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### Hoof Prints for Healing: An Equine-Assisted Therapy Program for a Unique School

Alison M. Roy

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AN EQUINE-ASSISTED THERAPY PROGRAM

Hoof Prints for Healing: An Equine-Assisted Therapy Program for a Unique School

by

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Submitted in partial fulfillment of the requirements for the degree  
of Doctor of Psychology in the Department of Clinical Psychology  
of Antioch University New England, 2012

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**HOOF PRINTS FOR HEALING:  
AN EQUINE-ASSISTED THERAPY PROGRAM FOR A UNIQUE SCHOOL**

presented on April 6, 2012

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# AN EQUINE-ASSISTED THERAPY PROGRAM

## Abstract

The unique and meaningful relationship that can develop between humans and horses has been well documented for centuries. More recently a hypothesis has emerged that humans can improve self-concept and social competence from having a horse in their lives. To date, few studies have empirically explored this hypothesis. The hypothesized social and emotional benefits of interacting with horses have inspired Equine-Assisted Therapy (EAT) programs which utilize horses in goal-directed treatment. EAT programs have been shown to be especially effective for socially and emotionally disadvantaged children and youth. In the current project, the author created an EAT program for the socially and emotionally disadvantaged population at a unique residential school in Pennsylvania. The school houses grade Pre-K through 12 with students from across the country. The EAT program is modeled after The Green Chimney's Residential Farm School, the Elk Grove Unified School District's Project Riding Instruction Designed for Education (RIDE), and the Sierra Tucson Integrated Riding Resource Program (STIRRUP). Through specific and carefully designed lessons and hands on experiences the EAT program aims to produce some specific outcomes in the areas of the participants' self-concept and their perception of the social support they receive from their environment. Students are gradually introduced to their horse for the eight week program. They are tasked with learning how to care for, feed, water, groom and exercise their horse while gradually increasing their mastery over caring for another being and riding. Participants learn about the horse social world and, with the aide of the EAT therapist, gradually generalize what they have learned to their own social world. This is done while the therapist, horse, and participant engage in a therapeutic process about forming a relationship and bond grounded in trust. Also included as a part of this project is a template for program evaluation, should the program be implemented by the school.

The evaluation template utilizes a pre and post analysis of the Self-Perception Profile for Children (SPPC) and the Social Support Scale for Children (SSSC) designed to assess changes in participants' self-concept and their perception of the support they receive from their social environment.

*Keywords:* equine-assisted, animal-assisted, children, self-concept, school

## Hoof Prints for Healing: An Equine-Assisted Therapy Program for a Unique School

*There is something about the outside of a horse that is good for the inside of a man.*

*~ Sir Winston Churchill*

### **Introduction**

**The relationship between man and animal is mutually beneficial.** According to the American Pet Association (2006) there are approximately 45 million dog owners in the United States and a total of 140 million pets nationwide. In addition to this, 83% of pet owners state they own a pet for companionship and 57% state that they own a pet to have someone to communicate with. These statistics illustrate the significance of the human animal bond. The pets included in the statistics include cats, dogs, reptiles, birds, fish, various small animals, and horses. The current project specifically focuses on the beneficial relationship between human and horse.

Humans and animals have an undeniably strong bond and research has shown that humans can obtain extrinsic benefits from this bond. Numerous authors have found varying benefits including teaching independence, improved social behavior, learning non-verbal communication, decreasing blood pressure, increasing self-esteem, etc. These numerous benefits serve a wide variety of individuals across all developmental and age levels (Cole & Gawlinski, 2000; Parshall, 2003).

**The beneficial relationship between humans and animals can be utilized for therapeutic purposes.** Animal Assisted Therapy (AAT) programs seek to capitalize on the beneficial relationship between animals and humans, to address clinical needs. A majority of AAT programs have focused on using dogs in a therapeutic role. These AAT programs have

been implemented in school settings, nursing homes and assisted living environments, college campuses, correctional facilities, and mental health clinics (Parshall, 2003). In recent years, the AAT programs have shifted to include horses, known more specifically as Equine Assisted Therapy (EAT) and Hippotherapy. EAT is AAT which includes a client (rider), horse, and a licensed mental health professional. Hippotherapy is a subset of EAT that is more focused on the physical benefits of riding, and is used for occupational therapy and rehabilitation.

EAT, like AAT, has several specific benefits for the participants. Animals, including the horse, through AAT help to support the child in the beginning stages of forming a relationship with the therapist. Additionally, through the relationship with the AAT animals, children learn how to care for another being which in turn has the potential to increase their self-esteem (Katcher & Wilkins, 1998; Cawley, Cawley, & Retter, 1994). However, it appears as though relating to horses, through EAT, may also have the ability to teach children how to navigate their social environment more effectively than others AAT animals. This project will specifically focus on EAT, and the direct benefits of EAT for children (Macauley & Guiterez, 2004).

**The Milton Hershey School has both the need and the resources to establish an EAT program.** The current project creates an EAT program for a specific population of children and adolescents, as well as an accompanying proposed evaluation strategy. Few EAT programs have been implemented due to cost and resources needed to run a program correctly and effectively. Even fewer EAT programs have included systematic data collection concerning their effectiveness (Karol, 2007), which is critical to moving the field of EAT forward. The Milton Hershey School (MHS, 2010) is an ideal site to develop and evaluate an EAT program because they serve a population that is likely to benefit from EAT, and they have the resources in place to offer an effective program. Located in Hershey, Pennsylvania, MHS enrolls students from

socially and economically disadvantaged environments from around the country in grades Pre-K through 12. Disadvantaged youth are among the populations that have been shown to benefit most from EAT (Cawley et al., 1994). Secondly, while lack of resources is a frequently cited barrier to EAT programs, MHS already has the horses, setting, and staff available to develop and maintain an EAT program (MHS, 2010).

**Project Goals.** The MHS EAT program can therefore be mutually beneficial by both giving the students at MHS a valuable program with benefits directly targeted to their population, and by establishing an EAT program with an accompanying evaluation strategy that has the potential to produce quality data for the field of EAT and AAT.

The specific benefits that this program will aim to produce include improved self-concept, and improved ability to judge and react in social situations. Ideally, this program would be implemented at MHS and evaluated using this dissertation's proposed evaluation strategy in order to support the existing literature on EAT.

### **Literature Review**

The literature review will focus on the rationale for the EAT program. First, the importance of the bond between human and animal will be discussed; including the history and the impact this bond has on humans and their development. At the end of this section, the human and horse bond will be specifically highlighted. The discussion on the connection between humans and animals sets the stage nicely for a section on how this connection can be used in a number of ways therapeutically. In general, Animal Assisted Therapy is explained, including its history and how it led to the development of using horses in a therapeutic role in Equine Assisted Therapy. Equine Assisted Therapy is then outlined in detail.

### **The Human and Animal Bond**

The dog was domesticated 30,000 years ago, and since then animals have been considered valuable companions (Catanzaro, 2003). In the 1790s the York retreat in England was credited as the first animal-based retreat for the pervasively mentally ill. The York Retreat used animals to help patients learn nurturing characteristics and self-control in place of chemical and physical restraints (Mallon, 1992). A similar program was created in Germany in 1867 where the Bethel Center relied primarily on animals for helping resident patients with various developmental disabilities and epilepsy. This setting, which now has over 5,000 patients and animals, still uses Animal Assisted Therapy as a primary treatment modality (Catanzaro, 2003; Mallon, 1992).

Formal study of the human animal bond followed years later and had its beginnings in veterinary medicine. In the early 1970s several universities began to teach the importance of the human animal bond to their veterinary students (Hines, 2003). Notably, Texas A&M, the University of Minnesota, Washington State, and the University of Pennsylvania began to include classes on human animal companionship and connection. Despite recognition of the human animal bond in veterinary medicine, the helping professions were slow to develop their own research and support (Hines, 2003).

**Animals enter the helping professions.** The Delta Society of Renton, Washington, as well as Humane Societies nationwide guided the helping professions to the use of animals professionally (Hines, 2003). Both societies implemented volunteer programs to take animals into nursing homes, schools, and prisons. The Delta Society also created several therapeutic horseback riding programs including the Partnership in Equine Therapy and Education (PETE) which was created to research and develop therapeutic riding programs for disabled children

(Hines, 2003). Additionally, the Delta Society and the Humane Society are responsible for working with the media to bring the idea of the benefits of the human animal bond to the mainstream public (Hines, 2003).

**Human and horse bond - utility, companionship, communication.** Few animals have had a greater impact on humans, their development, their culture, and advancement, than the horse (Lawrence, 1992). Cave paintings of horses galloping in Altamira date back to the Paleolithic human era (Mallon, 1992). The horse has long been used as a means of faster and more efficient human mobility and transport. Horses have been relied upon to transport people, goods, soldiers into battle, and are often associated with power and wealth (Lawrence, 1992).

