I needed to approach this relationship from various viewpoints, if my project (EAAT proposal) was to be objectively considered by the administration (Scott, 2009; Murphy, 2005). Following, in Table 6, are the highlighted responses from various viewpoints, the members of the expert panel, in regards to their experiences with administration:

Table 6

The Expert Panel Responses Regarding the Relationship Between the Institution's EAAT Program and the Administration

Appaloosa University (APP)

"My administration has been highly supportive. One thing that helps is that my state only has 5 [NARHA] certified instructors, and there is only one NARHA Premiere Center. We have a need here, so that helps."

Roan University (RO)

• "Some decisions are made by those who don't understand the nature of the horse."

Chestnut College (CH)

- "The whole college gives so much support as a small, liberal arts based college. Because we include some psychology, human anatomy, and exercise, everyone is very supportive."
- "They all got excited when they saw the funding."

Bay University (BAY)

- "Administration [is the biggest obstacle]. Administration is tough. I started this program. I have never had a dean in all these [15] years who was supportive of the program; however, two presidents were. The current president put us up to be a representative video program for the state institutional system."
- Director E said he felt that the administration was not supportive because of the cost and liability involved with EAAT.
- "The high turnover [of administration] causes change. You must be thick skinned."

Pinto University (PIN)

- The EAAT program at PIN was recently terminated after there was a change in the department chair and the vision and the objectives for the program changed.
- "[At the institution there was a] lot of bureaucracy. It was a problem just getting support. There was a lot of skepticism about the program. It was a two edged sword. Some wanted to be involved because it was at the university, and others did not want to be involved because of the bureaucracy. The time it took to get contracts trough, was tough. And the university took a substantial amount of our money when we would get funding. When we would get a grant they would take between 7 and 26% of the money, but not giving us staff to write grants."

Buckskin University (BUC)

• An independent center works with the BUC director to provide student internships. "We [the EAAT center] are aligned with the current staff member [equine director] at BUC, and that could change and cause problems if there are personnel changes."

Analysis of theme 3 data. With my project and guiding research questions in mind, I made the following analysis about the institutional relationship between an EAAT program and the administration:

- If it can be established that the EAAT industry needs higher learning graduates, as in institution AP, more credibility and support could be gained with the administrators. For my proposal, empirical evidence of this need would have to be provided through the literature review (Fine, 2006).
- It can be problematic dealing with administrators who do not have an equestrian background or limited equestrian knowledge (RO)). According to Donaldson (2006), an effective leader needs to be an educative leader when proposing change (p. 167).
- Interdisciplinary collaborations are known to be well-received by the administration (CH).
- Interdisciplinary collaborations can benefit stakeholders when funds are raised by an EAAT program; and, the funding can heighten institutional support (CH).
- EAAT vision and objectives may vary throughout the administration hierarchy,
 and changes in administration could alter the level of EAAT support (BAY, PIN
 & BUC). Educative leadership is needed (Donaldson, 2006).
- EAAT cost and liability can create primary concern for the administration (BAY).
- Administrators can be skeptical about the credibility of an EAAT program and whether or not it warrants support (BAY).

Theme 4: EAAT finances. My research problem was to find a way to fill the budgetary gap that is necessary to run a quality equine program at WWU. My project, a multi-option proposal to expand EAAT at WWU, needed to not only be feasible. Ideally, it would help fill the budgetary gap in the traditional equine program. Table 6 provides insights from the expert panel regarding the financial aspect of EAAT at their institution.

Table 7

Financial Insights from the Expert Panel

Palomino University (PAL)

- "We are a state school on a really tight budget. The EAAT program is stuck paying for a lot of overhead because we [the EAAT program and the traditional equine program] share resources."
- Fundraisers are the major source of income. The EAAT program runs 3-4 fundraisers, whereas the traditional equine program does not. They will often use the funds to purchase beginning level school horses which can be used by both programs.
- "We do use client fees and a couple of fundraisers to pay [EAAT] program staff and certain needs."
- PAL is one of the less expensive EAAT programs in their area. An eight week session, which meets once a week, is \$200. (\$25./lesson). Grooming (on the ground only) lessons and private lessons are more expensive.
- PAL has a scholarship fund for those who cannot afford EAAT services.
- PAL does not allow clients to make insurance claims for the services. "We don't collect insurance because in a university, it can be a giant ball of red tape. It would be a mess and be a complete nightmare," said the director.
- Course and service learning requirements fortify the labor force and reduce the financial burden.
- In response to maximizing resources, the director responded, "It is what you have to do when you have very limited resources."

(Table continues)

Appaloosa University (APP)

• "In the department of animal science, we [the EAAT program] are under the equine budget, as allotted by the dean."

Roan University (RO)

- "We have one budget for the entire horse program [EAAT and traditional equine program] and the faculty is hired by the university."
- RO charges \$25. per private EAAT session, and \$125. per group of 4-6 clients.
- The work study/financial aid program is used to pay for some student labor.
- Course and service learning requirements fortify the labor force and reduce the financial burden.

Chestnut College (CH)

- A FIPSE (Fund for the Improvement of Postsecondary Education) grant was secured to start the four year EAAT degree program.
- The EAAT budget is united with the [traditional] equine program.
- "We don't charge the school district. It is free because it was necessary to get school systems to buy into it about 15 years ago. And, they (the institution) even assisted with bussing at the beginning, using the FIPSE grant funds."
- "Community lesson clients can make a donation of about \$25. per lesson."
- No insurance claims are made for providing services because CH does not provide therapy with a licensed therapist.
- When asked if the EAAT program serves as a good marketing tool, the director responded, "for us, yes. Our enrollment [as an institution] has changed because of the economic downturn, but at the same time 10-15 freshmen are still interested in our EAAT program."
- Course and service learning requirements fortify the labor force and reduce the financial burden.
- Horses are leased out to summer camps when school is not in session, saving on the cost of horse care.

(Table continues)

Bay University (BAY)

- "It [EAAT] is good marketing for enrollment at the university.
- "Local supporters help balance the costs."
- "Twice a year, we do the Special Kids' Rodeo and bus in area [special education] school kids as far as 70 miles away. We set up mock rodeo events (wooden horses) and horseback riding. 200-250 kids come in for an all day event, and I will eventually get students (EAAT clients) from this. Walmart and Dodge are sponsors for the rodeo."
- "It [EAAT service] was a free program starting out."
- The EAAT lesson fee is only \$10. per ride.
- They offer scholarships for EAAT clients.
- The EAAT director, who is the equine department head, is not paid extra to run the EAAT program, and BAY is seeking a graduate assistant to balance out this problem.
- Course and service learning requirements fortify the labor force and reduce the financial burden.
- The work study/financial aid program is used to pay for some labor.

Pinto University (PIN)

- PIN charges \$125./mo. for a weekly session, which divides to \$31.25/lesson.
- "Private insurance claims are not used, but state insurance could be billed for mental health services."

Buckskin University (BUC)

- An independent center works with the BUC director to provide student internships.
- Students pay BUC, and then BUC reimburses the independent center.

Analysis of theme 4 data. The following analysis had potential for strengthening my proposal to expand the EAAT program at WWU:

- EAAT can serve as a marketing tool to increase enrollment in the institution (CH & BAY). This was the original premise that prompted my institution to seek the addition of new programs, which lead me to my research problem and project (McCarthy, 2008).
- Fundraisers can provide funding for an EAAT program, and they can benefit the traditional equine program as well (PAL).

- Major corporations, such as Walmart and Dodge, are known to sponsor EAAT fundraisers (BAY).
- For some institutions, the primary objective for establishing an EAAT center is to provide a learning laboratory for the students. Earning revenue by offering community services can be secondary in importance, similar to vocational beauty schools. The expert panel EAAT centers, which were institutionally operated, charged up to 75% less for the same services offered by independent centers (PAL, RO, CH, BAY & PIN).
- The claiming of insurance for EAAT services was not exercised in any of the expert panel institutions, based on a) the difficulty in dealing with institutional bureaucracy and b) the fact that insurance claims cannot be made unless a licensed therapist is part of the service team (PAL, CH & PIN).
- The traditional equine program and the EAAT program budgets are combined in 3/7 of the expert panel institutions (APP, RO & CH).
- PAL and APP completely separate their budgets from the independently owned and operated EAAT centers with which they collaborate. The cost of running the EAAT center is not the responsibility of these institutions, which may be perceived as a financially attractive situation to some administrators.
- If workable, an institution's current faculty may be asked to assume the responsibility of teaching EAAT courses and overseeing the program (BAY).

- Much of the labor in offering EAAT services to the community can be inexpensively provided through course and service learning requirements (PAL, RO, CH & BAY), work study (RO & BAY), and graduate assistants (BAY).
- The expense of caring for the horses can be defrayed if the horses are leased to summer camps, when school is not in session (CH).

Theme 5: Staffing. My project, a multi-option proposal to expand the EAAT emphasis at WWU, would likely incite the administration to inquire about securing qualified staff at an affordable price. Table 8 provides insights from the expert panel on creative ways and means of addressing this concern.

Table 8

Insights from the Expert Panel Regarding EAAT Staffing

Palomino University (PAL)

- The traditional equine department chair, who was the head of EAAT program for 10 years, recently hired one part-time director/instructor/academic advisor. "[There are] too many pieces for one person to do all," commented the equine program director.
- "It is hard to keep good [EAAT] adjuncts."
- PAL does not have an OT or PT on the EAAT staff; however, they get consults from the clients' therapists, and volunteer consults by therapists from a local hospital.
- PAL graduates and seniors from the OT program help with EAAT clients.
- Course and service learning requirements fortify the labor force.

Appaloosa University (APP)

APP has a faculty member in charge of the Therapeutic Horsemanship minor.
 Three years prior, this person started as an adjunct. With the growth of the EAAT program, she has become a full-time faculty member, even thought the EAAT center is operated off-campus by an independent organization.

(Table continues)

Roan University (RO)

- "If I had a good certified instructor to hire 40 hours/week, I could double the clientele [for EAAT services]. I need the okay to hire the instructor so I can get the revenue to pay for her. We are going to try a graduate on a six month contract to see if the position justifies itself."
- "I have two girls working 20 hours a piece in the therapy program, making a little more than minimum wage. They do record keeping, volunteer training, wall papering, teaching, and anything! I use student labor through [the] work study [program] at minimum wage."
- In reference to obstacles with EAAT programs, the director said, "our graduates don't stay to help you teach! We need to retain them."
- The labor force is increased through course and service learning requirements.

Chestnut College (CH)

- The director of the on-campus EAAT center is also a NARHA Advanced Instructor who teaches with the aid of a full-time NARHA certified instructor.
- Course and service learning requirements help to fortify the labor force.

Bay University (BAY)

- The BAY equine department chair has served as the director of the EAAT program since its inception, 15 years ago. The chair, who is not paid for the extra responsibilities said, "BAY needs a new facility and they need a director." BAY is seeking a graduate assistant to help alleviate the work load.
- The work study/financial aid program provides some workers, along with those provided through course and service learning requirements.

Theme 5 data analysis. My proposal to expand EAAT at WWU included various staffing options based on the following analysis:

- Developing an EAAT program with an experienced EAAT adjunct may be prudent, and it could possibly transition into a full-time position (APP). It could, however, be difficult to keep quality adjuncts on staff (PAL).
- When an existing faculty member or department chair assumes the development and/or operation of an EAAT program, it may save money; however, it might be an unreasonable and inefficient practice (PAL & BAY).

- The work study/financial aid program can provide some workers (RO & BAY), along with those provided through course and service learning requirements (PAL, RO, CH, BAY & PIN) and the graduate assistant program (BAY).
- When an institution relies on students as part of the labor force, the turn-over rate upon graduation should be taken into account (RO).
- If an institution wants to certify students as instructors through NARHA, an advanced instructor needs to be employed to supervise the instruction (PAL, RO, CH & BAY)
- Licensed therapist(s) need to be on staff, if insurance claims are to be made, or if
 instructor certification is sought from the American Hippotherapy Association
 (AHA).

Theme 6: Scheduling. The logistics of implementing an EAAT program is something that would need to be addressed, especially if resource-sharing (i.e. arenas, horses, work study, etc.) was to be a major selling point in my proposal to expand EAAT at WWU. Table 9 reveals the various ways that the expert panel set their EAAT schedules.

Table 9

EAAT Scheduling Insights from the Expert Panel

Palomino University (PAL)

- They hold 6-8 week sessions in the spring, fall, and summer. It is too cold in the winter.
- Fall and spring sessions are correlated with the lab times of the EAAT courses.
- Client services are only provided on two days of the week.
- Approximately 30 clients are served during a session.
- On each service day, they usually provide 3 or 4 group lessons. Each group has 3-4 clients.

Appaloosa University (APP)

- An EAAT class requires 12 hours of service learning, so the students must volunteer at the off-campus, independently owned center.
- The center holds six week sessions, so APP students volunteer two hours per week. They car pool or drive there.
- The center holds a six week session in the spring, a twelve week session in the summer, and a six week session in the fall.
- In the spring session, the lab portion of [an upper level EAAT] class is held in the evenings at the center from 4:30 7:30 p.m. The lab is one day a week, and the APP instructor supervises the students as they help instruct at the center.

Roan University (RO)

- RO runs EAAT sessions for the community, after April and until November or December.
- "We tried [session] blocks (6 or 10 weeks). We are going to start limiting the blocks so more students can ride. They will be put on a waiting list, after participating in one block."

(Table continues)

Chestnut College (CH)

- The EAAT center operates when the college is in session, and not in the summer.
- The EAAT schedule is also coordinated with the public schools' schedule.
- As many as 120 clients are served per week, Monday through Friday, 8:30 a.m.— 6:30 p.m.
- Most lessons are groups. In the afternoon, they are semi-private, or private.
- Most community clients are a considerable distance (30 45 miles) from the EAAT center, but CH does its best to accommodate the clients.
- The EAAT facility is 3 miles from the main campus. CH students drive their own cars or they carpool for their practicum EAAT experience at the center. "We talked about an on-campus building, but the current property is better," said the director.

Bay University (BAY)

- "Our program is different than a typical therapeutic riding program [EAAT center]. The center serves as a laboratory for the students and is only open 2 days a week for 3 hours, on Mondays and Wednesdays."
- "We will stuff 25 30 riders in that slot. Every rider (client) is working with a group of I-E students. To an outsider it looks like mass confusion. We may have as many as 10 riders up [mounted] at the same time, doing different things in different locations."

Pinto University (PIN)

• PIN terminated their EAAT program. When it operated, it ran all year, except for August (too hot).

Buckskin University (BUC)

• University faculty and students cannot get involved on a daily basis because the independently owned EAAT center is 75 minutes away. BUC students schedule their 4 - 6 month internships according to the academic calendar.

Theme 6 data analysis. At WWU, the facilities, horses, and faculty are considered to be performing at an optimal level. Keeping this in mind, the following analysis was made to devise workable schedule options for my proposal:

• Students in 3/7 of the expert panel institutions assist with providing community services just two days a week (PAL, APP & BAY), whereas one well-developed EAAT program provides sessions 5 days a week, serving up to 120 clients (CH).

- Block sessions of 6-10 weeks can be held for the community riding lessons (PAL, APP & RO).
- Conducting group EAAT lessons is an accepted practice (PAL, CH & BAY).
- EAAT session scheduling is contingent on the geographic climate. Some schools
 did not operate in the winter (PAL, APP & RO) and some did not operate in the
 summer (CH and PIN).
- EAAT service schedules are usually aligned with the institution's academic calendar, when the students are available to assist (RO, CH & PIN).
- In order to serve clientele, schedules may need to be coordinated with the public school calendar and the clients' limited availability, after school (CH).

Theme 7: Employability. My proposal to expand the EAAT emphasis at WWU might help to solve my research problem – filling the budgetary gap in providing a quality equine education. However, ethically, the proposal must be in the best interest of the primary stakeholder, the student. Will the expansion of the EAAT emphasis truly make the student more employable? Are well-paying jobs available in sufficient amounts? Table 10 provides the perspectives of the expert panel in regards to these questions.

Table 10

Expert Panel Insights Regarding the Employability of EAAT Graduates

Palomino University (PAL)

• "Our graduates on that [EAAT] track who have the NARHA certification and the B.S. are very employable and we get great feedback from employers. If they had a chance to work more with OT and PT that would be beneficial."

Appaloosa University (APP)

- "One thing that helps is that this state only has 5 certified instructors, and there is only one NARHA Premiere Center. We have a need here, so that helps."
- "Right now the industry is so centered around NARHA that if you look at the jobs you need NARHA certification because of their standards of quality control. They just came up with a higher education membership, which we are planning on pursuing so students can graduate as NARHA instructors."
- "The students here are being trained to become [EAAT] instructors, but there are other schools which have business classes and tracks to be administrators. Our purpose, however, is to make well-qualified instructors."

Roan University (RO)

- "There is a need [for graduating students with an Associate of Arts degree with an EAAT emphasis], but many go on to do something else (i.e., working for trainers, teachers, etc.). It seems more like it a stepping stone for entering jobs."
- When asked about providing EAAT training to professional therapists, the director commented, "[they have not been involved in our program] and I wish they would. It is a missing piece of the puzzle because we are opening our doors to more clients with physical disabilities."

Chestnut College (CH)

- "I think we must be careful. Is our profession ready to handle as many people as we are turning out with degrees? I have had good success in job placement, but I can't guarantee they will get a job in their state."
- "I am insulted that employers want to offer part-time when they need full-time, or [they say] we will hire you if you write a grant to cover your salary. It is frustrating."

(Table continues)

Bay University (BAY)

- Besides having the ability for BAY students to get NARHA certification oncampus, the kinesiology, education, and the psychology departments can have their students meet the professional development requirements for their certifications. This concept broadens their education, and perhaps their employability.
- "There is definitely a need for graduates from our EAAT program.