The bond that has existed between human and horse for centuries has not been replicated by another beast. The horse and the human have always had an especially meaningful relationship; humans often consider their horse to be a noble companion. Through the horse, humans feel as though they are noble too; embodying the horse's characteristics of grace, power, and beauty. Those humans who live with and rely on horses often feel as though their horse truly understands their thoughts, feelings, and needs. Through this understanding relationship humans appear to improve self-concept, and feel more dignified and refined (Lawrence, 1992).

The horse appears to have the ability to communicate with humans through subtlety and nonverbal expression (Lawrence, 1992). Horses have been found to be non-judgmental and overtly tolerant of their human companions; a relationship rarely replicated by even other humans. Through small gestures, such as nuzzling, neighing, and loyalty, horses show their humans affection and unconditional love. Additionally, it has been shown that horses have exceptionally developed hearing which makes them hypersensitive to their environment. They

are able to distinguish not only between fellow horses, but they are able to know each human companion through that person's voice (Engel, 1992).

Because of their sensitive hearing and sense of feeling or touch, horses have to be handled delicately, despite their substantial size. The humans that work with horses must learn how to speak slowly, and in a calming and direct way. Humans have to learn the fine art of how to tactilely communicate with their horse; every little movement or moment of pressure means something to the horse. Through both voice and tactile commands a human can learn how to ask their horse to go through the various stages of riding. Only an effective communicator will be able to produce the effect they desire on horseback. This is why horses, through EAT, more so than other animals such as canines, can teach humans subtle and effective verbal and nonverbal communication (Lawrence, 1992; Engel, 1992).

In addition to teaching effective communication, EAT demonstrates the importance of building trust in a relationship. A human who is too eager or too overbearing initially in the relationship with their horse will quickly learn that the horse needs time and investment before they can form a trusting relationship with a human companion. A horse's hesitant nature most likely stems from evolution; horses are innately prey animals. A horse is programmed to flee whenever they sense a situation is not safe, classically part of the "fight or flight" model. A horse is a flight animal and requires a significant amount of reassurance to feel safe and trusting of their human companion. A human who enters into EAT with verbose language and actions will quickly learn their horse is going to have a "flight" response. If a trusting relationship is built between human and horse the rewards are significant, and these rewards are central to EAT.

Through this love, affection, tolerance, and communication, a bond is created that has a significant impact on humans and their ability to form bonds with other animals and even other

humans. This bond between human and horse, the bond that exists outside of judgment and with kindness and acceptance, is the bond that is at the center of Equine Assisted Therapy (Engel, 1992).

### **Animal Assisted Therapy**

In the 1950s Boris Levinson, a psychology professor at Yeshiva University, was one of the first clinical psychologists to document his work with animals in the therapy setting. He is considered one of the founders and leaders in the modern field of AAT. Levinson became supportive of AAT after a personal experience he had working with a child in a therapy session who refused to communicate. Levinson used his dog Jingles as a facilitator with the child, and through Jingles the child was able to eventually open up to Levinson (Parshall, 2003).

**AAT: the introduction of an animal into the therapeutic milieu.** During the late 1600s, the use of animals in therapy was first recorded by John Locke (Parshall, 2003) who used a variety of animals to help children learn care taking and nurturing abilities. AAT is defined as the use of animals in a therapeutic setting with the purpose of helping the client achieve their goals (Parshall, 2003). Dogs are the most commonly used AAT animal most likely due to their trainability as well as their likability and acceptance among the general population. However, a variety of animals have been brought into the therapy room including birds, cats, or even squirrels (Parshall, 2003).

**AAT has been successful for varying populations and diagnoses.** AAT has been shown to be effective with emotionally disturbed children, depressed college age students, urban youth with social and behavioral difficulties, cardiac patients, female inmates, and psychiatric inpatients (Parshall, 2003). Animals facilitate healing in a variety of ways, specific to each of the above populations. For example, for cardiac patients, having an animal present creates a

relaxation response in the patient by decreasing blood pressure, heart rate, and respiratory rate. For children with social and behavioral difficulties AAT has the potential to improve attention and the child's ability to communicate. The child learns how to first express their thoughts and feelings to the animal; eventually they are able to be expressive with their therapist, teachers, and caregivers (Cole & Gawlinski, 2000). For mood disorders the animal's presence during a therapy session helps to create a calming effect which improves overall mood (Cole & Gawlinski, 2000). Relaxation and nonverbal communication are an AAT animal's inherent expertise and these skills appear to be healing for a variety of individuals.

**AAT is particularly useful with children.** An area of particular interest within the study of AAT is the animal's role in child development. In the United States approximately three-quarters of households with children have a pet (Melson, 2003). Many children grow up with a family pet in their lives, and this pet has been shown to be a major player in children's support network. Researchers have argued that pets give children someone to talk to; pets lend a nonjudgmental ear and consequent emotional support (Melson, 2003). In addition to the role of listener, animals can provide stimulation for children and may promote an environment of learning and exploration (Melson, 2003). As mentioned previously the literature documents that AAT is beneficial for children because they may be especially hesitant to participate in traditional talk therapy, or may lack the skills to produce verbal output in the therapeutic setting (Katcher & Wilkins, 1998). Therapeutic animals have the ability to reduce the child's anxiety level which then provides an atmosphere that is conducive to emotional and psychological growth. Children have numerous emotions that they may not be able to comprehend or control. The animals act as a calming agent; as a way to safely reduce and release emotions.

Children spend a majority of their first years in the classroom so it is imperative that they function well in the school environment. Similar to the therapeutic relationship, AAT can be used in the school setting to help improve the teacher child dyad. Through the animal the child may be able to form a more beneficial relationship with their teacher which could help promote a more productive learning environment. The animal may prove to be effective in helping to break down the wall that some children put up to protect themselves from adults. The animal becomes essentially a neutral agent in the process of building trust with the teacher. The child may more easily build trust initially with the animal, which can then be transferred into the relationship with the adult. In this role, animals may be particularly helpful in the classroom setting for supporting and encouraging the bond between teacher and child (Cawley, et al., 1994).

AAT is especially powerful for two groups of children. Children with emotional disturbances improve self-concept, the ability to pay attention in class, and social skills, as well as decrease their hyperactivity and oppositional behaviors in AAT(Kogan, Granger, Fitchett, Helmer, and Young, 1999). And children with Pervasive Developmental Disorders (PDD) achieve higher levels of attention and overall engagement with the therapist in AAT sessions (Martin & Farnum, 2002).

### **Equine- Assisted Therapy - The Healing Power of the Horse**

**EAT: A horse enters the therapy session.** The research literature has delineated two different ways horses are used in a therapeutic setting — EAT (or synonymously Equine-facilitated Psychotherapy; EFP) and Hippotherapy. The Professional Association of Therapeutic Horsemanship International (PATH) formally the North American Riding for the Handicapped Association (NARHA) has a broad category of Equine Assisted Activities/Therapies, one of which is EAT/ EFP (PATH, 2012). EAT integrates the horse in

psychotherapy sessions. Hippotherapy, a specialization of EAT, focuses more on the equine movement through riding and can be used to facilitate physical therapy, occupational therapy, and speech and language therapy goals (Macauley & Guiterez, 2004). The horse is used to guide goal directed treatment, and help to foster a healing environment within the riding ring (Vidrine, Owen-Smith, & Faulkner, 2002). One area of Hippotherapy that is currently being explored is sensory integration therapy, which is hypothesized to enhance integration of human sensory input via synchrony of the horses' and riders' motions. Sensory integration Hippotherapy has produced some promising results for Attention Deficit Hyperactivity Disorder (ADHD) and Learning Disabilities (Horse Worx and Equitherapy Centre, 2010).

Historically, there have been two models of thought in therapeutic riding. The British model focuses on riding as a sport that promotes both physical and mental well-being, whereas the German and Swiss model focuses more on the medical benefits of riding, the physical changes that can occur with the rider's musculoskeletal system and balance (Copeland, 1992). The United States has adopted a model of therapeutic riding that incorporates both the British and German and Swiss models as well as adding the concept of having educational goals in the program (Copeland, 1992).

The focus of this EAT program is on the subset of EAT that emphasizes the psychosocial benefits of riding and seeks to capitalize on the reciprocal and potentially therapeutic relationship that forms between the horse and rider (client; Macauley & Guiterez, 2004). This program will therefore follow the U.S. EAT model of blending physical and mental well-being while achieving specific goals.

**The benefits of EAT at the center of the proposed MHS program.** EAT has many of the same therapeutic benefits for children as AAT (mentioned previously). Horses, like other

therapy animals, have the ability to ease children into the therapeutic relationship. Additionally, horses, through EAT, have been shown to increase a child's self-esteem. The increase in self-esteem is thought to at least partially arise from the child learning how to care for a large, powerful animal. The final benefit of EAT that is at the heart of the MHS program is the improvement in the child's ability to respond and interact in their environment (Cawley et al., 1994; Katcher & Wilkins, 1998). The focus of EAT is on the relationship and interpersonal connection between the animal and rider. It is within the context of this relationship overt growth, change, and healing occur. These skills can be invaluable for children and adolescents when navigating their social worlds, including home and school (Cawley et al., 1994). Aiding in the therapeutic process, learning a care taking role, increasing a child's self-esteem, and improving a child's ability to interact and respond to various social demands are the benefits of EAT that are the focus of the MHS EAT program.

***Horses aid in the therapeutic process.*** Animals have the capacity to be nonjudgmental and this neutral stance can then foster an environment that is conducive to sharing and expressing emotions. Animals create this nonjudgmental stance by giving unconditional love, a consistent relationship, and by listening without rebuttal (Reichert, 1998).

As previously mentioned, horses are bound to the evolutionary model of fight or flight (Engel, 1992). They need to form a trusting relationship with their human companions in order to be able to not only work with them but also learn from and teach them effectively. In this way, horses are similar to children in their relationship to others; both horses and children need to trust their human companions so they don't "flee" from relationships, and this trust is not earned immediately or easily. Initially, in therapy, children are sizing up their therapist trying to learn if they can trust them or not; they are trying to decide whether to stay and work (fight) through

therapy or whether they disengage (flight). Through their relationship with their EAT horse, children can learn how to form a trusting relationship first with the horse and then with the EAT therapist. Trust is built within the context of EAT (Engel, 1992).

It is of utmost importance that the therapeutic relationship is seen as nonjudgmental because then the child can present in session as their authentic self. The EAT horse may be able to help facilitate this nonjudgmental relationship with the therapist by modeling the relationship for the child (Reichert, 1998). The reciprocity learned in the EAT relationship can be transferred to peers and others outside the therapy session as well. As the child learns how to interact interpersonally; the child begins to learn the natural give and take of relationships. The child feels comfortable and confident in their ability to openly express feelings and thoughts without the fear of being criticized or judged (George, 1988).

***Horses teach children caring for another.*** Once the child becomes attached to the horse in the therapeutic sessions, the natural desire to care for the horse arises. During EAT, children have the opportunity to practice being a caretaker and tending to another's needs. Working with animals, such as horses, can teach a child the ability to nurture another (George, 1998). Ideally, in an EAT program the child should be encouraged to keep a log or journal of their horse's feeding, grooming, stall cleaning and medication schedule. This practice teaches the child responsibility by making them the sole care taker of their animal (Ross, 1992). Eventually, after practicing this with animals, children can begin to translate to other humans, and themselves, learning how to self-soothe. Self-soothing behavior is important for emotional regulation and behavior management, especially when an outsider (such as a parent or a counselor) is not available to aid with soothing.

***Horses improve self-concept in children.*** In EAT, the improvement seen in children's and adolescents' self-concept appears to come from the child's ability to conquer their fear of the animal and then progress into the care taking role for the animal. This may be especially true in EAT because the horse is a large and powerful animal. The amount of care a horse needs is greater than other animals frequently used in a therapeutic context (dogs, cats). As the child becomes more and more confident in this care taking role and begins to assert himself with the animal and staff, make decisions, and become more aware of his impact on others, self-concept flourishes (Katcher & Wilkins, 1998).

***Horses teach children how to navigate the social environment.*** In addition to improving their self-concept, children learn to rely on and interpret their social environment through the development of a nonjudgmental, non-critical, and reassuring relationship with their EAT horse. The lack of a common verbal language requires children to pay closer attention to horses' non-verbal cues, which enhances the children's attention and sensitivity in interactions outside the EAT session or environment. Children who are considered to have underdeveloped social skills in other contexts are able to engage with the horse as a peer (Katcher & Wilkins, 1998).

Horses are particularly non-verbal, and present their non-verbal signals on a large canvas. For example, horses do a lot of communicating with one another through their ear movements. When their ears are pinned back against their head it often means they are angry and may react by kicking. Conversely when the ears are swiveling around the horse is listening and expressing interest and curiosity. Horses use other parts of their bodies to communicate as well. A swish of the tail and a stomp of the hoof could indicate agitation. The various emotional signals displayed on the horse can easily be taught to and understood by children (Katcher & Wilkins, 1998). Through the EAT horse children can also learn about miscommunication and misreading social

cues. As mentioned above, a horse who has their ears pinned is most likely angry, however it could also mean that they are listening to something directly behind them. The horse who is stomping and swishing could be shooing a fly. Horses make a snorting noise by exhaling when they are warming up and relaxing to their rider; this signal is often misread as anger or agitation by children and it scares them. If a horse's social cues are misread, the rider risks getting kicked, or having their horse panic and become unsafe. Studying horses' social cues, and recognizing when a cue has been misread, are large and important parts of EAT (Katcher & Wilkins, 1998).

Children who experience EAT eventually develop anthropomorphism, in that they ascribe human traits to their horse. In other words, children learn about what humans may be thinking or feeling through the horses with which they are working (Katcher & Wilkins, 1998). The therapist's role in EAT is to then get the child to realize what the horse is asking for, such as whether it is hungry, tired, scared, etc. Once a child is able to recognize needs in their EAT horse, they may be able to recognize what other peers want and need, and further what they themselves want and need (Katcher & Wilkins, 1998). Children will also be able to begin to recognize not only the social cues of the people around them, but also begin to realize when they may misread their environment. This heightened awareness helps the child become more immersed and involved in their social world (Katcher & Wilkins, 1998).

Additionally, EAT helps children learn how to more effectively navigate through their social environment by teaching nonverbal communication. Children are less likely to use verbal communication in therapy, so the more they can learn about and utilize nonverbal communication the better they can convey what they are thinking and feeling to their therapist. Animals can help children learn about nonverbal communication including what human body language, facial expressions, and voice tone may indicate about feelings and emotions (Reichert,

1998). Much as a horse's single cue may indicate different emotions (pinned ears meaning anger or curiosity) children may begin to understand how peer's reactions could mean different emotions in different situations (Engel, 1992).

Eventually, through EAT, children learn to mirror the feelings, emotions, behaviors, and reactions that they see in their horse; they work within the capacity of the horse that they want to see in themselves. It is at this point that perspective taking can be taught and learned. Children can begin to understand why their horse responds the way it does, and what they can do to make their horse respond in a certain way. They start to see that their actions affect others, and other people affect them as well (Katcher & Wilkins, 1998). The intricate nature of give and take in relationships becomes something that children in EAT understand and can achieve.

**Existing EAT research.** Most of the literature on EAT is comprised of single case studies and anecdotal data. This is most likely due in large part to the lack of available resources and highly trained staff. The field is moving toward more scientifically based qualitative and quantitative studies with larger sample sizes, in order to provide scientific support for EAT (Vidrine, Owen-Smith, & Faulkner, 2002). Only then can the benefits of EAT programs be fully understood, become mainstream, and receive the attention and financial support they need to be available to a wider population of potential participants.

**MHS as the setting for an EAT program.** Because of the proposed benefits of EAT as described above and the need for effective therapeutic groups at MHS, the author of this project created an EAT program for MHS (see Appendix B for the complete program). This program would work to improve the self-concept of the MHS students while simultaneously increasing their locus of control and mastery of their social environment. MHS's residential school setting places a high demand on social skills and appropriate social milieu interactions. The students at

MHS may benefit from a program that specifically targets this social hurdle. In addition, students at MHS frequently present with symptoms of emotional dysregulation and an inability to self-soothe. The EAT program created for MHS specifically focuses on nurturing another and self in order to help students learn those care taking skills. Finally, this project creates a program that can be eventually studied in order to produce much needed quantitative data for the field of AAT and EAT. Although it was not used for this project, a proposed method of program evaluation is also outlined for that reason.

### **Current Programs in Equine-Assisted Therapy**

Currently there are well over 500 EAT therapy programs being used with children in the United States. The three programs used here as examples were chosen because their population, setting, and mission are similar to those of the proposed MHS EAT program (see Appendix B).

#### **The Green Chimney's Residential Farm School**

In 1947 the Ross family established the Green Chimneys residential treatment center and special education school in New York State. Currently the school has almost 200 students on more than 550 acres of land (Mallon et al., 2000). According to the school, Green Chimneys “provides innovative and caring services for children, families and animals and targets its services at restoring and strengthening the emotional health and well-being of children and families, and fostering optimal functioning and independence” (Green Chimneys, 2010).