 Unfortunately, most of the positions available are part time and do not pay as well as they can make in other industries. Most of my students who stay in the industry have another full time job and work part time as EAAT instructors."

Pinto University (PIN)

• In reference to developing qualified, employable graduates, the director said, "It is definitely a challenge in finding qualified EAAT staff. You either get horse people without the educational background or people skills, or you have people trained in the industry (professional therapists) without the horse skills, so even with [the EAAT organizations that offer] certificate programs, the training only requires minimal skill. [The therapists'] knowledge base and intuition to horse safety and anticipating problems isn't adequate and they need so much more training. I had an entire semester with them (kinesiology, education, social work, therapeutic recreation, counseling—basically the mental health field) to teach them more skills."

Theme 7 data analysis. Following are employability factors that had to be considered in the development of my proposal to expand the EAAT program at WWU:

- Students might be more employable if they are strong in both their equine knowledge/skills and professional knowledge/skills (BUC).
- NARHA instructor certification is considered as a factor in making a student more employable upon graduation in 6/7 of the expert panel.
- Students who can do their EAAT training under the guidance of professional therapists may be more employable (PAL, RO, BAY, PIN & BUC).
- Employability may be geographically contingent, based on regional needs for EAAT instructors and directors (APP, CH & BAY).

- The EAAT curriculum needs to align with employment goals. Is the program training employable instructors, directors, or both (APP)?
- Students in EAAT programs may consider their EAAT training to be a means of broadening both their equine background and their employability (RO, BAY & PIN). This value also applies to those who are seeking professional degrees as therapists with an EAAT emphasis (RO, BAY & PIN).
- RO offers an Associates of Arts degree with NARHA instructor certification.
 Could that route be an attractive marketing tool to enroll those who are not interested in pursuing a four-year degree?
- It might be ethically responsible to search for empirical evidence to know if we are over-saturating the EAAT job market, thereby doing an injustice to graduates (CH).
- It might be ethically responsible to determine if an extensive EAAT education warrants the typically low salaries in that field (RO, CH & BAY).

The Qualitative Data: The End-users

After member-checking and triangulating the data from the quantitative survey and the five expert panel, qualitative interviews, basic prototypes of EAAT implementation were formulated for consideration and review by two distinct end-user groups. The two groups were selected on their potential to be end-users of the EAAT plan. Group I consisted of the entire WWU six member equine division faculty. The members of group II were identified as potential end-users from non-equine divisions and programs. This group included select division chairs from behavior and social services,

business, human performance, and education. Also, included in the group were the directors for service learning and disability services. End-users were each invited to participant in a 20 minute phone or email interview. This request was made through a formal email explaining the purpose and value of the study, accompanied by an informed consent form. Follow-up phone emails were used to confirm participation and to develop a positive researcher-participant relationship.

End-user Group I data. I was concerned that this phase of data collection was during the opening weeks of the WWU academic school year, when the faculty is especially busy. Therefore, I offered the option of interviewing via email. Fortunately, 4/6 of the group was willing to participate. Seven predetermined questions were asked, based on the theme development from the previous data analysis of the quantitative survey and the expert panel interviews. For the anonymous reporting of the findings, each group member was assigned a pseudonym relating to horse tack and equipment. The following table provides an overview of the equine experience that makes the end-users qualified to participate in the study:

Table 11

Qualifications of End-user Group I

Instructor	HM ran a horse training business for 8 years, specializing in
Hackamore	western horses; trained WWU horses and riders to national and
(HM)	world championships; coached multiple national champion
	intercollegiate judging teams; and HM has been teaching at WWU
	for 5 years.
Instructor	KW owned and operated a hunter/jumper training business for 20
Kimberwicke	years prior to teaching at WWU; trained WWU horses and students
(KW)	to national and world titles; and KW has been teaching at WWU
	for 15 years.

(Table continues)

Instructor	MB was a former WWU equine division chair for 10 years;
Meadowbrook	specializes in horse breed history, horse care and carriage driving;
(MB)	and MB has been teaching at WWU for 19 years.
Instructor	MG was a former WWU division chair; is a world champion rider;
Martingale	specializes in saddle seat riding; coached students and horses to
(MG)	world championships; authored a book on riding; and MG has been
	teaching at WWU for 40 years.

The qualifications of the End-user Group I represent years of diverse, practical experience in the equine industry. These end-users would incorporate their past experiences, beliefs, and values into the answers I would ask in the interviews. Tables 12-18 present the seven interview questions and the highlighted responses from End-user Group I.

Table 12

End-user Group I Highlighted Responses to Interview Question One

Question 1

Within the equine division curriculum, what courses do you think might have potential for incorporation into and EAAT program?

Instructor Hackamore (HM): Theory of Equine Behavior and Training Methods, Equine Business Practices, and Horse Management Practicum

Instructor Kimberwicke (KW): Equine courses plus courses in education, special education, psychology, business, and social work

Instructor Meadowbrook (MB): Equine Care, Techniques of Equine Management, Survey of Therapeutic Riding, Equine Health and First Aid, Equine Management Practicum, Theory of Teaching Techniques, Theory of Equine Behavior and Training Methods

Instructor Martingale (MG): "All of them could [be incorporated]."

Question 1data analysis. Whereas KW and MG viewed all WWU equine courses as having some potential for integration into an EAAT program, HM and MB agree that the WWU courses, Theory of Equine Behavior and Training Methods, and the Equine

Horse Management Practicum, are applicable to an EAAT program. Based on the triangulation of the data from the quantitative survey and the expert panel interviews, other equine courses viewed as applicable include courses in theory of teaching, teaching methods, riding, equine business, equine health, and equine first aid.

Table 13

End-user Group I Highlighted Responses to Interview Question Two

Ouestion 2

What do you think the positive aspects would be in having an expanded EAAT emphasis at WWU that could serve those in the community with disadvantages or disabilities?

Instructor Hackamore (HM): "Connection with the community that we live in is such an important aspect of life. WWU and the equestrian department have the means to provide a form of service to the community that is rare and special. Every "open house" event that we have hosted and every service activity has been well supported by the local community. An organized, intentional approach for using the horses and facility at WWU for outreach into the disadvantaged or disabled community is entirely possible. The rewards of EAAT would not just be realized for the participants, but for the students, university, and equestrian faculty. Connections with the community help students to develop a sense of oneself in world, and foster deep connections with our horses and our local population. It would be beneficial to all of us if the rest of the university was more connected with the equestrian component of the school. This would provide a way to teach "across the curriculum. I can see some clear positives to integrating EAAT into courses other than the EQS department."

Instructor Kimberwicke (KW): "An EAAT emphasis at WWU would meet the WWU initiative of incorporation of service learning into curriculum. In addition, WWU would provide a much-needed and popular venue for the practice of EAAT in our geographic area."

Instructor Meadowbrook (MB): "A very positive aspect would be the interaction between EQS and other campus divisions, such as human performance, special education, social work, etc. I feel strongly that the strength of a small liberal arts college/university is the ability to get collaboration between dissimilar divisions. That is where the magic often starts, and the student gets a learning environment that is literally custom made for them."

Instructor Martingale (MG): "Riding horses gives them (riders with disabilities) movement they might not otherwise experience. Being with an animal makes people feel good. Being on top of a horse allows them to be up high looking down, rather than in a wheelchair looking up."

Question 2 analysis. The fact that WWU has a history of support from the local community with EAAT events may be indicative of future support for an expanded EAAT program (HM). Another positive perspective is that EAAT program stakeholders (i.e. local community, participants, WWU students, equine faculty, and non-equine faculty, etc.) have potential to benefit from an expanded EAAT program (HM, KW, MB & MG). EAAT could also benefit the university's initiative to incorporate service-learning into the curriculum (KW). WWU, a relatively small liberal arts institution, may also be in a good position to benefit individual students through EAAT interdisciplinary relationships (MB). The interdisciplinary aspect of EAAT could build morale and connectedness among diverse departments (HM & MB).

Table 14

End-user Group I Highlighted Responses to Interview Question Three

Question 3

What do you think the negative aspects might be in having an expanded EAAT emphasis at WWU?

Instructor Hackamore (HM): "I can appreciate that any additional program requires organization, financing, and leadership. The equestrian department at WWU is already stretched to the very limit, so adding another program would be challenging."

Instructor Kimberwicke (KW): "The expansion of the facility use would increase costs of operation."

Instructor Meadowbrook (MB): Having the full time professors of the university make time to develop new courses for the EAAT program or adding additional components to their courses, if needed. If developing and teaching "new" courses were involved, it may be hard to fit them into qualified faculty members' already full schedules."

Instructor Martingale (MG): "[Problems might include] lack of ring time, cost of insurance, cost of building items for safety, trying to find safe horses to do the job, and finding stall space."

Question 3 data analysis. The primary concern for all end-users is the cost of expansion and operation. Another major concern is the overextending of the faculty (HM & MB). Other concerns include having adequate leadership, facilities, horses, and schedules.

Table 15

End-user Group I Highlighted Responses to Interview Question Four

Ouestion 4

What obstacles do you think would be encountered in expanding the current EAAT program?

Instructor Hackamore (HM): "Division of resources (student, faculty, facility and horses) would most likely be an obstacle. Any new program requires "buy in time" to be successful. It would be critical that the leadership be willing to stay with it until it had a strong, supportive foundation."

Instructor Kimberwicke (KW): "The main obstacle would be in convincing faculty that our students could find jobs and make a living in this discipline. They are reluctant to accept that Therapeutic Riding is anything other than a volunteer-driven activity."

Instructor Meadowbrook (MB): "Finding time in current schedule of the EQS facilities and lesson horses schedule the EAAT components. The horses suitable for EAAT events are the low key horses that can be used more than once a day, so past experience has shown that the additional horse use, has not been a problem. And as for facility use, the EAAT components do not require that much time."

Instructor Martingale (MG): "... same as answer three (ring time conflicts, insurance costs, addition of safety items, finding safe horses and space to house them)."

Question 4 data analysis. The logistics involved in the scheduling and sharing resources is the primary EAAT expansion obstacle, as perceived by the group I end-users (HM, MB & MG). Consistent with my triangulation findings, two other vital points were made that would need to be addressed in my proposal, a) stakeholders would need to be

convinced that EAAT is truly credible and graduates are employable (KW), and b) stakeholders would need to be educated about the realistic amount of time needed for a new program to gradually develop into its full potential with strong support (HM).

Table 16

End-user Group I Highlighted Responses to Interview Question Five

Questions 5

If the WWU annex (a separate 1.5 acre facility, .5 mile from campus) remained available for its present purposes, how would you feel about an EAAT program being run there with approximately 3-5 horses?

Instructor Hackamore (HM): "If we had the manpower to do it, I think it would be a very viable idea."

Instructor Kimberwicke (KW): "If we could fund the development of that facility for that purpose, I think that it would be a grand idea."

Instructor Meadowbrook (MB): "If the EAAT scheduling was to be everyday, and the vision was not just to expose our students to it-but to have an up & running therapeutic facility, I think it is a good idea. One thing nice about having the therapy horses on campus is that they would be used in other classes. They would stay fit, and there would be the on-campus facilities protocol taking care of them. If off campus, it would fall on the students living at the annex or the students running the EAAT. Keeping those horses fit, clean, and ready to use would be harder."

Instructor Martingale (MG): "If we had the money to make it safe that would be just fine. We at the time are full to capacity with our lame, sick, and in need of a rest horses. I wish we had more pasture space for our current horses out there now."

Question 5 data analysis. WWU owns an adjacent (.5 mile distance) equine facility that contains a house for a student manager, and accommodations for approximately12 horses on 1.5 acres. The property is used for rehabilitation of injured, ill, and tired horses, and it is used for the accommodation of overflow horse counts. The end-users all agree that the annex has good potential for use by an expanded EAAT

program. Perceived problems include adequate funding (KW & MG), sufficient manpower (HM & MB), and the limiting of the current facility usage (MG).

Table 17

End-user Group I Highlighted Responses to Interview Question Six

Question 6

If land was available near the current round pen, or somewhere close to the stables, how would you feel about an oversized, covered round pen being installed for dual use by the EAAT program and the traditional equine program?

Instructor Hackamore (HM): "I'll dig the first post holes myself."

Instructor Kimberwicke (KW): "If we could fund the development of that facility for that purpose, I think that it would be a grand idea. [This idea is] even better because it is within walking distance of our campus."

Instructor Meadowbrook (MB): "Wonderful!"

Instructor Martingale (MG): "That would be great."

Question 6 analysis. The expert panel well-received the idea of using the WWU annex for an expanded EAAT emphasis, but they had a resoundingly favorable response to the idea of using a small portion of WWU property, on campus, within 200 feet of the main equestrian complex. The area currently contains a small 60' diameter arena that is used by the traditional program for training and exercising horses. My question proposed the idea of replacing the current arena with a covered arena that is a little bit larger than the current one. Although not stated, possible reasons for the positive responses could include the convenience for students (KW), the ability to share workers and horses, and the fact that a shared covered arena would allow for year-round use versus seasonal use.

Table 18

End-user Group I Highlighted Responses to Interview Question Seven

Question 7 What additional insights or comments would you like to share?

Instructor Kimberwicke (KW): "Although I think that an expanded EAAT emphasis is a great idea, I also think that beefing up our EQA (equine administration) major is a priority that we cannot put aside much longer. WWU is slow to accept change. For example, the entire educational world is going online and WWU is reluctant to consider it. For WWU to consider the idea of an expanded EAAT emphasis, that part of our industry will have to have an already-entrenched history of success and financial stability."

Instructor Martingale (MG): "It would be great if we had the resources to do this because it serves a very useful purpose. However, we have a hard time affording to do what we need to do now without that added program."

Question 7 analysis. Effective constructivist leadership is needed throughout the EAAT program development process to reduce any rivalry between the EAAT program and the traditional equine program for resources and administrative support (KW & MG). Another leadership challenge would be the preparation and presentation of sound, statistical evidence to support an EAAT expansion proposal. In the past, innovative expansion proposals of the WWU traditional equine program had been met with reluctance, so strong evidence of EAAT credibility and financial feasibility would be required in my proposal (KW).

End-user group II data. The members of group II were identified as potential end-users from non-equine divisions and programs. This group included select division chairs from behavior and social services, business, human performance, and education; and directors of service-learning and disabilities services. At the time of the interview invitation, these faculty members were in the opening weeks of the academic school year,

an extremely busy time. Only 2/7 of the group responded after a second invitation. This is a stark contrast with the high response rates for the survey, expert panel, and end-user group I, which validates the systems thinking premise that those more closely connected to a problem are more apt to participate in helping to solve the problem (Donaldson, 2006). The two respondents were the chairs for the business department and the education department. Fortunately, according to the quantitative survey data, these two departments are typically involved in EAAT programs; therefore, I valued their insights into helping me derive shared meaning for my EAAT proposal. In recording their data, I used pseudonyms that related to their fields (Professor Reader and Professor Fiscal).

End-user group II was asked the same questions as end-user group I (see tables 12 - 18). The interview responses were congruent with the group I responses. The only notable difference was that group II suggested courses from their respective divisions to include in an EAAT program. Professor Reader recommended Education of the Exceptional Child and Educational Psychology, and Professor Fiscal recommended Entrepreneurship, Accounting, and any business course that could be deemed worthy of inclusion in an EAAT program. These suggestions were triangulated with the data from the survey and expert panel to provide interdisciplinary curriculum recommendations in the proposal.

Section 3: The Project

Introduction

As of June 1, 2010, I was no longer employed at William Woods University (WWU). When I was employed at WWU as the equestrian division chair, my research problem arose in response to the university president's mandate for divisions to become more cost-efficient (Fessler, personal communication, 2009). This requirement was followed by a request to consider innovative programs (e.g., veterinary tech program) that could be incorporated into the existing traditional equine studies program to attract more students (McCarthy, personal communication, 2009). As the equestrian studies division chair, I was thus presented with the problem of finding an innovative and costefficient way to fill the budgetary gap in providing a quality equestrian education at WWU. For an intervention in this fiscal dilemma, my research and project focused on the expansion of the Equine-Assisted Activities and Therapy (EAAT) program at WWU. My mixed-methods research data were developed into a tailor-made proposal that included various options for EAAT expansion, focusing on the cost-efficient use of existing resources (e.g., current courses, programs, faculty, facilities, equipment). My project, the multi-option proposal, would be presented in written format to the academic dean.

The project was designed to solve my research problem by fulfilling primary goals relating to finances, students, and social justice. Following are expanded elements of each goal:

- 1. The financial goal is a solution for the budgetary conflict
 - a. Without making negative cutbacks in the existing equine program,

- b. Without raising student fees, and
- c. By capitalizing on existing division resources, with minimal imposition.
- 2. The student goal is an enriched learning experience for the students
 - a. Through experiential, practicum learning,
 - b. Through service learning,
 - c. Through entrepreneurial learning, and
 - d. Through interdisciplinary collaborations.
- 3. The social justice goal is to provide EAAT services to those in the local community with disadvantages or disabilities.

The project genre was selected based on the Walden University objectives for a project study. A project is to involve critical review of relevant research and theoretical literature related to a problem and its possible solutions within a field of study (Walden Ed.D. guide, 2008). The project genre was suited to my leadership challenge of addressing a local problem and instituting change. The genre was especially compatible with my study's overarching theories of constructivism (Nahas, 2005) and systems thinking (Goodman, 2008). Consistent with constructivism, shared meaning was developed in the interview discussions regarding the successes, obstacles, and concerns of other institutions (Donaldson, 2006; Greyling, 2008). Using the constructivist "constant comparative method" (Creswell, 2007) of analysis, research data were to be integrated into a personalized proposal that suited the unique WWU culture.