Samuel Ross, executive director of Green Chimneys, explains that most of the students who attend have some history of abuse or neglect. Most of them had significant difficulty in their school and their home community (Ross, 1992). Green Chimneys uses animals in their program because it teaches their children responsibility through the act of caring for and loving the

animal. The love created is reciprocal and the child therefore learns about genuine concern for another (Ross, 1992).

The Green Chimneys program utilizes many kinds of plants and animals in several different arenas and programs. The program that they are perhaps best known for is their therapeutic riding program. Notably, this program has successfully shown marked improvement in the children's perception of themselves and others for the better which has led to an increase in self-concept; the children feel as though they have accomplished something by caring for and working with the animal and this in turn increases their self-esteem (Green Chimneys, 2010). Green Chimneys school notes the above improvements are most likely due to the idea that children have learned a sense of mastery in the area of animal caretaking, which then develops into their sense of mastery over their self, environment, and others in that environment. The children also appear to develop a confidence in the people around them, their social support network. They begin to rely on their social support network to increase their mastery and self-confidence, much like they once relied on the animal (Green Chimneys, 2010).

### **Project RIDE**

Project RIDE, Riding Instruction Designed for Education, in Elk Grove Unified School District is another program similar to the one being proposed and will serve as a reference for the MHS EAT program. The Project RIDE program was designed to expand the education of special education students district wide (McParland, 1992). Starting with 30 students and one session a week in 1979, Project RIDE currently includes a full-time teaching position with 3 sessions a week, and is included in the school district's master plan for education (McParland, 1992).

Project RIDE was originally designed to "enhance existing services by complementing and extending other special learning programs such as speech and language, adapted physical

education, occupation or physical therapy, and psychological services” (McParland, 1992, p. 520). The Project RIDE program is a resource for treatment of a variety of diagnoses and is seen as an expansion of traditional special education services. In addition to special education students, whom the program was originally designed for, regular education students have also been integrated and are considered an integral part of the program. This integration has led to heightened disability awareness and understanding of students with special education needs which leads to cohesiveness within the school district (McParland, 1992). Project RIDE facilitators have found that the connection that develops between regular education students and special education students is mutually beneficial, and creates an open line of communication between the two groups of participants. Project RIDE’s future goals are to make their program accessible to a more diverse population of students, and to encourage other school districts to create their own therapeutic horseback riding program.

### **The STIRRUP Program**

The final program described for the purpose of comparison is STIRRUP (Sierra Tucson Integrated Riding Resource Program) which takes place at the Sierra Tucson Adolescent Care Center. This center aims to raise the self-esteems of a population of adolescents who have severe emotional disturbances, substance abuse problems, or have experienced significant abuse through EAT (Rector-Morken, 1992).

Through the STIRRUP program, adolescents learn skills that aid in their ability to form and maintain healthy relationships and effective communication skills. These skills eventually allow the adolescents in the STIRRUP program to build intimate, meaningful real-life relationships outside the riding ring (Rector-Morken, 1992). The program utilizes both the relationship between horse and rider and the relationship between rider and instructor to improve

communication skills and access parts of the rider's inner psyche that might otherwise be unattainable (Rector-Morken, 1992). Generally, if the adolescents can master relationship building in the riding program, and then in real-life settings, eventually self-esteem and self-confidence is built and maintained.

One way the STIRRUP program works on the adolescents' relationships is through "family work." Each horse is considered a member of the barn family and has personality characteristics that could fall into one of the following categories: (a) dysfunctional family member, (b) healer, (c) hero, (d) scapegoat, (e) identified client (Rector-Morken, 1992). The adolescents learn how families interact through observations of the horses and their roles in the barn family (Rector-Morken, 1992).

In addition to these foci, the STIRRUP program also works to improve the rider's ability to remain present and mindful for the riding lesson, with the hope that this mindfulness training will be eventually applied to settings outside the riding ring (Rector-Morken, 1992).

These programs exhibit the feasibility of maintaining a similar EAT program at the Milton Hershey School. The current programs also display the need for such a program for this particular population of students in this unique setting. There are two main themes present across the three programs that are hoped to be achieved in the MHS EAT program; increased self-concept and increased perceived support from a social network. Increased self-concept is thought to include not only an increased self-esteem but an overall feeling of mastery and control over an independent self. Overall, the MHS EAT program aims to increase the emotional health and independence of the children involved in order to increase their self-concept as well as ability to garner support from those people in their social network.

### **The Milton Hershey School Population**

The Milton Hershey School was founded in 1909 by Milton Hershey and his wife, Catherine. The focus of the school is to provide a free education to under-served and under-resourced children (Milton Hershey School, 2010). As stated in the Deed of Trust for the school, in order to attend the school, students must “come from a family of low-income (69% of families are at or below the national poverty line), limited resources, and social need, be age 4–15, have the ability to learn, be free of serious emotional and behavioral problems that disrupt life in the classroom or the home, be able to take part in the school’s program, and be born in the United States” (Milton Hershey School, 2010).

The school is both a home and a school for about 1800 students in grades pre-kindergarten through 12th grade. A majority of the students are from the state of Pennsylvania, although 29 other states including the District of Columbia are also represented in the student population (Milton Hershey School, 2010). The students can attend school year round and live in home environments called student homes with a married couple who are referred to as “houseparents.” Once enrolled in the school the student’s biological family or nominator is called the student’s “sponsor.” Each of the student homes contains 10 – 14 students all from one educational level (elementary, middle, or high school). The houseparents and the other students living in the student home become the student’s extended family. It becomes imperative for the student to form new relationships and bonds with their extended family, teachers, mentors, and other students. The equine assisted therapy program is intended to help with the student’s social and emotional intelligence and their ability to bond with another human being through forming a bond with the horse. The horse may also act as a transitional object for the students who are leaving their home to live and learn in a new environment.

The population of the Milton Hershey School is appropriate for AAT, and specifically EAT programs. EAT has been found to be most beneficial for those children and adolescents who are culturally disadvantaged, socially delayed, and who have not had the opportunity to form healthy and productive relationships with adults (George, 1988). By definition, MHS children are both culturally and socially disadvantaged. While not all students at MHS are involved in psychological services, many of them could benefit from learning skills to help them regulate their emotions and self-soothe when care takers are not available. Although the deed of trust states that a child “must be free of serious emotional and behavioral problems,” many of the students at MHS require psychological or behavioral services during their time at MHS. There are several reasons for this: students may unknowingly come in with symptoms of a psychological disorder, they may enroll with a vulnerability that is exacerbated by the demands of MHS, or they may develop symptoms after their enrollment. MHS accepts students as young as four years old, so it can be difficult to predict their mental health future. Finally, MHS students would benefit from being able to form healthy and productive relationships with others because of the high social demands inherent in a residential school setting.

### **Resources**

The resources needed in order to operate an equine-assisted therapy program are substantial and EAT is rarely if ever supported by insurance policies (Karol, 2007). MHS offers a nearly unique setting and context to develop and implement an EAT program. Below, I will address the equipment, animals, and human expertise necessary to implement EAT.

### **Equipment**

Resources needed include the equipment for both the horse and the rider. Each horse requires a well fitting saddle, bridle, saddle pad and halter. Additionally lead lines that are in

good condition for each horse are recommended. Each rider requires proper riding boots (boots that are not bulky, have an appropriate heel, and provide adequate ankle support) and a helmet that is recognized as sufficiently protective by the American Society for Testing and Materials and the Safety Equipment Institute (ASTM & SEI). In addition to equipment, adequate grooming tools should be provided. These tools include a soft and hard brush, two curry combs (one metal and one rubber), a shedding blade, a mane and tail comb, a towel, a sponge, clippers, a sweat scraper, and a hoof pick for each horse (Engel, 1992). Each horse should have a tack box that contains their grooming tools for the students to use.

### **Animals**

An EAT program requires a group of horses that, in addition to the EAT human facilitators, must be evaluated for their fit within the program and trained (Cole & Gawlinski, 2000). Each horse must possess specific characteristics in order to be considered for an EAT program. According to Engel (1992), “the horse must have additional training to be virtually spook-proof to all elements in his environment and to meet the many obligations required of him in his new venture” (p. 95). Because of the delicate nature of EAT, the primary concern for the horse and rider should always be to maintain a safe environment. EAT is largely about trust and forming a safe bond between horse and child, so a dangerous horse could make forming this trust difficult or with one dangerous act could cause this trusting relationship to break down. The following EAT horse characteristics are considered the benchmark that must be achieved for a horse to be eligible to be used in an EAT program in order to maintain that safe environment.