In the proposal, the research problem had to be addressed in a convincing manner, if the administration was expected to objectively consider the expansion of the EAAT

program. Educative, constructivist leadership would be needed to sell the administration on a program about which they had limited knowledge (Shapiro, 2008). The decision makers would need to be strategically guided through the proposal and encouraged to be part of the constructivist process of developing collective meaning and knowledge structures (Gagnon & Collay, 2006; Goodman, 2008).

Whenever change is considered, it is prudent to be sensitive to the institutional culture. Every system (i.e., institution) has its own culture comprised of individuals with unique histories, values, beliefs, and goals; and, these factors are ever-changing (Shapiro, 2008). The content of the proposal would need to be filtered with these factors in mind. The content also needed to be linked to strong, empirical evidence for the value of EAAT through my literature review (Fine, 2006).

The Review of Literature

To support the financial, student, and social justice goals for my project, it would be necessary to expand my literature review to address issues relating to the themes that emerged in my research. Therefore, the literature review included the investigation of EAAT terminology problems; relationships with EAAT organizations; the legitimacy of EAAT; the employability of EAAT graduates; and EAAT finances.

The EAAT terminology problem. Although my quantitative survey consisted of close-ended questions, there was a section for participants to offer subjective comments. The director from one participating institution, Dun University, expressed concern about using the term, *EAAT*:

Having the term *EAAT* as a global term to encompass everything makes it difficult to discern what the institution is supporting. Programs working in collaboration with institutions need to be very specific about whether the program is offering medical service (hippotherapy, or mental health service) or a recreational/adapted program such as vaulting, riding, and driving (Mullen, survey, 2010).

Serpell (2006) noted that the word *therapy* is often used loosely and that it should not be concluded that therapy is any event that is enjoyed by the patients. He explained that the term *animal-assisted therapy* (AAT) is often applied to an array of programs which are anything but therapy in the medical sense of the word (p. 22). Oxford English Dictionary Online (2010) defines *therapy* as "treatment intended to relieve or heal a disorder." In contrast, the dictionary defines *recreation* as, "an activity done for enjoyment." EAAT programs, as observed in my quantitative findings, can run the gamut of these definitions. Serpell (in Fine, 2006) warns that we must be careful not to weaken the term *therapy* by applying the term to quasi-medical fields that do not provide direct medical treatments, as is the case with gem therapy, massage therapy, aroma therapy, and many animal-assisted therapy programs (p. 22).

According to one of my expert panel interviewees, the director at Dun University, it is important to be clear and concise about the labels we use to identify EAAT programs (Mullen, EP Interview, 2010). It can be misleading to call them *therapeutic riding programs*, as was common in the early history of the movement, because such programs may offer more than riding, and they may not offer true therapy. The term *EAAT* is now

commonly used by two major national organizations, NARHA and Horses and Humans Research Foundation (HHRF), because the term alludes to just about every form of equine-assisted activities and therapy (NARHA, 2010; HHF, 2010). Below is NARHA's expanded definition of the term, *EAAT*:

Though NARHA began with a focus on horseback riding as a form of physical and mental therapy, the organization and its dedicated members have since developed a multitude of different equine-related activities for therapeutic purposes, collectively known as equine-assisted activities and therapies (or EAAT). Besides horseback riding, EAAT also includes therapeutic carriage driving; interactive vaulting, which is similar to gymnastics on horseback; equine-facilitated learning and mental health, which use the horse as a partner in cognitive and behavioural therapy, usually with the participation of a licensed therapist; ground work and stable management; and NARHA Horses for Heroes, a new program that uses a variety of EAAT disciplines specifically to help war veterans and military personnel. In addition, many of NARHA's 25 volunteer-driven committees are working on identifying and refining even more disciplines and activities that might be put to use in the world of EAAT (NARHA, 2010).

For sake of clarity in my research, and in my project (proposal), I used the term *EAAT* as an all-encompassing term to include the broad range of equine-assisted activities and therapy. I heeded the advice of the director from Dun University (Mullen, EP Interview, 2010), and attempted to make it very clear as to the extent of the therapy, and the extent of non-therapy activities, that would be included in my proposal options.

Relationships with EAAT organizations. Constructivist and systems thinking theories permeated my project study. Constructivism embraces "collective intelligence" (Sergiovanni, 2005, p. 134), and systems thinking encourages learning from many sources (Gardner, 2008, p. 34). It would, therefore, be prudent to consider the insights and resources that could be gleaned from prominent EAAT organizations. Some of these organizations are potential allies for the development and implementation of my proposal to expand EAAT at WWU. Following, are key services provided by these organizations, all of which have potential application to my proposal:

The North American Riding for the Handicapped Association (NARHA). As of 2009, NARHA no longer calls itself the North American Riding for the Handicapped Association because the title is considered misleading and politically incorrect. NARHA represents centers that incorporate more than riding, the organization is now global in scope, and the term *handicapped* is now considered inappropriate. The title NARHA is currently considered a label, rather than an acronym, for the organization that began in 1969 when EAAT was a relatively new concept in the United States (NARHA, 2010).

Today, globally, NARHA is comprised of over 6,300 individual members and nearly 800 centers that annually provide equine-assisted activities and therapy to approximately 42,000 people. Services include instructor certification, center accreditation, educational opportunities and advocacy work. An annual national convention is a major educational opportunity. NARHA recently merged with the EFMHA (the Equine Facilitated Mental Health Association), which in 1996 was founded as a section of NARHA to support the mental health aspects of EAAT (NARHA, 2010).

My research data revealed that the majority (6/7) of the expert panel participants represented institutions that provided, or were seeking to provide, NARHA instructor certification for their students. Because these institutions felt instructor certification was an important part of an institution's EAAT program, I planned to incorporate that option into my proposal. NARHA offers three levels of instructor certification – Registered, Advanced, and Master. Special certifications are available for driving and interactive vaulting. In order for a higher learning institution to offer instructor certification, the institution must meet the requirements set by the newly formed (2010) NARHA Higher Education Membership. Three levels of NARHA Higher Education Membership provide varying plans for offering instructor certification to students. Level one does not permit the institution to offer instructor certification. Level two members can work with an oncampus or off-campus NARHA Premiere Accredited Center (PAC) to train students to meet primary certification requirements which must be completed at a NARHA sponsored certification event at a NARHA PAC. Level three members can provide training and certification on their campus. For my proposal, it was important to consider that all three levels of membership require the class room instructor and the supervising practicum instructor to be certified as either an Advanced Instructor or Master Instructor. Additionally, the on-campus or off-campus EAAT center that provides the students' practicum experience must be a NARHA PAC. The institution has one year from the start of membership to complete the accreditation process to become a NARHA PAC (NARHA, 2010).

NARHA's marketing approach for the Higher Education Membership highlights the value of a) exceptional educational materials and resources for the teacher and the student, b) national recognition to the university for student recruitment, c) networking opportunities for the students, and d) the potential to increase graduate employability (NARHA, 2010). These highlights could be used to sell my proposal.

The Equine-assisted Growth and Learning Association (EAGALA). EFMH is a term commonly used by the Equine-facilitated Mental Health Association (EFMHA) which is now fully integrated into NARHA. EFMH may or may not (i.e., 100 % of my expert panel institutions) involve actual mental health treatment by a licensed therapist (NARHA, 2010). Even though 68 % of the 25 institutions in my quantitative survey claimed to incorporate Equine Facilitated Mental Health (EFMH) into their services, only one institution (Dapple Gray University) was associated with EAGALA (Mullen, Survey, 2010). The terms Equine Assisted Psychotherapy (EAP) and Equine Assisted Learning (EAL) are used in lieu of EFMH by this national organization that trains and certifies handlers and therapists (EAGALA, 2010).

EAGALA, formed in 1999, has a global membership spanning 38 countries. Like NARHA, they offer educational resources, training, and certifications. In contrast to NARHA, the certification requirements are much less extensive. EAGALA Certification can be completed at a six day workshop. Their advanced certification requires an additional workshop and 150 professional development hours. The certifications fall into two categories -- The EAGALA Equine Specialist (non-professional) and the EAGALA Mental Health Professional (licensed therapist). Therapy involves a team that has an

Equine Specialist (ES) and Mental Health Professional (MHP), according to the EAGALA Model (EAGALA, 2010).

Based on my research, this EAGALA model draws attention to a problem that exists within the field of EAAT. According to the expert panel director from Pinto University, "when acquiring staff, you either get horse people without the educational background and people skills, or you get people professionally trained (therapists) who have minimal horse skills." The director expressed concerns that this problem cannot be resolved with certificate programs that require minimal equine handling skills (Mullen, EP Interview, 2010). Based on employability comments from 5/7 of the respondents in my expert panel interviews, this concept would need to be integrated into my project in order to address the concern about gainful employability of EAAT graduates (Mullen, EP Interview, 2010).

The American Hippotherapy Association (AHA). AHA, an organization which has evolved over the past 30 years, promotes the use of horse movement as a strategy of treatment in occupational, speech-language, and physical therapy sessions for those with disabilities. Muscle tone, posture, balance, coordination, motor development and emotional development are shown to be improved through the use of Hippotherapy as a treatment strategy. AHA provides extensive education, clinical experience, and certification for professional occupational, speech and language, and physical therapists. Therapists are eligible for testing to become Hippotherapy Clinical Specialists (HPCS) if they have at least 6,000 hours of professional experience and 100 hours of hippotherapy practice. The AHA also has a certification collaboration with NARHA. Licensed

therapists or therapist assistants may become NARHA Registered Therapists upon completion of requisite hours of hippotherapy practice and AHA approved hippotherapy coursework (AHA, 2010).

AHA's emphasis on providing practical equine experience with professional knowledge is observed in two of my seven expert panel institutions. Appaloosa University and Buckskin University are each in the process of pursuing involvement in hippotherapy through collaborations with OT, PT and SLT programs at local universities (Mullen, Interview, 2010). One of my survey institutions, Gruella University, offered a five year plan, through an articulation, that combines their 3-year bachelor's degree in equine studies with a 2-year master's degree in occupational therapy at a different university (Mullen, survey, 2010).

The Delta Society. The Delta Society is an organization that provides resources for healthcare, educational and other professionals so they can learn how to safely and effectively incorporate therapy animals into their practices. Some of their resources include information regarding standards of animal care, standards for being an animal handler, service animal laws, ADA laws, and federal laws (Delta Society, 2010). Much of their information pertains to dogs and small animals, but it can be applied to EAAT (Fine, 2006). Safety issues and legal issues must be addressed in my proposal.

The Equestrian Medical Safety Association (EMSA). NARHA, EAGALA, AHA all have safety standards for their related activities and therapy, but the EMSA is dedicated to the safety of people in all equestrian activities. Their mission is achieved

through education of healthcare professionals; research about injury patterns and risks; efficacy of safety measures and equipment; and etcetera (EMSA, 2010).

The Federation of Riding for the Disabled International (FRDI). Another

resource for the development and implementation of my EAAT proposal is the FRDI, an international organization with members from over 45 different countries. They provide current educational materials, publish an annual Scientific and Educational Journal of Therapeutic Riding, and they sponsor an International Congress for Therapeutic Riding which spotlights the latest in EAAT research and development. They support high standards of protection and training of EAAT horses, as well as high safety and competency standards for EAAT handlers and instructors (FRDI, 2010). The legitimacy of EAAT. In my proposal to expand EAAT, I needed to show that EAAT is more than just a trend or what Fine (2006) identifies as "pop therapy." Instructor Kimberwicke, a participant in my End-user Group I interviews, agrees, "the main obstacle [in expanding EAAT at WWU] would be in convincing faculty that our students could find jobs and make a living in this discipline. They are reluctant to accept that EAAT is anything other than a volunteer-driven activity (Mullen Interview, 2010). Fine (2006) cautions us to be skeptical of those who make unreasonable claims about the power of the medium, stating that for AAT to gain respectability, there needs to be empirically-based evidence to document the interventions (p. 521). According to Fine (2006), in the field of psychotherapy alone, approaches and theories have increased approximately 600% since the 1960's, and there may be close to 200 therapy models, including animal-assisted activities (AAT). This growth has merit in the eyes of some,

but others disagree and consider it to be no more than "pop" therapy (p. 515). Fine also draws attention to the fact that research can be biased by AAT therapists who have a strong interest and passion for the medium, and often use their own animals in the research (p. 239).

Four years ago, Kruger and Serpell (in Fine, 2006) summed up their viewpoint on the legitimacy of EAAT, by stating that "despite their long history and unequivocally positive media attention they typically receive, animal-assisted interventions are currently best described as a category of promising complementary practices that are still struggling to demonstrate their efficacy and validity" (p. 21). Four years later, in 2010, one of my survey participants expressed the same concern. In response to one of my research questions, the director from Blue Roan University said, "EAAT is an expanding industry that needs support in developing evidence based outcomes" (Mullen survey, 2010). Deliberate strides are, however, being made to validate EAAT, and support is increasing for research in this field. Support for EAAT research is the primary objective of a relatively new organization which was established in 2004, the Horses and Humans Research Foundation (HHRF). This is evident in the following HHRF statement of goals (HHRF, 2010):

The primary goal is to support, promote and fund scientific research that explores the claimed, yet unsubstantiated benefits of equine-assisted activities and therapies, leading to the discovery of the most effective methods and techniques for conducting thousands of existing and future programs. The secondary goal is to educate the public (including parents, donors, insurance companies and

physicians) on research findings so that equine-assisted activities become more accessible to those in need.

The HHRF seeks funding for research and has an approval process for awarding of funds for proposed research. Examples of HHRF funded projects include The Benefits of Equine Therapy Substantiated by a Washington University research team, the Spastic Cerebral Palsy Study, and the Mental Health/ Special Education Study (HHRF, 2010).

The Federation for Disabled Riders International (FDRI), established in 1980 and headquartered in Belgium is also devoting attention to establishing credibility in the field of EAAT. Their mission, as follows, is also research oriented (FDRI, 2010):

Our mission is to facilitate the worldwide collaboration between organizations and individuals whose objectives are philanthropic, scientific and educational in the field of equine assisted activities.

In addition to resource-filled newsletters, The FDRI publishes an annual journal entitled, The Scientific and Education Journal of Therapeutic Riding, and every three years they sponsor The International Congress of Therapeutic Riding. A sampling of the type of studies that the FDRI provides as a resource include Forces created by the contact of a rider's back on the horse's back during hippotherapy (Dvorakova, Peham & Jamura, 2008); Therapeutic riding and symbols related to the horse (Freire & Bruna, 2008); and One horse power for success – the cooperation between equine assisted occupational therapy and speech language pathology (Ute, 2009).

The American Hippotherapy Association (AHA) also strives to validate equine therapy. They provide research grant money for PT/OT/SLP students, instructors or

clinicians to complete empirical research measuring outcomes related to hippotherapy. The AHA publishes the current evidence to support the credibility of hippotherapy. A sampling of their validating resources include the following studies: Effects of hippotherapy on postural stability, in persons with multiple sclerosis: a pilot study (Silkwood-Sherer & Warmbier, 2007); An exploration of German and British physiotherapists' views on the effects of hippotherapy and their measurement (Debuse, Chandler & Gibb, 2005); and Evaluation of hippotherapy: A single-subject experimental design study replicated in eleven patients with multiple sclerosis (Hammer et al., 2005).

The North American for the Handicapped Association (NARHA), the oldest--and the most influential--organization in the American EAAT movement, is also involved in providing credibility through evidence. Besides offering annual regional and national conventions, NARHA has four publications which spotlight the latest in EAAT developments and research (NARHA, 2010).

The employability of EAAT graduates. Empirical studies do not exist about the employability of EAAT graduates. Therefore, it is necessary to rely on reflective and deductive reasoning to construct a reality about EAAT employability (Shapiro, 2008).

Types of EAAT jobs. Prior to discussing employability, the actual jobs in the EAAT job market should be identified. Positions in the EAAT field typically include volunteer helpers and handlers (30,000 in just NARHA centers), instructors, directors, and therapists (NARHA, 2010). Many of these positions are crossover positions, especially in newer centers. Based on my research findings (Mullen survey, EP

interviews & EU interviews, 2010), college students participate in an EAAT class, emphasis, minor, or major with one or more of the following employment goals in mind:

- To become an EAAT instructor
- To become an EAAT director
- To become an EAAT director/instructor
- To found an EAAT center
- To enhance skills set and range of employability with a traditional equine degree
- To enhance skills set and range of employability with a business degree,
 education degree, special education degree, or any other degree
- To use EAAT as a treatment strategy with a therapist degree

Ethical considerations. Several (5/31) of my research participants revealed concern about the employability of graduates in the EAAT field. Concerns were specifically related to low salaries, the availability of EAAT jobs, and the locations of available jobs (Mullen survey, EP interview & EU interview, 2010). This presented a moral dilemma in my project study, as I pursued the proposal of a program in a field that is relatively new with limited empirical evidence of validity (Fine, 2006). Students who pay for an education have expectations of employability, and this should be a primary objective of higher education, according to Pathak (2010). He suggests that higher education should value the development of a finished product (the student) that fits into the labor market, enhancing the student's ability to get the best possible return on investment in the least possible time and cost (p. 168). Per constructivism and systems thinking, the best interest of all stakeholders should be taken into consideration when

addressing change (Marlowe & Page, 2005; Trochim, et al., 2006). This awareness is consistent with the institutional goal of providing a student-centered education at my workplace (WWU, 2010). A student-centered focus would require curricular changes to be in the students' best interest, conducive to gainful employment.

Even though my research problem involved finding an intervention to solve a fiscal problem, the employability of qualified graduates was an ever-present concern that guided my proposal. Following constructivist leadership principles, I needed to facilitate the development of a purpose for which all stakeholders could subscribe in their actions (Shapiro, 2008, p. 183). The ethical responsibility of establishing an honorable purpose (prepared, employable students) influenced the planning, preparation, and presentation of my proposal for EAAT expansion. This route is consistent with the concept of moral reasoning in value-added leadership, which recognizes that our values guide our actions (Sergiovanni, 2005, p. x).

Employability factors. It is important to understand that employability is not solely contingent on the number of available EAAT jobs. According to Bernston (2006), the job market is the external part of employability, and human capital factors as well as labor market factors help to predict employability. Human capital factors, described by McQuaid (2005), are individual characteristics (e.g., social skills, reliability, diligence, motivation, confidence, problem-solving skills, literacy, qualifications, education, work experience, and personal circumstances). The following external employability factors are identified by McQuaid (2005): the level of local and regional demand; salary schedules; opportunities for progression; availability of entry level positions; level of

competition for the jobs; required skill levels; and location of vacancies (p. 206). In my proposal, when addressing the employability of EAAT graduates, attention needed to be focused on factors that higher learning has the ability to influence (personal growth, qualifications, and education). Ethically, however, external factors (level of local and regional demand; level of competition for jobs; required skill levels) cannot be overlooked.

In regards to external employability factors, it is important to acknowledge that there are nearly 800 NARHA centers and 3, 500 NARHA certified instructors in the United States (NARHA, 2010). Hypothetically, to reconcile this disproportion, each center would need to untypically employ at least four instructors. The organizations EAGALA (specializing in mental health therapy) and AHA (specializing in physical, occupational, and speech/language therapy) also certify instructors, adding to the pool of those who might be seeking employment. In regards to the balance of supply and demand, it should be noted that EAAT employment options beyond NARHA centers, include self-employment, or work in private programs, public programs, hospitals, and higher education. It is notable that 42,000 clients with disabilities or disadvantages are being served annually at just NARHA centers alone (NARHA, 2010). Many of these centers have client waiting lists (Mullen Survey & EP interviews). This could indicate the need for more centers or expanded centers, which equates with an increase in job market demand.

With the surging interest in EAAT in the past two decades, the supply side of employment currently appears to be out of balance with the demand side. Some

employers may attempt to get entry level workers at the lowest possible salaries (Chestnut College in Mullen EP interview, 2010). College graduates with an EAAT emphasis may need to view their education as a means of what Houston (2005) describes as 'bumping up' (moving up the layers of employment through capital investment in their qualifications and education) or 'bumping down' through the layers into jobs for which they are overqualified. Houston shares how this effect impacts the overall job market and those who are less skilled:

The concentration of overqualified labor in lower-skilled jobs means those in the lowest group have nowhere to 'bump down' to. Thus, the imbalance between labor demand and supply in all occupations impacts most on bottom of the labor market and accounts for the concentration of unemployment among the unskilled (232).

In consideration of the internal or external employability factors that McQuaid (2005) described, college graduates with an EAAT emphasis might be at least able to 'bump down' to entry level jobs at lower salaries. It is likely, however, that college graduates would rather secure a "good job" which is characterized by security, reasonable pay, reasonable work conditions, and the prospect of advancement, versus a "bad job" which is characterized by insecurity, poor pay and conditions and limited opportunities (Houston, 2005, p. 232). The range between good and bad jobs is broad (Houston, 2005). Individual job seekers must personally decide what a "good job" entails. For example, college graduates, with an EAAT emphasis, may value an entry level position because fulfilling their passion has priority over salary; or it is a

steppingstone opportunity to prepare for self-employment; or it is a renowned employer that can provide enriched learning experience. Again, every individual must determine if a college education with an EAAT emphasis will provide a substantial return on their investment; but the reality is "the returns to human capital investment and/or years of work experience are greater to some workers than others" (Houston, 2005).

In my proposal, the added value of a college degree with an EAAT emphasis needs to be addressed. It may not be as simple as citing the facts that a bachelor's degree is commonly viewed as time well spent; that pursuing a higher education improves the likelihood of financial success; and that the EAAT- related degree could attract some employers who use the 4-year degree as a screening device for hiring and promotion (Arney, 2006, p. 185).

EAAT finances. My research identified that the number one obstacle for EAAT expansion is the alleviation of the administration's concern over finances (Mullen, Survey, EP interviews & EU interviews, 2010). Higher education institutions, according to Pathak (2010), are under intense pressure to create a valuable education with scarce funds (p. 166). This pressure was evident when my university president made a mandate to the division chairs to become more cost-efficient (Fessler, personal communication, 2009), and when I was later asked to consider new and innovative programs (e.g., veterinarian tech program), which might have potential to expand the traditional equine program (McCarthy, personal communication, 2009). These challenges are consistent with Pathak's (2010) perspective on higher learning,

Market expansion and a diverse set of customers have propelled the institutions towards active brand building and differentiation. The transformation of institutions of higher learning into competitive enterprises is underway (p. 166). Martinez (2006) explains, "policy makers will use the term *efficiency* when they speak of generating savings, encouraging lower program costs, and making the best use of state resources" (p. 314).

A study in which a state legislature passed a resolution calling on higher education to be more cost-efficient was cited by Martinez (2006). He shared that the schools did not receive a cut in their budgets, but they were encouraged to form a unified approach to achieve savings through strategies such as cutting low enrollment programs, consolidating resources, and changing business practices (p. 13). Similarly, my project, a proposal to expand EAAT at WWU, was also based on a goal of not making budget cuts. My project heavily focused on two strategies, a) the sharing of existing resources, and b) securing supplemental income through increased enrollment; providing EAAT services; fundraising; donation; and grants.

Funding Formulas. Three categories of funding formulas for higher learning institutions were identified by Mullin and Honeyman (2007) which include, a) no formula funding (no common calculation method), b) responsive funding (enrollment count factored with base cost of education), and c) functional component funding (responsive funding plus component funding for special programs and services). At WWU, a private institution, no formula funding is the protocol, which has its benefits and its drawbacks, according to Mullin and Honeyman (2007):

Institutions benefit in that individual institutional needs that reflect unique missions can be emphasized in funding negotiations. Drawbacks may include the possibility that informal allocations could be influenced by political considerations rather than institutional need; a lack of transparency in the process to allocate funds; and the limited ability colleges may have to plan for the future. Funding formulas can emerge in an organic manner, changing in the wake of economic, technological, and political developments, according to Mullin and Honeyman (2007, p. 125).

Using this emerging process, my proposal was based on the following simple formula for funding an EAAT program at WWU:

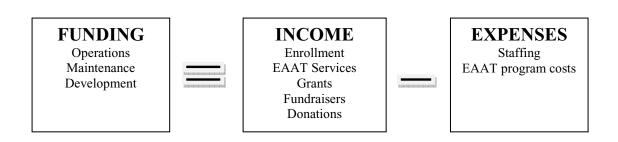


Figure 14. Funding formula for proposed EAAT program.

The basic premise of this formula is that income minus expenses will dictate the amount of available funds for program operation, maintenance, and development. The formula results in a self-balancing budget. This is consistent with the systems thinking concept of a reinforcing loop in a system, such as a budget (Senge, 2006). Although 3/7 of my

expert panel interviewees had combined EAAT program and traditional program budgets, I recommended in my proposal that the budgets be kept separate for accuracy in future assessment of the EAAT program (Mullen, EP interviews, 2010).

Efficiency through the sharing of resources. The impressive entrepreneurial skill of combining existing resources with innovative ideas in order to create a valuable product is touted by Henderson (2010, p. 23). In 2006, Martinez explained how a state challenged its institutions to set goals to maximize the use of existing state resources. Congruent with my project goals, the institutional goals included increasing enrollment, generating external funds, and increasing collaboration among and within institutions. The goal of increased collaboration was met with the most success (p. 299). Collaborations included the sharing of resources or faculty as determined by discipline councils (interdisciplinary representatives). This is common practice for institutions with an EAAT program and a traditional equine program to share classrooms, faculty, staff, horses, facilities, utilities, equipment, and interdisciplinary courses (Mullen Survey, 2010).

One of my expert panel interviewees was in the process of pursuing a tri-college articulation to share the EAAT program at Appaloosa University (Mullen, EP interview, 2010) for the very same reasons Martinez (2006) espouses in the following statement:

Interinstitutional programs have been developed in certain areas where it is clear that one institution cannot maintain a program on its own, but where the demand from multiple institutions signals that the program should continue. Institutions

have also shared facilities to offer courses that draw on the strengths of different universities (p. 310).

Securing supplemental income. In a 48 state study, Mullin and Honeyman (2007) investigated funding formulas for higher education. Student enrollment was identified as a dominant factor in most funding formulas. Enrollment has a significant impact on finances (p. 115). In my proposal to expand EAAT at WWU, enrollment growth is to be a major selling point. For the past three years, the WWU Survey of Therapeutic Riding class, which is offered every semester, maintained an enrollment average of 10 students (Mullen, unpublished document, 2010). Some institutions have a policy for minimum enrollment such as a 7/10 rule, which stipulates that the institution would not fund graduate classes with fewer than 7 students or undergraduate classes with fewer than 10 students. These numbers are considered the points at which the class becomes financially unfeasible (Martinez, 2006). At WWU, any class that has fewer than six students may be held, but the salary is reduced to a tutorial level (WWU Salary Schedule, 2010).

The majority of my Expert Panel institutions offered EAAT services to those in their community with disadvantages or disabilities. The services did generate some income, but in every case the fees were below those of competitive independent EAAT centers. Some institutions were more concerned about having a learning laboratory for their students and an inviting connection with the local community Mullen, Expert Panel interviews, 2010).

The traditional emphasis on quality standards for enrolling students, hiring faculty, and teaching methods is being replaced by emphasis on student enrollment

numbers, the ability to secure grants, and customer satisfaction ratings, observes Pathak (2010, p. 168). In my survey, 31% of the institutions relied on grants to supplement their EAAT program budget, 23 % relied on donations, and fewer relied on fundraisers (Mullen, survey, 2010). If more funds were needed, however, to operate my proposed EAAT expansion at WWU, I suggested capitalizing on grants, donations, and fundraisers. Animal-assisted interventions, with the unequivocally positive media attention it receives (Fine, 2006), is a field that tends to be highly supported by the rich and famous, as well as those who are touched by the social justice aspect of the human-animal bond phenomena. This movement that affects people at a deep emotional level is conducive to the raising funds through fundraisers, grants, or donations.

When visiting EAAT center websites, it is not uncommon to find revenue earning achievements, innovative fundraising ideas, and, of course, a PayPal donation link. Citing a few fundraising success stories can provide an idea of the support that is possible. Shepherd Meadows Therapeutic Riding Center in CT recently received a \$120,000. grant from the state to improve their facilities (Strides, 2010). Through fundraising efforts, Texas Tech University just started construction on the first phase of building a new EAAT teaching and research facility (Strides, 2010). In California, Ride Your Horse Therapeutic Riding Program, only a few years old, is near completion of an expansive indoor arena, purchased through donations (Rideyourhorse.com, 2010). One institution in my survey, Chestnut College, started its EAAT program and thereby drove up enrollment in their traditional equine program through a substantial FIPSE grant (Mullen survey, 2010). Not an average EAAT center, the 30 year old nationally-acclaimed Shea Center in

Orange County, CA built a 4.5 million dollar EAAT center in 2006, and they recently secured another 1.8 million dollars to build an educational complex. All of this was accomplished through donations, grants, and fundraisers. A recent, one night, fundraising event earned them \$440,000. (Sheacenter.org, 2010). These examples validate Martinez's (2006) viewpoint on external funding, "external funding can improve educational experiences for students and contribute to capital improvements" (317).

Implementation of the Project

For my proposal to be well-received, it was important to focus on the development and presentation preparations. Mallon (2006) warns that new proposals are seldom enthusiastically greeted by an organization's administration, especially with the interplay of politics and power at various individual, interoganizational, intraorganizational, and societal levels (p. 152). Constructivist leadership recognizes these factors, and works diligently to unite these forces with a common purpose leading to a sense of "collective ownership" (Patton, Wesley & Zimmerman, 2006).

When I began my research, I had a grandiose vision as to how the EAAT program could be expanded at WWU. I assumed my proposal would be the recommendation of an EAAT major and the development of an operating EAAT center on campus. After triangulation of my mixed methods data, I learned that a major in EAAT is a rarity, and institutions with majors have well-established, long-running programs. In addition to that fact, the lack of empirical evidence about the employability of graduates has me concerned. Through the construction of my understanding of EAAT in higher learning, I subscribed to the approach of starting small, and following the concept of an "emerging

curriculum," as described by Shapiro (2008). An "emerging curriculum" is one that develops from the students' needs and interests (p. 11). My proposal, therefore, recommended that the EAAT expansion start at a low level with minimal need for capital investment. Then, if student interest (i.e., increased enrollment) and student needs (i.e., employment) were met, the curriculum and the program could emerge and grow at a manageable pace. In reference to starting an animal-assisted venture, Mallon (2006) believes, "starting small is a good maxim." Haug (2010) recommended that when adding an innovative e-learning library program to an existing traditional library program it should be started part-time to minimize the stress on the current faculty so they do not lose confidence in the concept and productivity with their regular responsibilities. Garvin (2008) also alludes to the strategy of a gradual transition for program growth, based on a stages-of-change strategy. My proposal for expansion of the EAAT program attempted to provide a clear picture of how the program could develop over time, giving an exciting glimpse of what the future could hold.

Needed resources, existing supports, and potential barriers. My proposal for expanding the EAAT concentration at WWU was multi-optioned. Following are the needed resources for Option One (an EAAT program/center which provides community lessons on the main campus):

- Sharing of 3 4 beginning-level school horses
- Sharing of 3 4 full sets of horse tack
- Sharing of one small arena
- One NARHA certified part-time adjunct

 Additional stipend for the adjunct, or someone else, to serve as program coordinator

The support for these needs could be provided by the sharing of existing traditional equine program resources. Per my expert panel interviews, 100% of the WWU equine faculty members are in support of this on-campus option, especially if one of the small arenas could be eventually upgraded (through donations or fundraisers) to a covered arena for use by both programs. The NARHA certified adjunct is already teaching in the existing EAAT course at WWU.

Potential barriers to this option include the scheduling of arenas and horses, and the typical problems that might be encountered in sharing (e.g., miscommunications, and differences in training methods). The salary stipend for the adjunct would need to be covered through enrollment, EAAT services, and possibly grants.

Following are the needed resources for Option Two (an EAAT program/center that provides community lessons off campus):

- Sharing of the university's off-campus equine facility
- Donation or purchase of 3 4 beginning-level school horses
- Donation or purchase of 3 4 full sets of horse tack
- Conditioning of the arena footing
- One NARHA certified, part-time adjunct
- Additional stipend for the adjunct, or someone else, to serve as the program coordinator
- Conversion of restroom to ADA standards.

The off-campus equine annex could be shared between the EAAT program and the traditional equine program; however, because this option is off campus, horses and tack cannot be shared. The financial support for this option would need to be secured through institutional develop funding and/or fundraising, donations, and grants.

The potential barriers include the extra time and effort, beyond program coordinating, to secure the funding. The students would not be able to conveniently walk to the facility, which is ½ mile away. They could drive themselves or carpool. Another barrier is the needed conversion of the current restroom into an ADA accessible restroom.

Following are the resources needed for Option Three (collaborating with an offcampus independent center) include the following:

- Transportation (individual cars, university shuttle, or carpooling) to the site which is 30 minutes from campus
- A collaboration agreement with the center

Support for this option would depend on the willingness of the independent center to form collaboration for students to do their practicum experience and practice teaching at the center. This option might involve a cost to the university. In my interviews, I learned that Buckskin University paid an independent EAAT center for the cost of supervising their students, whereas Appaloosa University did not (Mullen, EP interviews, 2010). The needed financial support for this option should, however, be minimal, which could appeal to the administration.

The potential barriers to this option are related to the distance from campus. This option could result in time conflicts with the student schedules; limited daily involvement

by students; less interest for enrollment; the inability to serve the immediate local community; the loss of opportunity to incorporate interdisciplinary courses and service learning; and fewer donation possibilities which could also benefit the traditional equine program.

Proposal for implementation. My project, the proposal to expand EAAT at WWU, was presented in written form to the university's academic dean. Since I am no longer employed at William Woods University, the dean will determine the route of the proposal. I provided recommendations to the dean for the implementation process and time table, based on a constructivist leadership approach. It is important that key stakeholders are involved in the decision making, planning, and implementation of a program, in order to establish trust and support (Shapiro, 2008). Following were my recommendations, in chronological order, for the proposal process:

Step one: I present the written proposal to the academic dean.

Step two: The academic dean will review the proposal and decide whether or not to send it to the university president and the CFO to initiate their interest and support.

Step three: A week later, the academic dean will meet with the university president and the CFO to discuss the different options and determine if, and what, steps will follow.

Step four: In respect to the primary end-users, the equine division faculty, it is recommended that the academic dean immediately set a meeting with the equestrian division chair to discuss the administration's interest in expanding the EAAT program (which could include an EAAT minor), and offer the opportunity for the chair to express concerns and share ideas and suggestions.

Step five: The equestrian division chair sets a division meeting to discuss the EAAT expansion with the end-users, garnering suggestions, ideas, and concerns.

Step six: The equestrian division chair sets a meeting with the academic dean to discuss the division's input.

Step seven: The academic dean will meet with the division chairs in an upcoming Academic Council meeting to share the administration's interest, and gain their perspectives on integrating EAAT into different divisions, relative to curriculum and the establishing of an EAAT minor (if the administration chooses this option). The meeting should include the determination of the next few steps to take, and the deadlines to accomplish them. A target program starting date should be set.

Step eight: The dean and the equestrian division chair meet to finalize, in writing, the curricular content of an EAAT minor (if this option was selected by the administration), and the additional job description duties of the EAAT adjunct who will be overseeing the EAAT program.