A horse should enter an EAT program with the basic gaits and transitions between those gaits mastered. A therapeutic rider should not have to exercise or train the horse they are riding. In order to maintain an EAT horse’s balance and fitness level, it should be ridden by an

experienced rider or trainer outside of the time spent in the EAT lesson. The EAT horse should have also learned voice commands and be able to respond to those commands within the context of the EAT lesson. If the horse is able to be controlled by the EAT facilitator, the child riding has the ability to focus on their own riding skills instead of correcting the horse's behavior. This gives the rider added independence and feeling of safety (Engel, 1992).

In addition to being balanced and fit, an EAT horse must be even tempered and be made as spook-proof as possible. It is common knowledge in the field of EAT that no horse is spook-proof and that there is always the possibility of a new sight or smell that might catch the horse off guard. However, the trainer or EAT facilitator should be familiar with the nuances of each horse in order to know what to expect from each horse participant (Engel, 1992). While being trained and evaluated to become part of an EAT program, the horse should be introduced to a variety of sights, smells, sounds, and people in order to be desensitized to more and more unique situations. The horse should also be exposed in advance to any games or activities that might take place during EAT (Engel, 1992).

With all the training and handling that occurs with an EAT horse, the final essential is communication between handlers. EAT horses may have an owner, a trainer, a lesson coach, a mental health worker, a barn staff member, and an EAT student working with them so communication among human parties is vital. Lack of communication could lead to the horse being under or over exercised, medicated or fed improperly, or overall mishandled, endangering both horse and rider (Engel, 1992). A written schedule or journal that is available and visible for all parties to utilize and contribute to is recommended. This written document should include documentation of the horse's care such as feedings and exercise and can be made a part of the therapeutic programming (Ross, 1992).

**Professional Staff**

An EAT program requires a staff of trained professionals, one of which should have a clinical background. Ideally this trained professional should, within her scope of practice, help the participants set goals for EAT, measure their progress towards these goals, and then be able to evaluate the EAT process (Cole & Gawlinski, 2000). A profession staff member could be a psychiatric nurse, clinical social worker, clinical psychologist, or psychiatrist, ideally at the masters or doctoral level. This professional should have an in-depth knowledge of horses, horseback riding, and may have even done some riding or coaching in the past. If the clinical professional does not have appropriate experience with horses and horseback riding then at least one of the other professionals should have extensive horse experience. PATH International, has numerous workshops and conferences available to train profession staff in the area of therapeutic riding and coaching. Staff members who do not have in-depth knowledge about horses, riding, or coaching should be encouraged to attend some PATH trainings. PATH trainings include but aren't limited to information about lesson planning, tack and equipment, and coaching. The ratio of professional staff to students in the ring during the EAT lesson should be no less than 1 to 3 (Rector-Morken, 1992).

**Template for Program Evaluation**

Program evaluation for EAT programs is highly encouraged and recommended for ongoing program refinement and validating the substantial investment such a program requires (Burch, 2000). As part of designing this program, therefore, an evaluation design is provided as well. Evaluation of the MHS EAT program should produce evidence of student change that house parents and sponsors alike can recognize and appreciate. By evaluating the program through surveying the students directly, student progress could be monitored and treatment

planning and recommendations could be suggested for each individual student. MHS is a socially demanding environment, like any group living situation, and the measures outlined in this proposed program evaluation could give valuable information about how a student copes and adjusts in their environment. Program evaluation may also give valuable information about which students may benefit most from the EAT program (Burch, 2000).

For the MHS EAT program, the most important outcomes include enhancements to the child's self-concept or perception, the child's perception of the support they receive from their social environment, and the child's ability to relate to their environment and the people in it. Increased self-concept and increased perceived social support are the two most important outcomes that this EAT program aims to produce. These variables were chosen based on the research that is currently available on the benefits of EAT programs. Also, improvements in self-concept and perceived social support are areas that would have the most benefit for MHS students, given their background and current living situation.

## **Methods**

**Setting and participants.** Suggested participants include children matriculated from grades 2 through 8, or ages 7–13. Both house parents and legal guardians would be contacted about the evaluation of the EAT program when their student entered the therapeutic group. It is common to have students and caregivers complete surveys pre and post groups at MHS.

***Step 1: gathering participants.*** In order to assist in gathering participants for the EAT program, the Cone's template matching approach could be used (Foster & Mash, 1999). Following Cone's template matching system, first house parents, teachers, and therapists or the stakeholders of MHS would be given the profile of the student who could benefit from EAT the most. This profile should be generated by the individual who is implementing the EAT program

at MHS, and therefore the person most familiar with the intervention. This individual should also oversee the EAT program while it is running as well as monitor the evaluation process. This “EAT intervention specialist” could also be involved in the program in a more hands on way such as coaching or assisting in the riding ring.

The students hypothesized to benefit the most from the EAT program would most likely have low self-esteem, little confidence in their own abilities, and lack feelings of mastery over their environment. The students may also lack the basic skills to initiate and maintain close and meaningful peer or adult relationships. They may frequently miss or misinterpret social cues and nonverbal communications. These students may have little success with working collaboratively with peers or adults and therefore have a lack the trust in their social support network. Finally, the students who could benefit most from EAT may lack the skills necessary to practice self-care and to care for another.

The stakeholders should be ask to rank order which of these skills or qualities they deem to be most important in the MHS setting. Students who are recommended for the EAT program would then be triaged for acceptance based on which skill areas they lacked the most and how important those areas are to stakeholders.

***Step 2: determining which children could benefit most from EAT.*** The stakeholders would then be asked to refer children for the EAT program based on a short description of the program and its hypothesized benefits. The profile created by the intervention specialist and rank ordered by stakeholders would be used to determine which of the students recommended for EAT need improvement in the skill areas (Foster & Mash, 1999). This method of interviewing stakeholders would help to determine which students at MHS will benefit most from an EAT program by listing the desired prosocial behaviors and relationship skills most necessary at MHS

(Foster & Mash, 1999). It is especially important in this setting to narrow down participants because most of the students at MHS will most likely meet the baseline criteria for the EAT program (low self-concept and difficulty interacting with their social environment).

It would be important to determine, through Cone's template matching system, which students have the potential to improve the most through the intervention of EAT. These students would possess the least amount of the prosocial behaviors and relationship skills in the above student profile and would be offered the EAT program first. It is recommended that the school use this procedure to ration the availability of the program due to the amount of resources needed to run an EAT program including horses, staff, instructors, and time in the riding ring. All recommended participants could be offered the EAT program over time. The participants determined to need the EAT program the most through the Cone's template matching system would be randomly assigned into either an experimental group (participating in the fall semester of EAT) or a waitlist control group (participating in the spring semester of EAT).

A typical riding group consists of three students with one instructor and one aide (Engel, 1992). The EAT program should aim to have six students in a riding group, with an extra aide. The EAT program meets twice a week for eight weeks. Two groups of six students each should run each semester for a total of twelve students participating in the fall, twelve students participating in the spring, and twelve students participating in the summer. One group could meet on Monday and Wednesday and the other group could meet on Tuesday and Thursday with a make-up day for inclement weather or school closings on Friday. The number of participants was determined in order to give more students the chance to participate in the EAT program. Also, with more of a variety of horses participating the greater potential for social interactions between horses exists, which is a large part of the EAT program. The program evaluation would

aim to include two groups of twelve students each, which have the same horses, instructor, and two aides. Two groups will be completed during the fall semester, two groups during the spring semester, and two groups during the summer semester. Each group would meet for eight weeks.

An experimental group of students would participate in the fall semester of EAT; the waitlist control group of students would participate in the spring semester of EAT. Similar to a study done by Bass, Duchowny, and Llabre, a pre and post analysis will be completed prior to and immediately following the eight weeks of EAT (Bass, Duchowny, & Llabre, 2009).

### **Ethical Considerations**

Should MHS elect to complete a program evaluation, it would be of paramount importance that the legal guardians and the house parents of the participants are aware of exactly what they are volunteering to do, in other words that they give their voluntary informed consent. Mertens (2005) describes informed voluntary consent as “without threat or undue inducement (voluntary), knowing what a reasonable person in the same situation would want to know before giving consent (informed), and explicitly agreeing to participate (consent)” (p. 34). Participants would be required to read and sign a consent form prior to being included in the EAT program evaluation. The participants should also have an opportunity to ask questions about the consent form to ensure they fully understand what they are volunteering for.

When students are enrolled at MHS, their legal guardians sign a consent form which includes the student’s participation in individual therapy as well as any group therapy experience offered at MHS. The procedure for when a student is either recommended for therapy or requests therapy for him or her self is for the identified clinician to attempt to contact the legal guardian to inform them that their student is interested in participating in therapeutic services. Similarly, when a student is recommended for a group therapy experience at MHS, the student’s therapist

or the therapist running the group, contacts the legal guardian to inform them of their child's interest in participating in a program and to give the guardian a brief description of the program. This procedure for informed consent should be followed for the EAT program.