Step nine: If an EAAT minor is selected as a component of the EAAT expansion, the dean and the division chairs, in one of the weekly Academic Council meetings, review the final proposal of the EAAT minor and make the recommendation to send it to the WWU curriculum committee for final approval.

Step ten: The academic dean puts into writing the finalized details of the adjunct job description and then meets with the CFO to determine an adjunct stipend for coordinating the EAAT program expansion.

Step eleven: The academic dean and the equestrian division chair meet with the adjunct to discuss the duties involved in the contract, and the starting date of stipend responsibilities.

Step twelve: The adjunct (EAAT program coordinator), in corroboration with the equestrian division chair, starts working on the details of program implementation which include the duties in the job description (see table 13).

Step thirteen: The program coordinator and the equestrian division chair should immediately hold a meeting with the university's marketing, admissions, and advancement directors to discuss ways that their departments can market the program and seek publicity, grants, and donations.

Roles and responsibilities. As stated in the steps to implementation, the academic dean and the equestrian division chair hold key roles in getting the proposal approved and ready for implementation. An EAAT adjunct, or a select faculty member, or graduate assistant could assume the role of EAAT program coordinator. The role of the EAAT program coordinator should include at least the following duties:

Under the direct supervision of the equestrian division chair, the EAAT program coordinator will oversee the development and planning of the EAAT program/center; hire and supervise student workers; seek NARHA premiere Accredited Center (PAC) status for the EAAT program/center; seek NARHA Higher Education membership; seek NARHA instructor certification for students; coordinate horse and tack scheduling and care with instructors; work with the stable manager on developing and maintaining adequate EAAT facilities and equipment; serve as advisor of EAAT students; coordinate fundraisers; design and supervise an EAAT center website through the university tech division; work with the directors from marketing, admissions, and advancement to involve them in seeking publicity, donations, and grants; work with community organizations to establish clientele; supervise student teachers during community lessons; maintain EAAT records for community services; maintain the financial records and EAAT budget; and oversee program assessment.

Project Evaluation

The evaluation of my project, the proposal for an expanded EAAT program, would likely not take place until the EAAT program was operating for at least one semester. Program "growing pains" are to be expected, and it takes a reasonable amount of time to get a new program smoothly running. The goal-based assessment could take place as early as the end of the first semester.

As stated earlier, the EAAT proposal has the following three primary goals:

1. The financial goal is a solution for the budgetary conflict

- a. Without making negative cutbacks in the existing equine program,
- b. Without raising student fees, and
- c. By capitalizing on existing division resources, with minimal imposition.
- 2. The student goal is an enriched learning experience for the students
 - a. Through experiential, practicum learning,
 - b. Through service learning,
 - c. Through entrepreneurial learning, and
 - d. Through interdisciplinary collaborations.
- 3. The social justice goal is to provide EAAT services to those in the local community with disadvantages or disabilities.

These three goals can serve as an outline for evaluation by the equestrian division chair, along with the detailed EAAT program coordinator's job description which expands upon these goals. At that time, assessment should involve analysis of the financial records for the enterprise component (the EAAT center, which provides services to the community). The EAAT program financial report should also be included in the evaluation. "Success is defined by the ability of entrepreneurs to continually convert ideas into market profits," according to Henderson and Weiler (2010). Also, at that point in time, a recruitment report from the Office of Admissions can provide insight into the projected enrollment growth for the program.

At WWU, Students assess each course, every semester, using a well-managed institutional survey. This serves as a means of assessing the quality of teaching, and it

sheds light on program quality. Close-ended questions constitute the bulk of the survey, but a few open-ended questions offer revealing insights into the effectiveness of a program from the key stakeholder, the student.

Annually, at WWU, as part of the institution's strong assessment program, each division completes a program assessment which aligns course objectives, program objectives, and institutional objections. It would be the responsibility of the equestrian division chair to include the EAAT component in the assessment, which identifies strengths and weaknesses, and makes recommendations for improvements in the following year.

A long-term summative evaluation could include the assessment of graduates over time. Statistics (e.g., job duties, income & location) should be maintained on the types of EAAT jobs students get upon graduation, and the types of jobs they are in a few years later.

Implications Including Social Change

If my proposal to expand EAAT at WWU is adopted, the implications would be widespread throughout the institution and the local community. Within the university, students will have the opportunity for a specialized equestrian education that could help to satisfy their passion for a vocation in a purposeful and rewarding field. Their education could be enriched through service learning, entrepreneurial learning, and experiential learning, all of which are prominent elements of an EAAT education.

The university would have the opportunity to fill the budgetary gap for providing a quality equestrian education. The potential for expanded marketing appeal can lead to

an increased student enrollment. Through an EAAT minor founded on interdisciplinary collaboration, the added enrollment could boost university income and help to fill seats in some of the smaller non-equine courses (e.g., grant writing, human anatomy and physiology, special education, and entrepreneurship). Also, the traditional equine program and the EAAT program could dually benefit from resources secured through the donations, grants, and fundraisers that are commonplace in this field that tugs at the heartstrings of givers (Fine, 2006).

Besides enriched student learning in a specialized field, and a solution to the equestrian division budgetary gap, those in the local community with disadvantages and disabilities will be served through an operating EAAT center, an entrepreneurial enterprise. They will have the opportunity to experience the world of horses, just as ablebodied people do – social justice in action. Mental (emotional and educational) and physical benefits can be derived from the human-animal connection (Kachelmeier, 2008).

Conclusion

In this section, I introduced my project, a multi-option proposal to expand the EAAT program at WWU. I explained how the project was prompted by a problem that was presented when the administration requested that division chairs become more cost-efficient and innovative in program development. My three primary goals for the project (the EAAT program expansion proposal) were related to finances, enriched student learning, and social justice to those with disadvantages and disabilities. The literature review addressed these goals through the investigation of potential relationships with EAAT organizations; EAAT terminology/identity issues; EAAT credibility as a

profession; employability in the EAAT field; and financial matters. Then, I identified the needed resources and the logistics, steps, and timetable for the implementation of the project. Various assessment procedures were discussed which included short-term and long-term methods.

Upon completing this section, I was filled with mixed thoughts and emotions regarding my research and project. In the following section, I discuss my project's strengths and limitations; recommendations for improvement; what I learned about scholarship, leadership, and my inner self; the importance and application of my work; and how my project study can be developed in future research.

Section 4: Reflections and Conclusions

Introduction

My project is the end-result of nearly four years of study at Walden University. In that time, I reconstructed many of my perspectives on education and leadership. I learned a great deal about myself as a scholarly practitioner and as a person. Following, I reflect on this educational journey and acknowledge project strengths and limitations. I share the knowledge I acquired about scholarship, leadership, and project development, and I examine the quality of my practice in these areas. I discuss how my project relates to social justice and has application in other settings. I conclude with recommendations for expansion on my project.

Project Strengths

I was pleased with aspects of my project, which could be considered strong points. The project, a multi-option proposal for the expansion of EAAT at William Woods University (WWU), carefully and concisely addressed the problem of finding an intervention to fill the budgetary gap in providing a quality equestrian education. Major points were supported with research evidence to give credibility to the proposal. The proposal was saturated with the overarching theories of constructivism and systems thinking. All stakeholders were considered in the proposal, and the implementation stages were threaded with suggestions for discussion and shared decision-making.

Careful attention was given to the order of the content in the proposal, in an effort to assist the reader in constructing a positive outlook and a complete understanding.

Concerns about EAAT that were discovered in my research, were addressed in the proposal to quench any misconceptions about EAAT credibility and employment.

The goals for solving the problem were stated in the proposal. The proposal content supported those goals and it recommended options for EAAT expansion that were not costly or demanding on end-users. The problem of finding an intervention for the financial gap in the equestrian studies program was directly addressed with opportunities to secure additional revenue through increased enrollment; services for those in the community with disabilities; grants; donations; and fundraisers.

Perhaps the greatest strength of the proposal is that it has benefits beyond financial gain. It incorporates enriched student experience through experiential learning, entrepreneurial learning, and service learning. The interdisciplinary collaboration benefits all stakeholders. Lastly, and most importantly, the proposal involves the development of an EAAT center which provides services to those in the local community with disadvantages or disabilities.

Recommendations for Remediation of Limitations

Some of the weaknesses in the project were related to unexpected circumstances. I intended to have my doctoral studies completed before I resigned as equestrian studies division chair at WWU. I left in June, prior to IRB approval to collect data, so I was unable to conduct end-user interviews in person. I ended up changing them to phone interviews. When the time came to interview the end-user groups, they were in their first week of the new school year -- an extremely hectic time. Then, I altered the phone interviews to include the option of e-mail interviews to accommodate the end-users, in

hopes of getting a good participation rate. Unfortunately, even with a second invitation, end-user group II only had a 2/7 participation response. Although these circumstances were unexpected, I should have been more proactive in educating the end-user group II, in advance, about the importance of the study. Their input would have strengthened the credibility of my suggestions for the EAAT minor.

The fact that I moved 1,700 miles from WWU prohibited me from presenting the proposal in person. I had to resort to a presentation in written format, which eliminated the ability to answer questions and manipulate the course and tone of the presentation. A solution to this problem would have been to fly in for a personal presentation.

Another weakness in my project was the lack of empirical evidence regarding the employability of EAAT graduates. My proposal promoted a program that has minimal proof of the job market demand. I had to use deductive reasoning to address this concern.

More evidence-based studies are needed in this area.

Scholarship

In my first Walden course, I was impressed with the immediate emphasis on scholarly writing. This included the challenge of using the APA Style manual. Within a few months, I became less dependent on the manual. Rubrics for assessment of my writing soon became replaced by mental rubrics that guided me in my doctoral program and in my workplace. This mental gauge now encourages me to be much more concise and organized in my writing. I find myself analyzing every single word to determine its accuracy and worth. In addition to this attention to detail, I learned to not overlook the value of proofing my work multiple times and in separate sittings.

It was not until later in my studies that I realized the full importance of primary sources garnered from scholarly, peer-reviewed journals and sound academic journals and texts. The use of various data bases and libraries soon became common practice in my studies; however, my "moral compass" was continuously tested in regards to sources and referencing. I learned to discipline myself to avoid short-cuts and compromises, because in my courses I was exposed to the connection between ethics and scholarship. Carelessness, laziness, and dishonesty have no place in the life of a scholar.

Throughout my entire project study, I was challenged to base my work on a theoretical foundation. I discovered how overarching theories can permeate research methods, analysis, and a project. I was pleasantly surprised that the theories served as a guide, providing direction and focus in my studies. The theories became more meaningful to me as I aligned them with every aspect of my project study.

Due to my limited research experience, the methodology portion of my study provided me with significant scholarship challenges. I was puzzled about the direction of my study, until late in my coursework. After I determined my research problem, I was pleased with how all of my Walden courses contributed to the development of my mixed-method research design. During my data collection and analysis, I realized the importance of effective communication with participants; the ethical treatment of participants; accurate record keeping; triangulation and the constant comparative method (Creswell, 2007); member-checking; and the creation of reader-friendly tables and charts.

Project Development and Evaluation

I learned that a thorough literature review is of prime importance. Empirical evidence not only lends itself to credibility, it provides substantial material about which to write. My vision for the project was further developed in the section one literature review. I discovered how the overarching theories pertained to the various aspects of my research design and my project. After the data collection, and throughout the analysis phase, it was important to conduct an entirely new literature review to provide missing information and further develop the project. These two literature reviews enabled me to exhaust the available literature on the topic of EAAT as it pertained to my project. I quickly learned that literature review should be an ongoing process throughout the research project study. Regularly scheduled time blocks allow for enough "quality time" to properly address the problem.

The constant comparative method of data analysis (Creswell, 2007) was useful in developing my project. It helped to maintain a constant awareness of, a) my overarching theories, b) my research problem and guiding research questions, c) the goals of my proposal, and d) the anticipated perspectives of the audience to whom I would present the proposal.

Based on the constructivist and systems thinking theories, I recommended various assessment methods for my project, with input coming from multiple stakeholders. The instruments included a student survey; a division chair evaluation aligned with program goals and coordinator duties; an evaluation of EAAT financial

records; and assessment of graduate employment. The diverse forms of assessment can help to provide the institution with a credible review of the EAAT program.

Leadership and Change

Systems thinking encouraged me to view an educational institution as a whole unit, an "organism" that is made up individual components that interplay to establish equilibrium. My project (the EAAT proposal) was developed in consideration of the whole unit (EAAT and the higher learning institution), as I attempted to balance out the conflicting backgrounds, values, and beliefs of all the stakeholders. This diversity in the stakeholders contributed to healthy discussion and informed decision-making based on the constructivist concept of "collective intelligence" (Sergiovanni, 2005). Effective constructivist leadership is shared, redistributed, collegial, enabling, entrusting, empowering, and not heavily dependent on a particular person or position (Murphy, 2005). It involves active problem solving and "sense building" through the pooling of human resources and the fostering of collegial values, leading to shared purposes of the school (Sergiovanni, 2005). Patton, Wesley, and Zimmerman (2006) explain how these collaborative efforts lead to a wonderful sense of "collective ownership," and the

Per Greyling's (2008) recommendation, I mustered the courage to adopt a questioning attitude in the workplace, thereby fostering stakeholders to become open to new experiences, new constructions of meaning by engaging in a reciprocal relationship that involves the pursuit of critical reflection, innovation, and transformative learning.

This type of leadership helps to grow a *learning community of practice*, as described by

Lunenburg and Ornstein (2004) and Senge (2006). Successful constructivist leadership, however, depends highly on the leader having the capacity to foster strong relationships through reciprocal trust and respect (Donaldson, 2006, p. 137). This premise is especially important when the decision maker is amidst a network of environmental influences that affect rational decision making, such as organizational life, internal and external politics, requirements for conflict resolution, power distribution, and limitations of human rationality. These leadership challenges were an integral part of this doctoral study, as it focused on the three diverse components that drive an equine program – administration, academic rigor, and equestrian knowledge.

Analysis of Self as Scholar

I have become more accurate and thorough when I research solutions for everyday problems in the workplace. I can readily find credible empirical evidence to support a problem, and correctly reference it. The process I follow for a literature review is now based on strategic scheduling and planning. My understanding of various theories and research methods has increased. I have developed a systematic approach for analyzing my research data and recording the information in a logical, organized manner. I can more clearly envision how the various components of research are interconnected. My acquired knowledge is now expressed through writing that is more concise, effective, and correct (per APA standards).

Through my Walden experience, I have developed a solid foundation for scholarly growth. I do, however, realize that my scholarly status is in need of much more development. This is especially true in regards to methodology and theoretical

framework. Quality literature review needs to become a regular part of my work life. The standards of excellence and integrity, which I followed in my doctoral studies, need to be continued in the workplace. This means that procrastinating, taking short-cuts, and compromising quality are habits that need to be excluded from my practice. I have good intention to address these issues, and I am enthusiastically looking forward to the journey of scholarly growth.

Analysis of Self as Practitioner

As I learned scholarly principles throughout the development of my project study, I applied them on a daily basis in my workplace. The constructivist and systems thinking theories followed me to division meetings, classrooms, and my office. I have become more aware of the feelings and perspectives of others, acknowledging the fact that diversity is a positive thing. I have become more courageous in my leadership, and I more readily involve stakeholders when addressing change. This practice has been conducive to trusting relationships and respected leadership, and it has allowed me to make decisions that are often well-received. Also, this awareness of diverse perspectives, feelings, values, and beliefs has been an immense help in settling conflicts. It allows the conflict to be settled through the careful construction of shared meaning.

I have some practitioner skills that come naturally. Temperament tests reveal that I have an administrative bent. I am highly organized, detail-minded, and time-efficient. I tend to see the whole picture when problems arise. These traits can be assets or liabilities, depending on how I implement them. Fortunately, my three and one-half years at

Walden have helped me to become more respectful of those who are not like me, and to realize that the dissimilarity can help me to grow as a practitioner.

I am desirous of doing things that are purposeful, because this life is short and we all have the opportunity to make a positive contribution to this planet. These attributes create added value to my role as a practitioner (Sergiovanni, 2005). I, however, must not lose sight of the fact that I need to be forever learning and growing as a person and as a practitioner.

Analysis of Self as Project Developer

My project study originated from the passion I have for creating and organizing ideas into meaningful outcomes (i.e. social justice). Once I focused on a social justice issue, the project development was a natural progression. I was able to identify a problem, create a research study, and organize a plan to develop the project.

Although the development followed a logical progression, I discovered that my lack of research experience complicated the process. I struggled with identifying my actual problem. With the guidance of my doctoral chair, I was able to sift through secondary problems and pinpoint the primary problem that would form my inquiry stance. I encountered a similar level of confusion when I sought to develop guiding research questions. Once the problem was identified and the guiding research questions were established, I had less difficulty in deciding if I would do a research study or a project study. The theoretical framework and the methodology evolved out of my decision to do a project study.

My methodology sequence involved extensive triangulation and the use of the constant comparative method. After my research data collection and analysis was complete, I incorporated many components of my project study into the actual project (a multi-option proposal for EAAT). The Walden design for a project study made this a smooth and logical process. I am confident that in the future I will be able to address projects with greater competency, using a similar design. I will, however, need to avoid my propensity to put projects into tight time frames, due to procrastination. This limits the time allowed for proper research, planning, and implementation.

The Project's Potential impact on Social Change

My project (proposal for EAAT) has the potential to provide WWU with an intervention to fill the budgetary gap for providing a quality equestrian education. The project was designed to address the budgetary gap without raising student fees, thus providing students with the opportunity for an affordable, specialized equestrian education to satisfy their passion for a vocation in a purposeful and rewarding field. Their education could be enriched through service learning, entrepreneurial learning, and experiential learning, all of which are prominent elements of an EAAT education.