Included in the consent form (Appendix A) for participants, house parents, and legal guardians should be a brief description of the program and what the purpose of the program and program evaluation is. The consent form should then go on to describe what the participants in the program evaluation are going to be required to do. The consent form should also mention that this study involves minimal risk for the participants and that there may be no direct benefits for participating in the program evaluation. Finally, it is important to highlight in the consent form that participation in the program evaluation is voluntary and participants can drop out anytime without consequence.

### **Data Collection**

In order to assess the participant's perception of their self, The Self-Perception Profile for Children (SPPC: Harter, 1985) could be used. The students could be asked to complete the 36-item scale prior to the start of the 8 week EAT program, and at the conclusion of the EAT program. This survey contains five specific sub-scales including scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct as well as a global measure of self-worth. The 36 items are divided evenly among the 6 domains. The SPPC has been used to study the impact of bullying and victimization, the role of self-perception in clinical settings, and in the developmental and social developmental literature (Shevlin, Adamson, & Collins, 2003).

The SPPC has moderate overall internal consistency with a range of 0.71 to 0.84 with internal reliabilities for the individual subscales ranging from 0.62 to 0.74 (Shevlin et al., 2003).

Internal consistency for the subscales yielded a Cronbach's Alpha score of 0.71 to 0.82 (Francis & Piek, 2003). It is suggested by Shevlin et al that the SPPC may be best at measuring global self-worth across time rather than measuring the individual subscales. It was also suggested by Shevlin et al that the SPPC is preferable for evaluating intervention programs with comparatively short intervention times so as to control for natural participant maturation.

In order to assess the participant's perception of the social support they get from their environment, the Social Support Scale for Children (SSSC; Harter, 1985) could be used. The SSSC is a 24 item survey designed to measure the student's perceived social support from four sources including parents, teachers, classmates, and friends. Each area contains six items, with higher scores indicating a higher level of perceived support. Reliability scores for the SSSC ranged from 0.72 to 0.82 (Francis & Piek, 2003). Validity for the SSSC has been demonstrated through correlating the four subscale areas of the SSSC with the Global Self-Worth scale of the SPPC (Francis & Piek, 2003).

The MHS EAT program is hypothesized to create an increase in participants' self-concept, and therefore an increase in the mean SPPC, by increasing the participants' sense of mastery over both horse back riding and their ability to care for a large and powerful animal. The EAT program is hypothesized to create an increase in participants' perception of the support (mean SSSC score) they receive from their social environment by improving their ability to read and understand their social environment through social cues and nonverbal communications. It is also hypothesized that the EAT program will increase participants' ability to form meaningful, mutually caring and trusting relationships with peers and adults which could also increase their mean score on the SSSC.

Finally, it would be valuable for the program evaluation to include a comparison of the characteristics listed in the student profile and rank ordered by stakeholders on the Cone's template matching approach. In other words, did the participants improve in the identified desirable prosocial behaviors and relationship skills after participating in the EAT program. This data would be particularly important for stakeholder buy-in; are the characteristics that the stakeholders are most interested in students at MHS possessing, improving by participating in the EAT program.

The SPPC and the SSSC would be given to participants two times by the evaluators: one week prior to the start of the EAT program and one week post participation in the eight week EAT program. Improvement in the characteristics determined to be important by stakeholders would be evaluated by interviewing stakeholders one week post participation about the students they had in the EAT program.

### **Hypotheses and Data Analysis**

The hypothesis is the children will endorse a more favorable self-perception as well as a higher level of perceived social support following EAT. It is also hypothesized that there will be a correlation between the two variables; higher self-perception will correspond to higher perceived social support. In other words, it is expected that after participating in the MHS EAT program, students' overall mean overall self-worth score on the SPPC will increase and their scores in each of the four domains of the SSSC — teacher, parent, classmates, and friends — would improve.

A repeated measures analyses of variance (ANOVA) should be completed to examine whether the eight week EAT program resulted in an increase in global self-worth score from the SPPC and the total perceived social support scores from each of the four groups (parents,

teachers, classmates, and friends) on the SSSC. Once the data collection is complete, the mean self-perception level and the mean perceived social support level of the experimental group should be compared to the mean self-perception level and the mean perceived social support level of the waitlist control group across time one (prior to the Equine-assisted therapy) and time two (following the Equine-assisted therapy). In the proposed analysis, self-perception level and perceived social support level are the dependent variables and Condition (Treatment versus Waitlist) and Time (pre-test versus post-test) are the independent variables.

A repeated measures ANOVA with two independent variables yields a test with three effects; two main effects and one interaction effect. There is a main effect of Time, a main effect of Condition, and an interaction effect of Time and Condition. The question being addressed by the analysis is whether the treatment condition experiences greater improvements in self perception and perceived social support across the eight weeks (Time) of the EAP program, than the wait list condition. In order to test this research hypothesis the interaction effect of Time and Condition (Treatment vs. Waitlist) should be analyzed.

Using an effect size of 0.25, and  $\alpha = 0.05$ , the necessary N (sample size) needed for power of 0.80 is 64 (Cohen, 1992). If the staff at MHS wanted to complete the proposed program evaluation they would need to survey 64 student participants in the EAT program and have 64 students take the survey as a part of a control group. With twelve students potentially participating each semester (and with twelve students on the waitlist each semester) MHS would have to run the EAT program for at least six semesters to accumulate a sufficient sample size to complete the program evaluation.

## References

- Bass, M.M., Duchowny, C.A. & Llabre, M.M. (2009). The effect of therapeutic horseback riding on social functioning in children with autism. *Journal of Autism and Developmental Disorders*, 1261-1267.
- Burch, M.R. (2000). Program evaluation and quality assurance in animal-assisted therapy. In A. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 129-148). San Diego, CA: Academic Press.
- Cantanzaro, L.M. (2003). Historical perspectives on the human-animal bond. *American Behavioral Scientist*, 7-15.
- Cawley, R., Cawley, D. & Retter, K. (1994). Therapeutic horseback riding and self-concept in adolescents with special education needs. *Anthrozoos*, 129-134.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 155-159.
- Cole, K.M. & Gawlinski, A. (2000). Animal-assisted therapy: The human-animal bond. *American Association of Clinical Nursing Clinical Issues*, 139-149.
- Copeland, J. (1992). Three therapeutic aspects of riding for the disabled. In B.T. Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 19-20). Madison, WI: Omnipress.
- Engel, B.T. (1992). The grooming tools for the therapeutic riding horses. In B.T. Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 181-182). Madison, WI: Omnipress.

- Engel, B.T. (1992). The horse's reaction to his environment. In B.T. Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 156-157). Madison, WI: Omnipress.
- Foster, S.L. & Mash, E.J. (1999). Assessing social validity in clinical treatment research issues and procedures. *Journal of Consulting and Clinical Psychology*, 308-319.
- Francis, M. & Piek, J.P. (2003). The effects of perceived social support and self-worth on depressive symptomatology in children with and without developmental coordination disorder (DCD). 38<sup>th</sup> Annual Conference, October 2<sup>nd</sup>, 2003, Perth, Australia: The Australian Psychological LTD, (pp. 70-74).
- George, M. (1988). Child therapy and animals: A new way for an old relationship. In C. Schafer (Ed.), *Innovative interventions child and adolescent therapy* (pp. 400-418). New York: John Wiley & Sons.
- Green Chimneys. (2010). Green Chimneys Home. Retrieved from <http://www.greenchimneys.org>
- Hines, L. (2003). Historical perspective on the human-animal bond. *American Behavioral Scientist*, 7-15.
- Horse Worx and Equitherapy Centre. (2011). Horse Worx and Equitherapy Centre Home. Retrieved from <http://www.horseworx.net/>
- Karol, J. (2007). Applying a traditional individual psychotherapy model to equine-facilitated psychotherapy (EFP): Theory and method. *Clinical child psychology and psychiatry*, 77-90.

- Katcher, A. & Wilkins, G.C. (1998). Animal assisted therapy in the treatment of disruptive behavior disorders in children. In A. Lundberg (Ed.), *The environment and mental health: A guide for clinicians* (pp. 193-204). New Jersey: Lawrence Erlbaum Associates.
- Kogan, L.R., Granger, B.P., Fitchett, J.A., Helmer, K.A., & Young, K.J. (1999). The human-animal team approach for children with emotional disorders: Two case studies. *Child and Youth Care Forum*, 105-121.
- Lawrence, E.A. (1992). The human-horse bond. In B.T. Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 1-2). Madison, WI: Omnipress.
- Macauley, B.L., & Gutierrez, K.M. (2004). The effectiveness of Hippotherapy for children with language-learning disabilities. *Communications Disorders Quarterly*, 205-217.
- Mallon, G. (1992). Utilization of animals as therapeutic adjuncts with children and youth: A review of the literature. *Child and Youth Care Forum*, 53-67.
- Mallon, G., Ross, S.B., & Ross, L. (2000). Designing and implementing animal-assisted therapy programs in health and mental health organizations. In A. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 115-127). San Diego, CA: Academic Press.
- Martin, F. & Farnum, J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western Journal of Nursing Research*, 657-670.

McParland, C. (1992). Therapeutic horseback riding: A school district program. In B.T. Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 520-522).

Madison, WI: Omnipress.

Melson, G.F. (2003). Child development and the human-companion animal bond. *American Behavioral Scientist*, 31-39.

Mertens, D.M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage Publications INC.

Milton Hershey School. (2010). Milton Hershey School Home. Retrieved from

<http://www.mhs-pa.org>

Professional Association of Therapeutic Horsemanship International. (2012). Professional

Association of Therapeutic Horsemanship International Retrieved from

<http://www.pathintl.org/>

Parshall, D.P. (2003). Research and reflection: Animal-assisted therapy in mental health settings. *Counseling and Values*, 47-56.

Rector-Morken, B. (1992). Spiritual psychology: An approach to therapeutic riding. In B.T.

Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 618-622).

Madison, WI: Omnipress.

- Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals in storytelling. *Child and Adolescent Social Work Journal*, 177-185.
- Ross, S.B., Jr. (1992). The residential farm school approach. In B.T. Engel (Ed.), *Therapeutic riding programs: Instruction and rehabilitation* (pp. 517-519). Madison, WI: Omnipress.
- Shevlin, M., Adamson, G., & Collins, K. (2003). The self-perception profile for children (SPPC): A multiple-indicator multiple-wave analysis using LISREL. *Personality and Individual Differences*, 1993-2005.
- Vidrine, M., Owen-Smith, P., & Faulkner, P. (2002). Equine-facilitated group psychotherapy: Applications for therapeutic vaulting. *Issues in Mental Health Nursing*, 587-603.

## Appendix A

**Youth Consent to Participate in Survey**

You are being asked to participate in a research study conducted by The Milton Hershey School. This study is designed to collect data before the start of and following the completion of the Equine Assisted Therapy Group (EAT) in the Elementary and Middle School Divisions. The purpose of this study is to evaluate the effect EAT has on participants' self-concept and their perception of the social support they receive from their environment. Your responses may also be used to enhance the effectiveness of the EAT program.

Once all of your questions have been answered to your satisfactions should you decide to participate in this study, you will be asked to sign this consent form. The surveys will be administered to you, by your therapist, at two different times and should take no more than 15 minutes. The investigator does not perceive more than minimal risks from your involvement in this study.

Your specific responses and results will be kept strictly confidential. Your specific responses continue to be held in strict confidence, and will be shared only in the aggregate (i.e. as part of everyone's responses). No personally identifiable information will be disclosed.

Your participation in this study is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you are free to withdraw at any time without consequence of any kind. If you have any questions about the surveys during the time of completion or following completion please contact your therapist.

If you check "yes" below, it means you have decided to participate and have read everything that is on this form. You will be given a copy of this form to keep.

Yes, I would like to participate in the study

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Guardian (if under age 18)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Therapist

\_\_\_\_\_  
Date

Appendix B

**Hoof Prints for Healing**  
**An Equine Assisted Therapy Program**

**Designed by Alison M. Roy**

## **Mission Statement and Program Description**

**Mission statement:** To provide a unique school with a therapeutic program targeting enhanced self-concept and the development of trusting, nonjudgmental, and reciprocal relationships.

**Program Description:** Program runs for 8 weeks and meets twice a week for 90 minutes. Each day a new topic is introduced that has both a riding aspect and a therapeutic aspect. Each participant is assigned the same horse for the entire 8 weeks - this horse becomes their “project” and they are responsible for the horse’s care and well-being. The participants are also responsible for learning about their horse’s markings, coloring, breed, size, and personality. The first 3 weeks are devoted entirely to learning how to be safe with and care for the horse. During the first 3 weeks the focus of the therapeutic activities is getting the participant to know their horses inside and out; their personality, markings, and how they communicate. Riding begins at week 4 and participants begin to utilize all the skills they’ve worked hard to learn. Weeks 4-8 start to move the relationship between horse and rider to a deeper level. Participants begin to really care for their horse through preparing meals and understanding their daily routine. Participants then apply what they’ve learned about how their horse communicates to how horses interact with each other, and eventually how humans interact with each other. The therapeutic activities of weeks 4-8 also begin to deepen the bond between rider and horse through having them complete games and tasks together as a team. Two of the tasks are specifically focused on the concept of trust, a focus of the later EAT sessions. Finally, the horse and rider pair compete in a horse show together where they must show their unity by dressing in team colors and competing in various areas which test the bond they have developed over 8 weeks.

\* A lesson plan is available for this topic area

**Week One Lesson Plans****Day One: The Origin of the Horse and Horse Terms**

## Classroom Goals

- The history of the horse
- Horse breeds versus types
- The life cycle of the horse
- Parts of the horse
- Horse colors and markings

## Therapeutic Activity

- Meet and greet with the horses
- Pony identification sheet

The focus of this week's therapeutic activities is to introduce the participant to their horse and companion for the next 8 weeks. The pony identification sheet is the first task the participant completes that focuses on getting to know their horse and therefore starting the bond with the animal they are going to care for, for the next 8 weeks.

- Handout 1: History of the horse
- Handout 2: Life cycle of the horse
- Handout 3: Parts of the horse
- Handout 4: Horse Markings
- Activity Page 1: Pony Identification sheet

**Day Two: Preparing to Ride – Learning the Tack**

## Classroom Goals

- English saddle versus Western saddle
- Bridles and bits
- The halter and lead rope
- Blankets, boots, leg wraps, saddle pads, etc.
- Rider's turnout both informal and formal

## Therapeutic Activity

- Practice cleaning and storing your horse's tack

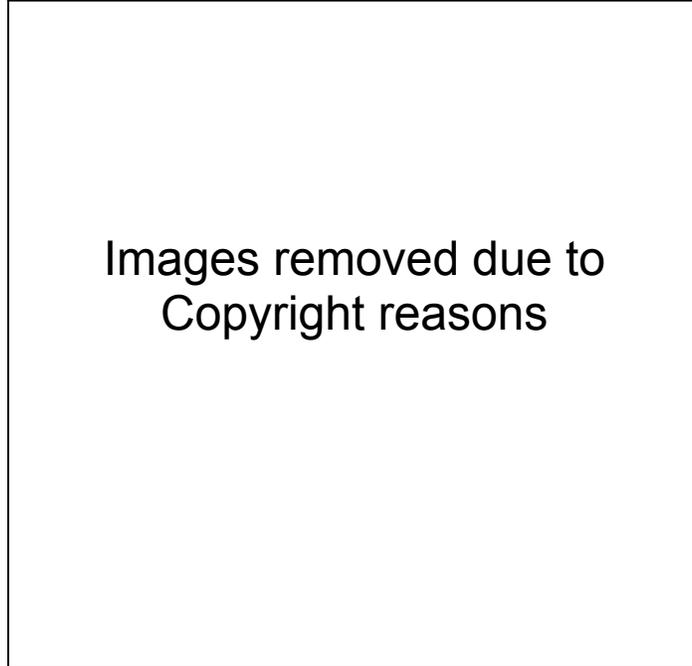
The task of learning about tack and how to care for it is part of the participants learning how to care for another. The participants start to take ownership and pride of their horses and their horse's belongings. By designing a saddle pad participants are asked to think about their horse's likes, dislikes, and personality. The goal is to help the participants along in the process of forming a bond with their horse that other participants or people wouldn't necessarily have with that particular animal.

- Handout 5: Tack and equipment

Handout 6: Rider's turnout  
Activity Page 2: Design Your Own Saddle Pad



Handout 1: History of the horse



Handout 2: Life cycle of the horse

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reasons

Handout 3: Parts of the horse



Images removed due to Copyright  
reasons

Handout 4: Horse Markings

## **Activity Page 1: Pony Identification Sheet**

Your horse is as unique as you are – make sure everyone else knows it! Draw your horse and make sure to include color, markings, breed, type, etc.

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reasons

Handout 5: Tack and equipment



Handout 6: Rider's turnout

## **Activity Page 2: Design Your Own Saddle Pad**

Design a saddle pad with your and your horse's personalities in mind!