Research identifies how EAAT programs are excellent mediums for service-learning and experiential learning, profoundly benefiting people with or without disabilities (Brouillette, 2006; Esbjorn, 2006; Foley, 2008; Graham, 2007; Hayden, 2005; Helm, 2009; Koch, 2008; Miller, Lamb & Downs, 2005; NARHA, 2009; Ridding, 2005; Russel-Martin, 2006; Schultz, Remick-Barlow & Robbins, 2006; Sole, 2006).

Besides enriched student learning in a specialized field, and a solution to the equestrian division budgetary gap, those in the local community with disadvantages and disabilities could be served through an operating university EAAT center, an entrepreneurial enterprise. They would have the opportunity to experience the world of horses, just as able-bodied people do---social justice in action. This use of equines in EAAT programs as valuable therapeutic tools for those with physical and mental disabilities is undisputable, according to the literature (Brouillette, 2006; Foley, 2008; Helm, 2009; Schultz, Remick-Barlow & Robbins, 2006; Trotter, 2008). Besides equine activities and therapy for common mental and physical disabilities, EAAT programs are experiencing treatment success with issues related to post-trauma, eating disorders, obsessive compulsive behavior, criminal rehabilitation, at-risk children, ineffective leadership, dysfunctional relationships, and a plethora of other disorders (Esbjorn, 2006; Graham, 2007; Hayden, 2005; Koch, 2008; NARHA, 2009; Ridding, 2005; Sole, 2006).

Implications, Applications, and Directions for Future Research

If the proposal to expand the EAAT program is accepted, it should help to fill the budgetary gap in the equestrian studies program. With the establishment of an EAAT center, students could have the opportunity for an enriched learning experience through experiential learning, entrepreneurial learning, and service learning. The entire institution could benefit from the interdisciplinary collaborations formed through the proposed EAAT minor. Community relations could be enhanced through the services provided to those with disabilities of disadvantages. Other institutions that want to start or expand an EAAT program could adapt the proposal for application in their organization.

To build upon my project, I recommend future research in the area of EAAT employment. Evidence is needed regarding the EAAT job market demand, salary ranges, job locations, preferred skills, and education. Another contribution could involve an expanded study of EAAT curriculum related to concentrations, minors, and majors.

Conclusion

My project strengths included the alignment of the constructivist and systems thinking theories and the involvement of all stakeholders throughout the development process. Limitations included my resignation as the WWU equestrian division chair and the poor timing of the data collection during the busy start of the academic school year.

Walden University's emphasis on scholarly research and writing helped me develop a firm foundation for future growth as a scholar. Through personal reflection, I identified my need to build on this foundation, especially in the areas of methodology. I recognized that project development requires an exhaustive, ongoing literature review, and project evaluation requires multiple means of assessment for a credible review.

I was able to put theories and principles of educational leadership into practice as I developed the project, and as I served as division chair in my workplace. I learned to view an educational institution as a system, a whole unit, seeking to establish equilibrium. Balance is complicated, but often enhanced, by the interplay of stakeholders with differing backgrounds, beliefs, values, and goals. I was rewarded with a newfound appreciation for the diversity of stakeholders and their ability to contribute to change.

As a project developer I had difficulty in filtering out secondary problems and pinpointing the primary problem. I also had difficulty in developing my guiding research

questions. Once these areas were confirmed, the progression of my project had a natural evolution. The constant comparative method was invaluable throughout development process.

I had the satisfaction of working on a project that could provide social justice for students who desire a unique, specialized equestrian education at an affordable price. The project was designed to enrich their education through experiential learning, service learning, and entrepreneurial learning. Social justice could extend to those in the local community with disadvantages and disabilities, providing them with the opportunity for equestrian activities that are typically only experienced by able-bodied people.

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Appendix A: The Project

A MULTI-OPTION PROPOSAL FOR THE EXPANSION OF THE EQUINE-ASSISTED ACTIVITIES AND THERAPY (EAAT) PROGRAM AT WILLIAM WOODS UNIVERSITY

GARY MULLEN

December, 2010

Introduction

This proposal is the product of my doctoral project study for my Ed.D. in Administration Leadership at Walden University. The title of my project study is, "Integrating Equine-Assisted Activities and Therapy (EAAT) into a Higher Learning Institution." Walden University encourages professionals to target their local workplace as the recipient of their research efforts. I, therefore, purposefully selected this project with the hopes that William Woods University would benefit from my studies. Later in this proposal, I will address issues that are likely to be a concern, including financial matters, the credibility of EAAT as a profession, and the employability of graduates.

The Problem

My research problem developed as a response to the university president's mandate for divisions to become more cost-efficient (Fessler, personal communication, 2009). This requirement was followed by a request to consider innovative programs (e.g., a veterinary technical program) that could be incorporated into the existing traditional equestrian studies program to attract more students (McCarthy, personal communication, 2009). As the equestrian studies division chair (at that time), I was thus presented with the problem of finding an innovative and cost-efficient way to fill the budgetary gap in providing a quality equestrian education at WWU. For an intervention in this fiscal dilemma, my research and project focused on the expansion of the Equine-Assisted Activities and Therapy (EAAT) program at WWU.

Proposal Overview

This multi-option proposal is for the expansion of the existing EAAT program at WWU. The extent of the current program is one course, Survey of Therapeutic Riding, which has been offered every semester since 2007, with an average enrollment of ten students. Service learning events associated with the class include the first Equestrian Special Olympics for the state of Missouri (in the spring of 2008); field trip visits from various Fulton treatment centers; occasional community riding lessons; and, the first WWU horse show with integrated classes for riders with disabilities (in the spring of 2010). The EAAT program is used as a successful recruiting tool by the Office of Admissions. It is marketed as an EAAT "concentration."

This proposal recommends the subtle expansion of the EAAT program to include an EAAT minor, and the opportunity for students to receive North American Riding for the Handicapped Association (NARHA) instructor certification through an EAAT center that serves the local community, on or off-campus. Options and logistics will be presented later in the proposal.

Proposal Goals

This proposal was designed with primary goals relating to finances, students, and social justice. Following are expanded elements of each goal:

- 4. The financial goal is a solution for the budgetary conflict,
 - a. Without making negative cutbacks in the existing equestrian program,
 - b. Without raising student fees, and

- c. By capitalizing on existing equestrian division resources, with minimal imposition.
- 5. The student goal is an enriched learning experience for the students
 - e. Through experiential, practicum learning,
 - f. Through service learning,
 - g. Through entrepreneurial learning, and
 - h. Through interdisciplinary collaboration.
- 6. The social justice goal is to provide EAAT services to those in the local community with disadvantages or disabilities.

Growth Strategy

When starting an EAAT center, Mallon (2006) recommends the maxim of "start small." This is consistent with Shapiro's (2008) explanation of an "emergent curriculum" that evolves based on student interest (i.e., enrollment in the program) and student need (i.e., gainful employment). Garvin (2008) also alludes to the strategy of a gradual transition for program growth, based on a stages-of-change strategy. By following this "start small" philosophy, time is allowed to see if enrollment does grow, and if students are securing quality EAAT jobs. Plus, this approach is less demanding on all stakeholders, and growth can naturally progress over time, as needs dictate.

Research Summary

The two guiding research questions for my mixed methods project study were as follows: (a) Among higher learning institutions, to what extent are internal and external resources used to integrate EAAT as an intervention to close the gap between income and

the budget needed for a quality equestrian studies program? and (b) How is an EAAT program compatible with the needs and capabilities of the institution, WWU? The quantitative component was in the form of a one-time survey to all identified U.S. higher learning institutions (37) that have an EAAT emphasis, minor, or major. The survey addressed the descriptive portion (ways and means) of the guiding research question. Research on how to align the survey data with the "needs and capabilities" of WWU was achieved using multi-faceted qualitative design involving five phone interviews involving experts (selected school administrators) and individual phone/e-mail interviews with two end-user groups (WWU equine division faculty and select WWU division chairs). After all the quantitative and qualitative information was compiled and analyzed, it was further refined into prototypes for various levels of EAAT involvement at WWU, and a written, multi-optioned proposal was developed. The draft was sent for member checking by the expert panel and end-user groups. After final review of all data, the multi-optioned proposal was refined and put into presentation format for consideration by the WWU administration. A full copy of the doctoral study can be viewed online at the Walden University Library (www.degrees4teachers.net).

Overview of Expansion Options

Three options for the expansion of the EAAT program at WWU are offered for consideration.

Expansion Option One:

 Provide on-campus lessons to those in the community who are disadvantaged or disabled

- Expand the EAAT concentration to a minor
- Seek NARHA Higher Education Membership to provide NARHA instructor certifications for WWU students

Expansion Option Two:

- Provide off-campus lessons to those in the community who are disadvantaged or disabled at the WWU equine annex
- Expand the EAAT concentration to a minor
- Seek NARHA Higher Education Membership to provide NARHA instructor certifications to WWU students

Expansion Option Three:

- Form a collaboration with an off-campus independent EAAT center (Cedar Creek TRP)
- Expand the EAAT concentration to a minor
- Seek NARHA Higher Education Membership to provide NARHA instructor certifications to WWU students

Option One Details

The Proposed Expansion

- Provide on-campus lessons to those in the community who are disadvantaged or disabled
- Expand the EAAT concentration to a minor
- Seek NARHA Higher Education Membership to provide NARHA instructor certifications for WWU students

Needed Resources

- Sharing of 3 4 beginning-level school horses
- Sharing of 3 4 full sets of horse tack
- Sharing of one small arena
- Additional stipend for the adjunct, or someone else, to serve as program coordinator

Benefits

- This is a cost-efficient option because t capitalizes on the sharing of existing traditional equine program resources. 74% of the 25 surveyed institutions share horses and arenas between their EAAT program and their traditional equine program.
- Per my end-user Interviews, 100% of the WWU equine faculty members are in support of this on-campus option, especially if one of the small arenas could be eventually upgraded (through donations or fundraisers) to a covered arena for use by both programs.
- The NARHA certified adjunct is already teaching the existing EAAT course at WWU.

Barriers

• It should be expected that there will be some conflict in the scheduling of arenas and horses, as well as the typical problems that might be encountered in sharing (e.g., miscommunications and differences in training methods).

Unless a more creative idea is devised, a salary stipend might be needed for the
adjunct, or faculty member, or graduate assistant, to assume the program
coordinator role (see job description of EAAT program coordinator).

Recommendations

- Based on my Expert Panel interviews, many of the institutions restricted
 community lessons to 2 days per week. Since WWU horses are ridden in
 traditional classes only 4 days per week, the scheduling could be developed
 around the classes, with Friday being a prime day for EAAT activities.
- I recommend that the proposed "EAAT Center" operate only on Fridays for the first year, during a 3-hour time slot. When I taught the Survey of Therapeutic Riding class, this was the time slot we successfully used. No traditional riding classes are held that day, and the human traffic is minimal, conducive to safety.
- The use of the small arena adjacent to the classrooms is my recommendation. It allows those with disabilities to safely arrive and prepare in a designated area. A future goal to benefit the EAAT program and the traditional program could involve an EAAT class sponsored fundraiser to put a roof on that arena.
- Expand the Survey of Therapeutic Riding course to four credit hours, and include a 3-hour lab on Friday. This will cover the adjuncts salary to supervise the community lessons during the lab. In 3 hours, using three horses, at least six community lessons could be offered.

- I recommend that a graduate assistant assume the program coordinator role, and work in conjunction with the NARHA certified adjunct and the equestrian studies division chair (see EAAT Program Coordinator job description).
- An EAAT minor could be a valuable marketing tool, since only 25% of the 27 schools in the nation offer an EAAT minor, and only 13% offer an EAAT major (Mullen, survey, 2010). For more details and potential course offerings, see the section entitled The EAAT Minor.
- If this option is approved, I recommend that the departments of marketing, university advancement, and admissions meet with the equestrian studies chair and the EAAT program coordinator to plan out a strategy to promote the fully functioning EAAT center and the EAAT minor. Also, a plan to raise funds to cover the small arena by the classrooms could be incorporated into the media attention that is likely to be received.

Option Two Details

The Proposed Expansion

- Provide off-campus lessons to those in the community who are disadvantaged or disabled at the WWU equine annex
- Expand the EAAT concentration to a minor
- Seek NARHA Higher Education Membership to provide NARHA instructor certifications to WWU students

Resources Needed

• Sharing of the university's off-campus equine facility

- Donation or purchase of 3-4 beginning-level school horses
- Donation or purchase of 3-4 full sets of horse tack
- Conditioning of the arena footing
- One NARHA certified, part-time adjunct
- Additional stipend for the adjunct, or someone else, to serve as the program coordinator
- Conversion of restroom to ADA standards.

Benefits

 The off-campus equine annex could be shared between the EAAT program and the traditional equine program.

Barriers

- Because this option is off campus, horses and tack cannot be shared. The
 financial support for this option would need to be secured through institutional
 develop funding and/or fundraising, donations, and grants.
- This will require extra time and effort, beyond program coordinating, to secure the funding.
- The students would not be able to conveniently walk to the facility, which is ½ mile away. They could drive themselves or carpool.
- Another barrier is the needed conversion of the current restroom into an ADA accessible restroom.

Recommendations

See the above recommendations in Option One. Most of them apply to this
option.

Option Three Details

Option Three Proposed Expansion

- Form a collaboration with an off-campus independent EAAT center (Cedar Creek TRP)
- Expand the EAAT concentration to a minor
- Seek NARHA Higher Education Membership to provide NARHA instructor certifications to WWU students

Resources Needed

- Transportation (individual cars, university shuttle, or carpooling) to the site which is 30 minutes from campus
- A collaboration agreement with the center

Benefits

• In my interviews, I learned that Buckskin University paid an independent EAAT center for the cost of supervising their students, whereas Appaloosa University did not (Mullen, EP interviews, 2010). The needed financial support for this option should, however, be minimal, which could appeal to the administration.

Barriers

- Support for this option would depend on the willingness of the independent center to form collaboration for students to do their practicum experience and practice teaching at the center.
- The distance from campus could result in time conflicts with the student schedules; limited daily involvement by students; less interest for enrollment; the inability to serve the immediate local community; the loss of opportunity to incorporate interdisciplinary courses and service learning; and fewer donation possibilities which could also benefit the traditional equine program.
- The independent center is accredited by NARHA, but it is not a NARHA
 Premiere Center (PAC). This means students cannot earn their NARHA instructor certification there, but they can complete all of the supervised teaching requirements and then take a one week NARHA workshop to complete the certification.

Recommendations

• See the recommendations in option one, most of which apply to this option.

EAAT Program Coordinator Job Description

The role of the EAAT program coordinator will include at least the following duties:

Under the direct supervision of the equestrian division chair, the EAAT program coordinator will oversee the development and planning of the EAAT program/center; hire and supervise student workers; seek NARHA premiere

Accredited Center (PAC) status for the EAAT program/center; seek NARHA

Higher Education membership; seek NARHA instructor certification for students; coordinate horse and tack scheduling and care with instructors; work with the stable manager on developing and maintaining adequate EAAT facilities and equipment; serve as advisor of EAAT students; coordinate fundraisers; design and supervise an EAAT center website through the university tech division; work with the directors from marketing, admissions, and advancement to involve them in seeking publicity, donations, and grants; work with community organizations to establish clientele; supervise student teachers during community lessons; maintain EAAT records for community services; maintain the financial records and EAAT budget; and oversee program assessment.

Financial Details

Higher education institutions, according to Pathak (2010), are under intense pressure to create a valuable education with scarce funds. Market expansion and a diverse set of customers have propelled the institutions towards active brand building and differentiation. The transformation of institutions of higher learning into competitive enterprises is underway (p. 166).

Martinez (2006) explains, "policy makers will use the term *efficiency* when they speak of generating savings, encouraging lower program costs, and making the best use of state resources" (p. 314). Similarly, my proposal to expand EAAT at WWU, is also based on a goal of not making budget cuts. My project heavily focuses on two strategies, a) the sharing of existing resources, and b) securing supplemental income through increased enrollment; providing EAAT services; fundraising; donation; and grants.

Funding Formula

Funding formulas can emerge in an organic manner, changing in the wake of economic, technological, and political developments, according to Mullin and Honeyman (2007). Using this emerging process, my proposal is based on the following simple formula for funding an EAAT program at WWU:

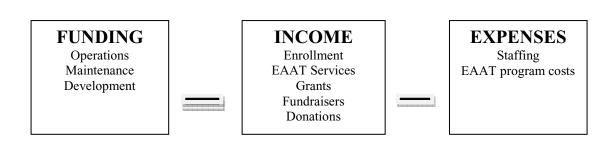


Figure 1. Funding formula for proposed EAAT program.

The basic premise of this formula is that income minus expenses will dictate the amount of available funds for program operation, maintenance, and development. The formula results in a self-balancing budget. This is consistent with the systems thinking concept of a reinforcing loop in a system, such as a budget (Senge, 2006). Although 3/7 of my expert panel interviewees had combined EAAT program and traditional program budgets, I propose that the budgets be kept separate for accuracy in future assessment of the EAAT program (Mullen, EP interviews, 2010).

Efficiency through the sharing of resources

The impressive entrepreneurial skill of combining existing resources with innovative ideas in order to create a valuable product is touted by Henderson (2010).

Collaborations include the sharing of resources or faculty. It is common practice for institutions with an EAAT program and a traditional equine program to share classrooms, faculty, staff, horses, facilities, utilities, equipment, and interdisciplinary courses (Mullen Survey, 2010).

One of my expert panel interviewees was in the process of pursuing a tri-college articulation to share the EAAT program at Appaloosa University (Mullen, EP interview, 2010) for the very same reasons Martinez (2006) espouses in the following statement:

Interinstitutional programs have been developed in certain areas where it is clear that one institution cannot maintain a program on its own, but where the demand from multiple institutions signals that the program should continue. Institutions have also shared facilities to offer courses that draw on the strengths of different universities (p. 310).

Securing Supplemental Income

In a 48 state study, Mullin and Honeyman (2007) investigated funding formulas for higher education. Student enrollment was identified as a dominant factor in most funding formulas. Enrollment has a significant impact on finances (p. 115). In my proposal to expand EAAT at WWU, enrollment growth is to be considered a major selling point. For the past three years, the WWU Survey of Therapeutic Riding class, which is offered every semester, maintained an enrollment average of 10 students, serving as an indicator of the interest in EAAT.

The majority of my Expert Panel institutions offered EAAT services to those in their community with disadvantages or disabilities. The services did generate some

income, but in every case the fees were below those of competitive independent EAAT centers (e.g., free or \$10. - 25./lesson versus the competitive rate of \$40./lesson). Some institutions were more concerned about having a learning laboratory for their students and an inviting connection with the local community

In my survey, 31% of the institutions relied on grants to supplement their EAAT program budget, 23% relied on donations, and fewer relied on fundraisers. I would definitely suggest capitalizing on grants, donations, and fundraisers. Animal-assisted interventions, with the unequivocally positive media attention it receives (Fine, 2006), is a field that tends to be highly supported by the rich and famous, as well as those who are touched by the social justice aspect of the human-animal bond phenomena. This movement that affects people at a deep emotional level is conducive to the raising funds through fundraisers, grants, or donations.

Examples of Financial Success

When visiting EAAT center websites, it is not uncommon to find revenue earning achievements, innovative fundraising ideas, and, of course, a PayPal donation link. Citing a few fundraising success stories can provide an idea of the support that is possible.

Shepherd Meadows Therapeutic Riding Center in CT recently received a \$120,000. grant from the state to improve their facilities (Strides, 2010). Through fundraising efforts,

Texas Tech University just started construction on the first phase of building a new

EAAT teaching and research facility (NARHA Strides, 2010). In California, Ride Your

Horse Therapeutic Riding Program, only a few years old, is near completion of an expansive indoor arena, purchased through donations (Ride Your Horse TRP, 2010). One

institution in my survey, Chestnut College, started its EAAT program and thereby drove up enrollment in their traditional equine program through a substantial FIPSE grant (Mullen survey, 2010). Not an average EAAT center, the 30-year-old nationally-acclaimed Shea Center in Orange County, CA built a 4.5 million dollar EAAT center in 2006, and they recently secured another 1.8 million dollars to build an educational complex. All of this was accomplished through donations, grants, and fundraisers. A recent, one night, fundraising event earned them \$440,000. (Sheacenter.org, 2010). These examples validate Martinez's (2006) viewpoint on external funding, "external funding can improve educational experiences for students and contribute to capital improvements" (317).

Considerations for an EAAT Minor

The following chart represents my research data regarding EAAT collaborations within institutions.

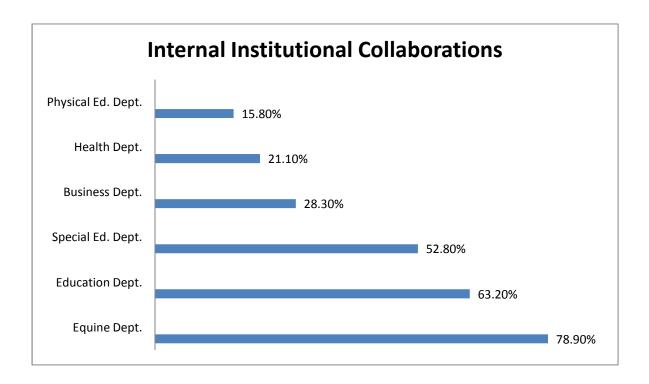


Figure 2. EAAT interdisciplinary collaborations within surveyed institutions.

A collaboration is a joint effort (e.g., EAAT program) between two parties that might not be immediately connected. An institution's equine department is the most common department (78.9%) to form an EAAT collaboration, followed by the departments of education (63.2%), special education (52.8%), business (28.3%), health (21.10%), and physical education (15.8%). Data also revealed that some institutions had multiple collaborations.

In my research, I asked End-User Group I (the WWU equestrian studies faculty) which courses they felt had potential for integration into an EAAT program. Using pseudonyms, their responses are as follows:

Table 1

End-user Group I Highlighted Responses to Interview Question One

Question 1

Within the equine division curriculum, what courses do you think might have potential for incorporation into and EAAT program?

Instructor Hackamore (HM): Theory of Equine Behavior and Training Methods, Equine Business Practices, and Horse Management Practicum

Instructor Kimberwicke (KW): Equine courses plus courses in education, special education, psychology, business, and social work

Instructor Meadowbrook (MB): Equine Care, Techniques of Equine Management, Survey of Therapeutic Riding, Equine Health and First Aid, Equine Management Practicum, Theory of Teaching Techniques, Theory of Equine Behavior and Training Methods

Instructor Martingale (MG): "All of them could [be incorporated]."

Whereas KW and MG viewed all WWU equine courses as having some potential for integration into an EAAT program, HM and MB agree that the WWU courses, Theory of Equine Behavior and Training Methods, and the Equine Horse Management Practicum, are applicable to an EAAT program.

End-user group II participants (select WWU division chairs) were asked the same question. Professor Reader recommended Education of the Exceptional Child and Educational Psychology, and Professor Fiscal recommended Entrepreneurship, Accounting, and any business course that could be deemed worthy of inclusion in an EAAT program.

These suggestions were triangulated with the data from the survey and expert panel, and I am, therefore, recommending that courses are selected which are conducive to employment as an EAAT instructor/director. Many job openings have this dual role preference. In addition to the recommended courses by the end-user groups, I also suggest consideration of the courses Grant Writing, Anatomy and Physiology, and Physiology of Exercise.

In the following section entitled Stages of Implementation, the process for establishing the EAAT minor is presented. The equestrian studies division chair, the EAAT program coordinator, the EAAT adjunct, and the academic dean have key roles in the development of the minor.

Stages of Implementation

This proposal is first to be presented to the university's academic dean. Since I am no longer employed at William Woods University, the dean will determine the route of the proposal after that point. It is important that key stakeholders are involved in the decision making, planning, and implementation of a program, in order to establish trust and support (Shapiro, 2008). Following are my recommendations, in chronological order, for the proposal process:

Step one: The proposal is sent to the academic dean.

Step two: The academic dean will review the proposal and decide whether or not to send it to the university president and the CFO to initiate their interest and support.

Step three: A week later, the academic dean will meet with the university president and the CFO to discuss the different options and determine if, and what, steps will follow.

Step four: In respect to the primary end-users, the equine division faculty, it is recommended that the academic dean immediately set a meeting with the equestrian

division chair to discuss the administration's interest in expanding the EAAT program (which could include an EAAT minor), and offer the opportunity for the chair to express concerns and share ideas and suggestions.

Step five: The equestrian division chair sets a division meeting to discuss the EAAT expansion with the end-users, garnering suggestions, ideas, and concerns.

Step six: The equestrian division chair sets a meeting with the academic dean to discuss the division's input.

Step seven: The academic dean will meet with the division chairs in an upcoming Academic Council meeting to share the administration's interest, and gain their perspectives on integrating EAAT into different divisions, relative to curriculum and the establishing of an EAAT minor (if the administration chooses this option). The meeting should include the determination of the next few steps to take, and the deadlines to accomplish them. A target program starting date should be set.

Step eight: The dean and the equestrian division chair meet to finalize, in writing, the curricular content of an EAAT minor (if this option was selected by the administration), and the additional job description duties of the EAAT adjunct who will be overseeing the EAAT program.

Step nine: If an EAAT minor is selected as a component of the EAAT expansion, the dean and the division chairs, in one of the weekly Academic Council meetings, review the final proposal of the EAAT minor and make the recommendation to send it to the WWU curriculum committee for final approval.

Step ten: The academic dean puts into writing the finalized details of the adjunct job description and then meets with the CFO to determine an adjunct stipend for coordinating the EAAT program expansion.

Step eleven: The academic dean and the equestrian division chair meet with the adjunct to discuss the duties involved in the contract, and the starting date of stipend responsibilities.

Step twelve: The adjunct (EAAT program coordinator), in corroboration with the equestrian division chair, starts working on the details of program implementation which include the duties in the job description.

Step thirteen: The program coordinator and the equestrian division chair should immediately hold a meeting with the university's marketing, admissions, and advancement directors to discuss ways that their departments can market the program and seek publicity, grants, and donations.

EAAT Program Evaluation

The evaluation of the expanded EAAT program, should probably not take place until the EAAT program is operating for at least one semester. Program "growing pains" are to be expected, and it takes a reasonable amount of time to get a new program smoothly running. The goal-based assessment could take place as early as the end of the first semester.

As stated earlier, the EAAT proposal has the following three primary goals:

- 1. The financial goal is a solution for the budgetary conflict
 - a. Without making negative cutbacks in the existing equine program,
 - b. Without raising student fees, and
 - c. By capitalizing on existing division resources, with minimal imposition.
- 2. The student goal is an enriched learning experience for the students
 - e. Through experiential, practicum learning,
 - f. Through service learning,
 - g. Through entrepreneurial learning, and
 - h. Through interdisciplinary collaborations.
- 4. The social justice goal is to provide EAAT services to those in the local community with disadvantages or disabilities.

These three goals can serve as an outline for evaluation by the equestrian division chair, along with the detailed EAAT program coordinator's job description which expands upon these goals. At that time, assessment should involve analysis of the

financial records for the enterprise component (the EAAT center, which provides services to the community). The EAAT program financial report should also be included in the evaluation. "Success is defined by the ability of entrepreneurs to continually convert ideas into market profits," according to Henderson and Weiler (2010). Also, at that point in time, a recruitment report from the Office of Admissions can provide insight into the projected enrollment growth for the program.

At WWU, students assess each course, every semester, using a well-managed institutional survey. This serves as a means of assessing the quality of teaching, and it sheds light on program quality. Close-ended questions constitute the bulk of the survey, but a few open-ended questions offer revealing insights into the effectiveness of a program from the key stakeholder, the student.

Annually, at WWU, as part of the institution's strong assessment program, each division completes a program assessment which aligns course objectives, program objectives, and institutional objections. It would be the responsibility of the equestrian division chair to include the EAAT component in the assessment, which identifies strengths and weaknesses, and makes recommendations for improvements in the following year.

A long-term summative evaluation could include the assessment of graduates over time. Statistics (i.e., job duties, income, location, etc.) should be maintained on the types of EAAT jobs students get upon graduation, and the types of jobs they are in a few years later.

Important Issue: EAAT Identity

The director from one surveyed institution, Dun University, expressed concern about using the term, *EAAT*:

Having the term EAAT as a global term to encompass everything makes it difficult to discern what the institution is supporting. Programs working in collaboration with institutions need to be very specific about whether the program is offering medical service (hippotherapy, or mental health service) or a recreational/adapted program such as vaulting, riding, and driving.

Serpell (2006) noted that the word *therapy* is often used loosely and that it should not be concluded that therapy is any event that is enjoyed by the patients. He explained that the term *animal-assisted therapy* (AAT) is often applied to an array of programs which are anything but therapy in the medical sense of the word. Serpell warned that we must be careful not to weaken the term *therapy* by applying the term to quasi-medical fields that do not provide direct medical treatments, as is the case with gem therapy, massage therapy, aroma therapy, and many animal-assisted therapy programs (p. 22).

The term *EAAT* is now commonly used by two major national organizations, NARHA and Horses and Humans Research Foundation (HHRF), because the term alludes to just about every form of equine-assisted activities and therapy (NARHA, 2010; HHF, 2010). Below is NARHA's expanded definition of the term, *EAAT*:

Though NARHA began with a focus on horseback riding as a form of physical and mental therapy, the organization and its dedicated members have since developed a multitude of different equine-related activities for therapeutic

purposes, collectively known as equine-assisted activities and therapies (or EAAT). Besides horseback riding, EAAT also includes therapeutic carriage driving; interactive vaulting, which is similar to gymnastics on horseback; equine-facilitated learning and mental health, which use the horse as a partner in cognitive and behavioural therapy, usually with the participation of a licensed therapist; ground work and stable management; and NARHA Horses for Heroes, a new program that uses a variety of EAAT disciplines specifically to help war veterans and military personnel. In addition, many of NARHA's 25 volunteer-driven committees are working on identifying and refining even more disciplines and activities that might be put to use in the world of EAAT (NARHA, 2010).

It is noteworthy that therapy must involve a licensed therapist. In the vast majority of the 25 surveyed institutions, no therapists were on staff. So, technically they are not practicing equine-assisted therapy. At WWU, it needs to be very clear as to the extent of the equine-assisted activities, which probably will not include therapy (unless a licensed therapist is involved).

Important Issue: The Credibility of EAAT

Fine (2006) cautions us to be skeptical of those who make unreasonable claims about the power of the medium, stating that for AAT to gain respectability, there needs to be empirically-based evidence to document the interventions (p. 521). According to Fine (2006), in the field of psychotherapy alone, approaches and theories have increased approximately 600% since the 1960's, and there may be close to 200 therapy models, including animal-assisted activities (AAT). This growth has merit in the eyes of some,

but others disagree and consider it to be no more than "pop" therapy (p. 515). Fine also draws attention to the fact that research can be biased by AAT therapists who have a strong interest and passion for the medium, and often use their own animals in the research (p. 239).

Four years ago, Kruger and Serpell (in Fine, 2006) summed up their viewpoint on the legitimacy of EAAT, by stating that "despite their long history and unequivocally positive media attention they typically receive, animal-assisted interventions are currently best described as a category of promising complementary practices that are still struggling to demonstrate their efficacy and validity" (p. 21). Four years later, in 2010, one of my survey participants expressed the same concern. In response to one of my research questions, the director from Blue Roan University said, "EAAT is an expanding industry that needs support in developing evidence based outcomes" (Mullen survey, 2010). Deliberate strides are, however, being made to validate EAAT, and support is increasing for research in this field. Support for EAAT research is the primary objective of a relatively new organization which was established in 2004, the Horses and Humans Research Foundation (HHRF). This is evident in the following HHRF statement of goals (HHRF, 2010):

The primary goal is to support, promote and fund scientific research that explores the claimed, yet unsubstantiated benefits of equine-assisted activities and therapies, leading to the discovery of the most effective methods and techniques for conducting thousands of existing and future programs. The secondary goal is to educate the public (including parents, donors, insurance companies and

physicians) on research findings so that equine-assisted activities become more accessible to those in need.

The HHRF seeks funding for research and has an approval process for awarding of funds for proposed research. Examples of HHRF funded projects include The Benefits of Equine Therapy Substantiated by a Washington University research team, the Spastic Cerebral Palsy Study, and the Mental Health/ Special Education Study (HHRF, 2010).

The Federation for Disabled Riders International (FDRI), established in 1980 and headquartered in Belgium is also devoting attention to establishing credibility in the field of EAAT. Their mission, as follows, is also research oriented (FDRI, 2010):

Our mission is to facilitate the worldwide collaboration between organizations and individuals whose objectives are philanthropic, scientific and educational in the field of equine assisted activities.

In addition to resource-filled newsletters, The FDRI publishes an annual journal entitled, The Scientific and Education Journal of Therapeutic Riding, and every three years they sponsor The International Congress of Therapeutic Riding. A sampling of the type of studies that the FDRI provides as a resource include Forces created by the contact of a rider's back on the horse's back during hippotherapy (Dvorakova, Peham & Jamura, 2008); Therapeutic riding and symbols related to the horse (Freire & Bruna, 2008); and One horse power for success – the cooperation between equine assisted occupational therapy and speech language pathology (Ute, 2009).

The American Hippotherapy Association (AHA) also strives to validate equine therapy. They provide research grant money for PT/OT/SLP students, instructors or

clinicians to complete empirical research measuring outcomes related to hippotherapy. The AHA publishes the current evidence to support the credibility of hippotherapy. A sampling of their validating resources include the following studies: Effects of hippotherapy on postural stability, in persons with multiple sclerosis: a pilot study (Silkwood-Sherer & Warmbier, 2007); An exploration of German and British physiotherapists' views on the effects of hippotherapy and their measurement (Debuse, Chandler & Gibb, 2005); and Evaluation of hippotherapy: A single-subject experimental design study replicated in eleven patients with multiple sclerosis (Hammer et al., 2005).

The North American for the Handicapped Association (NARHA), the oldest -- and the most influential -- organization in the American EAAT movement, is also involved in providing credibility through evidence. Besides offering annual regional and national conventions, NARHA has four publications which spotlight the latest in EAAT developments and research (NARHA, 2010).

Types of EAAT jobs

Prior to discussing employability, the actual jobs in the EAAT job market should be identified. Positions in the EAAT field typically include volunteer helpers and handlers (30,000 in just NARHA centers), instructors, directors, and therapists (NARHA, 2010). Many of these positions are crossover positions, especially in newer centers. Based on my research finding (Mullen survey, EP interviews & EU interviews, 2010), college students participate in an EAAT class, emphasis, minor, or major with one or more of the following employment goals in mind:

• To become an EAAT instructor

- To become an EAAT director
- To become an EAAT director/instructor
- To found an EAAT center
- To enhance skills set and range of employability with a traditional equine degree
- To enhance skills set and range of employability with a business degree,
 education degree, special education degree, or any other degree
- To use EAAT as a treatment strategy with a therapist degree

Ethical considerations

Several (5/31) of my research participants revealed concern about the employability of graduates in the EAAT field. Concerns were specifically related to low salaries, the availability of EAAT jobs, and the locations of available jobs (Mullen survey, EP interview & EU interview, 2010). This presented a moral dilemma in my project study, as I pursued the proposal of a program in a field that is relatively new with limited empirical evidence of validity (Fine, 2006). Students who pay for an education have expectations of employability, and this should be a primary objective of higher education, according to Pathak (2010). He suggests that higher education should value the development of a finished product (the student) that fits into the labor market, enhancing the student's ability to get the best possible return on investment in the least possible time and cost (p. 168). Per constructivism and systems thinking, the best interest of all stakeholders should be taken into consideration when addressing change (Marlowe & Page, 2005; Trochim, et al., 2006). This awareness is consistent with the institutional goal of providing a student-centered education at my workplace (WWU, 2010). A

student-centered focus would require curricular changes to be in the students' best interest, conducive to gainful employment.

Even though my research problem involved finding an intervention to solve a fiscal problem, the employability of qualified graduates was an ever-present concern that guided this proposal. Following constructivist leadership principles, we need to facilitate the development of a purpose for which all stakeholders could subscribe in their actions (Shapiro, 2008, p. 183). The ethical responsibility of establishing an honorable purpose (prepared, employable students) influenced the planning, preparation, and presentation of my proposal for EAAT expansion. This route is consistent with the concept of moral reasoning in value-added leadership, which recognizes that our values guide our actions (Sergiovanni, 2005, p. x).

Employability factors

It is important to understand that employability is not solely contingent on the number of available EAAT jobs. According to Bernston (2006), the job market is the external part of employability, and human capital factors as well as labor market factors help to predict employability. Human capital factors, described by McQuaid (2005), are individual characteristics (i.e., social skills, reliability, diligence, motivation, confidence, problem-solving skills, literacy, qualifications, education, work experience, personal circumstances, and etc.). The following external employability factors are identified by McQuaid (2005): the level of local and regional demand; salary schedules; opportunities for progression; availability of entry level positions; level of competition for the jobs; required skill levels; and location of vacancies (p. 206). In my proposal, when addressing

the employability of EAAT graduates, attention needed to be focused on factors that higher learning has the ability to influence (personal growth, qualifications, and education). Ethically, however, external factors (level of local and regional demand; level of competition for jobs; required skill levels) cannot be overlooked.

In regards to external employability factors, it is important to acknowledge that there are nearly 800 NARHA centers and 3, 500 NARHA certified instructors in the United States (NARHA, 2010). Hypothetically, to reconcile this disproportion, each center would need to untypically employ at least four instructors. The organizations EAGALA (specializing in mental health therapy) and AHA (specializing in physical, occupational, and speech/language therapy) also certify instructors, adding to the pool of those who might be seeking employment. In regards to the balance of supply and demand, it should be noted that EAAT employment options beyond NARHA centers, include self-employment, or work in private programs, public programs, hospitals, and higher education. It is notable that 42,000 clients with disabilities or disadvantages are being served annually at just NARHA centers alone (NARHA, 2010). Many of these centers have client waiting lists (Mullen Survey & EP interviews). This could indicate the need for more centers or expanded centers, which equates with an increase in job market demand.

With the surging interest in EAAT in the past two decades, the supply side of employment currently appears to be out of balance with the demand side. Some employers may attempt to get entry level workers at the lowest possible salaries (Chestnut College in Mullen EP interview, 2010). College graduates with an EAAT

emphasis may need to view their education as a means of what Houston (2005) describes as 'bumping up' (moving up the layers of employment through capital investment in their qualifications and education) or 'bumping down' through the layers into jobs for which they are overqualified. Houston shares how this effect impacts the overall job market and those who are less skilled:

The concentration of overqualified labor in lower-skilled jobs means those in the lowest group have nowhere to 'bump down' to. Thus, the imbalance between labor demand and supply in all occupations impacts most on bottom of the labor market and accounts for the concentration of unemployment among the unskilled (232).

In consideration of the internal or external employability factors that McQuaid (2005) described, college graduates with an EAAT emphasis might be at least able to 'bump down' to entry level jobs at lower salaries. It is likely, however, that college graduates would rather secure a 'good' job' which is characterized by security, reasonable pay, reasonable work conditions, and the prospect of advancement, versus a 'bad' job which is characterized by insecurity, poor pay and conditions and limited opportunities (Houston, 2005, p. 232). The range between good and bad jobs is broad (Houston, 2005). Individual job seekers must personally decide what a 'good' job entails. For example, college graduates, with an EAAT emphasis, may value an entry level position because fulfilling their passion has priority over salary; or it is a steppingstone opportunity to prepare for self-employment; or it is a renowned employer that can provide enriched learning experience. Again, every individual must determine if a college

education with an EAAT emphasis will provide a substantial return on their investment; but the reality is "the returns to human capital investment and/or years of work experience are greater to some workers than others" (Houston, 2005).

The added value of a college degree with an EAAT emphasis needs to be addressed. It may not be as simple as citing the facts that a bachelor's degree is commonly viewed as time well spent; that pursuing a higher education improves the likelihood of financial success; and that the EAAT- related degree could attract some employers who use the 4-year degree as a screening device for hiring and promotion (Arney,2006, p. 185)

Conclusion

If my proposal to expand EAAT at WWU is adopted, the implications would be widespread throughout the institution and the local community. Within the university, students will have the opportunity for a specialized equestrian education that could help to satisfy their passion for a vocation in a purposeful and rewarding field. Their education could be enriched through service learning, entrepreneurial learning, and experiential learning, all of which are prominent elements of an EAAT education.

The university will have the opportunity to fill the budgetary gap for providing a quality equestrian education. The potential for expanded marketing appeal can lead to an increased student enrollment. Through an EAAT minor founded on interdisciplinary collaboration, the added enrollment could boost university income and help to fill seats in some of the smaller non-equine courses (e.g., grant writing, human anatomy and physiology, special education, entrepreneurship, etc.). Also, the traditional equine

program and the EAAT program could dually benefit from resources secured through the donations, grants, and fundraisers that are commonplace in this field that tugs at the heartstrings of givers (Fine, 2006).

Besides enriched student learning in a specialized field, and a solution to the equestrian division budgetary gap, those in the local community with disadvantages and disabilities will be served through an operating EAAT center, an entrepreneurial enterprise. They will have the opportunity to experience the world of horses, just as ablebodied people do---social justice in action. Mental (emotional and educational) and physical benefits can be derived from the human-animal connection (Kachelmeier, 2008).

Appendix B: The Quantitative Survey

EQUINE PROGRAM SURVEY Gary Mullen, Walden University Ed. D. Candidate

*This	survey can be completed online at	edu			
This survey is to be completed by the individual who is chiefly responsible for the equine program in the institution – namely, the department chair, program director, or chief supervisor. It is being conducted as part of a doctoral project study to determine the ways and means of incorporating institutional resources (i.e. curriculum, faculty, facilities, programs, campus stakeholders, community with disabilities, etc.) into an equine-assisted activities and therapy (EAAT) program. Quantitative and qualitative data will be used to develop a multi-option proposal for integrating an EAAT program into the equine department at William Woods University, Fulton, Mo. The completed study will be of value to other institutions that are considering the implementation or expansion of an EAAT program.					
PERS	ON COMPLETING SURVEY:	POSITION:			
	TUTION:	DATE:			
PLEASE NOTE: In this survey, the term <i>equine-assisted activities and therapy</i> (EAAT) is a general term synonymous with the terms <i>therapeutic riding, equine facilitated therapy, hippotherapy,</i> and any other terms that describe using horses for treatment of individuals with any type of disability, disadvantage, or disorder physical or mental.					
	EAAT PROGRAM	DEMOGRAPHICS			
1. a.	Please answer YES or NO to the follow Are you a 501 C3 non-profit institution	•			
	□No				
b.	Are you a public institution? □No	□Yes			
c.	Did your institution have an <i>existing</i> equato its involvement in EAAT? □No	uine program (major, minor, or emphasis), prior ☐Yes			

d.	Does your institution <i>currently</i> have an equine program (not EAAT) in ac	ldition to an
	EAAT program?	□Yes
	□No	
e.	Does your institution offer just one EAAT course?	□Yes
	□No	
f.	Does your institution offer an EAAT emphasis, track, or concentration?	□Yes
	□No	
g.	Does your institution offer an EAAT minor?	□Yes
	□No	
h.	Does your institution offer an EAAT major?	□Yes
	□No	
i.	Is your institution an accredited training center for EAAT instructors?	□Yes
	□No	
	If yes, please state the accreditation organization (s):	
1.	Put an X in the box of the ONE statement that best describes the EAAT that your institution offers to community members with disabilities, disadisorders:	
	Our students are not involved in providing services to these community n	nembers.
	Our students serve this community in collaboration with an off-campus, i	ndependently-
•	erated EAAT center.	
Ple	ase explain:	
cor	Our institution uses its own resources to provide some EAAT services to numurity members. **ase explain:*	these
□ Ple	Our institution has another way of providing services to these communit ase explain:	y members.
2.	Please provide answers to these questions:	
a.	What year did your institution begin involvement in EAAT?	

b.	How many horses are used in the EAAT program?					
c.	How many clients from the community with disabilities, disadvantages, or disorders are being served by your program?					
d.	Do the insurar	nce policies	of clients pro	ovide some coverage for	your services?	
	□ Yes □ No	□ Yes □ No				
3.	Put an X in the box of all the teaching modes that your EAAT program uses for community members with disabilities, disadvantages, or disorders:					
	Vaulting □	Driving	\square Riding	☐ Ground activities	☐ Only ground activities	
	Other (please e.	explain):				
4.	Put an X in the	J	l the disabilit	ties, disadvantages, or d	isorders that your EAAT	
	Equine Facilita	ted Mental	Health	☐ Physical disabilities	☐ At risk youth	
	☐ Learning disorders ☐ Developmental disabilities ☐ Other (please explain)				please explain)	
	Does your EE. sorders? □Yes	AT progran □No	If ye	n any particular disabil s, which one(s) AT RESOURCES	ities, disadvantages, or	
1.	Put an X in the magnitude) by			onal resources that are	shared (at any level of	
	Classrooms	□ Land	☐ Arenas	☐ ADA approved re	estrooms Utilities	
	Vehicles for tra	nsportation	□ Tracto	ors, trailers, farm equipm	nent	
	Stalls and corra	als □ R	diding tack	☐ Maintenance crev	W	
	Other (please e	explain):				
2.	Put an X in the coursework in	-	_	ts that involve their fact	ulty, staff, curriculum, or	
	Education	☐ Physical 1	Education	☐ Special Education	□ Equine	
_	tment					
Depar	tillelit					
-		□ Sports T	herapy	☐ Legal Studies	☐ Communications	
	Business Entrepreneurial	_	herapy □ Technolo		☐ Communications ☐ Other (please	

	Put an X ii Program.	n the box of the institutional progr	rams that are involved in your EAAT
	Greek life	☐ Service learning	☐ Work study/financial aid program
	Clubs <i>(plea</i>	ase identify):	
	Other (plea	ase identify):	
		EAAT G	ROWTH
enro	ollment in y	our EAAT program.	est describes the growth of student
		has decreased from the prior year.	
		t is the same as the prior year.	
	Enrollment	t has increased from the prior year.	
<i>2</i> .	Enrollment	t growth is anticipated in our EAA?	Γ program. \square Yes \square No
<i>3</i> .	Our institu	tion plans to expand the scope of the	ne program in the future. \Box Yes \Box No
		EAAT FINAN	NCES
		ources of funding for your EAAT igned the number 1 and the lowes	Program. Rank in order with the top t ranked as number 5.
		d program budget (based on studen	nt enrollment) # grants #
	ations revenue e	earned by providing EAAT services	s # other sources (please
plain)		V 1 C	<u> </u>
2.	Do you con	nsider your EAAT program to be f	<i>financially successful?</i> □Yes □No
<i>3</i> .	Do you and	ticipate future EAAT financial suc	ccess?
		CLOSING IT	EMS
1.	Would you	be willing to follow up with a thir	ty minute phone or email interview, if
	necessary?	•	□ Yes □ No

2. Please add any additional comments or insights that you think might be helpful with this study (you may use a separate sheet of paper):

*Please attach any brochures, class descriptions, or other artifacts that might be helpful with this study.

Thank you for responding to this survey. Your contribution of time and effort has potential for far-reaching, positive benefits to equine programs in higher learning.

You may E-mail this survey as a Word Document, send it via postal service, or FAX it.

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> Phone: 573-592-4280 FAX: 573- 592- 1196

E-mail: gary.mullen@williamwoods.edu

Appendix C: Matrix for the Selection of the Expert Panel

Name of institution	
Location	
Number of years involved in	
EAAT	
Private?	
Non-profit?	
Liberal arts based?	
Traditional equine program?	
EAAT major?	
EAAT minor?	
EAAT concentration?	
Collaborates with independent	
EAAT center?	
Operates EAAT center?	
Accredited center?	
Approved for instructor	
certification?	
Integrate entrepreneurialism?	
Integrate service learning?	
Integrate specialists/therapists?	
Other departments integrated?	

Appendix D: Qualitative Interview Questions

Qualitative Instrument Items

Guiding Research Questions

- 1. Among higher learning institutions, to what extent are internal and external resources used to integrate EAAT as an intervention to close the gap between income and the budget needed for a quality equestrian studies program?
- 2. How is an EAAT program compatible with the needs and capabilities of the institution, WWU?
- I. Phone Interviews: Expert Panel

The expert panel will consist of five program directors selected on the following criteria: 1.) Their institution is similar to William Woods University; 2.) Their institution has a functioning EAAT program; and 3.) Their institution exhibits unique and creative use of resources (see Appendix C for Selection Matrix). Participants will be individually interviewed using primary questions, in addition to questions that are unique to their situation.

Primary Questions:

- 1. How did you incorporate existing courses and resources into your EAAT program?
- 2. What major benefits have been derived from your EAAT program?
- 3. What were the major obstacles in the development of the EAAT program?
- 4. What are the major obstacles that you encounter in the operation of the program?
- 5. How would you describe the financial condition of the EAAT program?
- 6. Is there anything I have overlooked, or anything else you would like to add?

Secondary questions (if time allows):

- 7. How does the EAAT program justify its existence?
- 8. How does the EAAT program attract enrollment, even into non-equine majors?

9. Tell me your plans to expand the scope of your EAAT program.

II. Phone Interviews: Group One (WWU equine division faculty)

After analyzing data from the survey and the expert panel interviews, EEAT prototypes will be conceptualized for review and discussion with equine division faculty members, via individual phone interviews.

Primary Questions:

- 1. If I were to say we want to use department resources to expand our EAAT emphasis, what are your immediate thoughts?
- 2. How could we incorporate existing WWU curriculum and resources into an EAAT program?
- 3. What conflicts or obstacles do you think would be encountered?
- 4. What do you think the positive aspects would be in having an expanded EAAT emphasis?
- 5. Is there anything I have overlooked, or anything else you would like to add?

III. Phone Interviews: Group Two (WWU division chairs & program directors)

After analyzing data from the survey and the interviews, EEAT prototypes will be conceptualized for review and discussion with select division chairs and program directors, via individual telephone interviews.

Primary Questions:

- 1. If I were to say we wanted to use department resources to expand our EAAT emphasis, what are your immediate thoughts?
- 2. How could we incorporate existing WWU curriculum and resources into an EAAT program?
- 3. What conflicts or obstacles do you think would be encountered?
- 4. What do you think the positive aspects would be in having an expanded EAAT emphasis?
- 5. Is there anything I have overlooked, or anything else you would like to add?

Curriculum Vitae Gary Mullen

Garymullen2@aol.com

Experience

Equestrian Studies Department Chair / Associate Professor

William Woods University Fulton, MO 2006 - 2010

Chief responsibility for the equine department faculty, staff, facilities, curriculum, budget, marketing and development; taught six credit hours; advised students; served on the Academic Council with other department heads; assessed faculty, staff, and students; Assessed and revised curriculum; etcetera

Horse Training Business, Self-employed

Gary Mullen Training Services Chino, CA 2001 - 2006 Trained most horse breeds in nearly every discipline; taught all riding levels; won over 40 national championship or reserve titles

Administrator/Instructor & Part-time Horse Training Business

Various private schools Southern CA 1978 - 2001

During these years, continuously operated part-time horse training business. Served as dean of men at a private college; principal or vice principal/instructor at 4 private schools; founded, developed, and operated two private K-12 schools; taught classes at middle school and high school level in basic math, pre-algebra, algebra, English, public speaking, newspaper, yearbook, etc.; counseled and advised students.

Director of Equine Science

University of Minnesota Crookston, MN 1976 - 1977

Taught courses in equine nutrition, physiology, industry, horsemanship, judging, etc.; marketed

the program through fundraising and public relations; advised and counseled students.

Education

Walden University MN 2007 - 2010

Ed.D., Administration Leadership

Colorado State University Ft. Collins, CO 1975 - 1977

M.S., Animal Science

Cal Poly University B. S., Animal Science

Pomona, CA

1972 - 1975

Certifications

Certified as an instructor for North American Riding for the Handicapped Association (NARHA)

Certified as an Equestrian Special Olympics Coach

Certified as a United States Equestrian Federation (USEF), "R" judge (highest status)

Recent Achievements

- Authored 2009 book, "Amazing Horses," published in at least 10 countries
- Authored numerous articles for equestrian magazines and newspapers
- Promoted to a United States Equestrian Federation large "R" judge in 2008
- Judged five National or World Championships in 2009
- Won over 40 national championship and reserve titles with show horses
- Was named the 2000 Interscholastic Equestrian League (IEL) Western Trainer of the Year
- Was named the 2005 International Andalusian Horse Association (IALHA) Professional Horseman of the year
- Served four successful years as division chair at William Woods University
 - Developed and taught three new courses, Survey of Therapeutic Riding, Equine Business Practices, and Equine Interim Practicum
 - Developed and managed the first Equestrian Special Olympics for the state of MO, spring 2008
 - o Stayed 4 years within the university department budget---a historical rarity
 - Improved the structure and organization of department policies and procedures (developed Equine Department Handbook)