## **Week Two Lesson Plans**

### **Day One: Handling a Horse**

#### Classroom Goals

- Comparing horse body language to human body language\*
- Fight or Flight!\*
- Ground rules\*

#### Therapeutic Activity

- Practicing ground rules to establish trust with your horse

Establishing and practicing ground rules teaches the participants to respect their horse and their horse's space. The goal of this therapeutic activity is to get the participants to form a mutually respectful relationship with a large and powerful creature. Ground rules require participants to move slowly, respect space, work quietly, and really observe their horse's nonverbal communication. Participants should be taught how to transfer these ground rules to their relationships with peers and adults, and encouraged to use them when interacting with other participants in the program.

Handout 7: Horse social cues

Activity Page 3: Horse Observation sheet

### **Day Two: Grooming**

#### Classroom Goals

- Rationale for grooming\*
- Tools and grooming techniques
- Review of ground rules
- Tacking-up

#### Therapeutic Activity

- The therapeutic touch of grooming – how touch can be relaxing and nurturing\*
- Self-soothing techniques\*

Touch can be relaxing, soothing, comforting, nurturing, and a way to communicate trust and love. Many of the participants in this EAT program may not have experienced soothing or comforting touch in their lives. Soothing another can teach participants nurturance skills, and self-soothing can teach participants a valuable coping skill to be used for their own emotional regulation. See the lesson plans for this section for more information on this therapeutic activity.

Handout 8: Grooming tools

Activity Page 4: Therapeutic Touch

## Horse Social Cues

### Ears



### Tails



### Hooves



Handout 7: Horse Social Cues

## Activity Page 3: Horse Observation Sheet

Spend some time getting to know your horse. Observe their body language, movements, and their reaction to you. **HINT:** be sure to check out their ears, tail, and hoof movements!

### My horse likes...

Touch

Tastes

Sights

Sounds

### My horse doesn't like...

Touch

Tastes

Sights

Sounds

**My horse communicates with me by...**

Images removed due to Copyright reasons

- 1. Curry comb the whole body. DO NOT curry comb the face or the lower legs**
- 2. Use the Dandy brush (stiffer bristles) over the whole body to get rid of the dirt you got to the surface using the Curry. DO NOT dandy brush the face**
- 3. Use the Body brush (softer bristles) over the whole body to add shine. This can be used gently on the face and lower legs**
- 4. Use the hoof pick only with adult supervision**

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due to Copyright  
reasons

## Activity Page 4: Therapeutic Touch

Touch can be a great way to connect with another being – especially your horse! Draw an outline of your horse and during a grooming session take notes of where your horse enjoys touch and what kind of touch makes them relax most.

Also notice your own body's reaction to grooming. Does touching your horse relax you too? What other kind of touch relaxes you in and out of the ring?

## Comparing Horse Body Language to Human Body Language

Horses and humans alike show different emotions through their body movements, facial expressions, and body positions. Observing horses and their body language can give you a better idea of what they are thinking and feeling, and may help you to understand what they are doing and why. Here are some common themes in horse body language:

**TAILS** – Horses swish their tails for a variety of reasons. Observe whether there are flies bothering your horse. If there are, the horse may be swishing its tail in order to swat at flies (often the most common reason a horse will swish its tail).

A horse will also swish its tail when angry or more commonly when frustrated. More advanced riders often experience their horse swishing their tail during riding exercises that are new or challenging to the horse. A good example of this is lead changes.

**EARS** – Horse's ears are historically their lifeline. They constantly swivel their ears to make sure they are hearing what is going on in all directions in their environment. When in the wild this is important for a horse's survival; they need to be observant of approaching predators. Observe your horse's ears – are they pinned forward and focused on you?

A horse can also show anger and upset through their ears. When the horse's ears are pinned back against their head it's a sign that they are not happy with their environment. Are there horses that your horse consistently pins their ears around? This body signal from a horse should be observed with caution and always watch for kicking or biting when a horse pins their ears.

**FEET** – A horse often stomps their feet to remove flies. They can also stomp out of frustration or boredom. Horses paw and stomp if they are bored and may need to move around. They can also do this when asking for something such as food.

Horses kick out for a variety of reasons. Well trained and even tempered horses rarely kick out at their human companions intentionally. It is good practice to always be observant of your horse's body language and environmental preferences to predict and prevent kicking.

Now think about how humans communicate non-verbally or with their bodies. What might you do with your eyes, mouth, hands, arms, legs, feet, etc. when you feel mad, sad, happy, excited, or ready to run? Share examples of when you felt one of these emotions and what that emotion did to your body.

## **Fight or Flight!**

When faced with a predator or danger some animals stand and fight (have students come up with examples such as lions, tigers, etc.) and other animals choose flight (again have students come up with examples such as deer/antelopes, zebras, and of course horses).

Horses are grazing animals. In the wild they have their heads down eating grass for most of the day which leaves them somewhat vulnerable to predators. They have some defenses though; their eyes are situated on the side of their head so they have excellent peripheral vision and they have ears that swivel to allow them to hear in many different directions. When horses hear or see an approaching enemy their body gives off signals; their adrenaline rushes, and in a matter of seconds they have made the decision to flee.

Humans are the same way. Your body responds in a certain way when scared or threatened; your pulse races, your hands may get sweaty, your pupils dilate, and then you have to make a decision of how to act – fight or flight.

Have the students describe in writing a situation in which they were scared and how their body responded. What did your five senses tell you about your environment that it was judged to be threatening? What signals did your body give you? What did you decide to do – fight or flight? What were the outcomes of that decision?

## **Ground Rules**

**Approach SLOW**

**Wide Circle** (HINT: think about a circle wide enough so they couldn't kick you)

**Bend at the WAIST** (not at the knees and don't EVER kneel or sit on the ground around your horse)

**Always have a HAND on the HORSE**

**Observe the BODY LANGUAGE at all times**

## **Rationale for Grooming and Therapeutic Touch**

Why do we need to groom our horses? We groom to remove dirt and hair that would otherwise build up and cause irritation and discomfort. Think about how it feels to put your sock or shoe on and realize that you have a small pebble or sand stuck between your skin and the fabric – it's uncomfortable! Putting a horse's saddle on before you do a thorough grooming feels the same way.

In addition to providing your horse with comfort, grooming can help to create a bond between you and your horse. Think about it – you are caring for another creature all by yourself. And that creature just happens to stand anywhere from 4-6 feet at their withers and can weigh up to a ton! Grooming can be comforting, relaxing, and nurturing for your horse and for you! Take pride and show some love in grooming your horse.

## **Self-Soothing Techniques**

Much like the grooming can be an enjoyable and relaxing experience for your horse, self-soothing or self-care techniques can be comforting as well - especially when you can't make it to the barn. Here are some ideas for self-care that can be done at your student home, with friends, or own your own.

**Nail (hoof) Care** – Complete your own mini manicure! Take time to file, shape, and soak your hands in warm water. Paint, or get a friend to help you paint, your nails fun colors. If you don't feel like painting, finish the manicure with hand massage using your favorite lotion.

**Hair (mane and tail) Care** – Just brushing your hair can be relaxing. Try practicing new hair styles on yourself or your friends who are nice enough to volunteer. You can even practice your horse braiding! Next time you wash or condition your hair take time to really massage the products into your scalp. Take time to notice how the warm water feels on your scalp and neck.

**Body** – Next time you are relaxing watching television or hanging out practice simple self-massage by just simply using your favorite lotion and massaging it into your hands, arms, feet, and legs. You can also massage your own shoulders. Feel and observe the tension leaving your body. Alternate using hot and cold compresses to relieve stress – which do you prefer? Does hot feel better on one area and do you prefer cold on another?

During touch self-care you can also use other coping skills such as deep breathing and counting to 10.....

**Week Three Lesson Plans****Day One: Riding**

Classroom Goals (completed in the riding ring with adult live demonstration)

- Review tacking-up and grooming
- Mounting and adjusting stirrups
- Practicing the proper seat position
- Gaits

Riding Goals

- Walking with your horse
- Getting comfortable in the saddle
- Airplanes and bending\*
- Adding a pole\*

Therapeutic Activity

- Caring for another – learning about riding aftercare for you and your horse\*

Riding aftercare is a continuation of grooming – it's a way for participants that they care about their horse and their horse's well-being, they take pride in the way their horse looks and feels, and it's another way for participants to nurture another creature. Participants should take away the ability to nurture and care for another as well as an increased sense of bonding with their horse from this unit combined with the grooming unit. This concept can be highlighted through the completion of Activity Page 5 which requires students to sum up their caretaking responsibilities through writing or other creative outlets.

Activity Page 5: What Does My Horse Need from Me sheet

**Day Two: Riding**

Classroom Goals

- Repeat from Day One

Riding Goals

- Repeat from Day One

Therapeutic Goals

- Repeat from Day One

## **Activity Page 5: What Does My Horse Need From Me**

Your horse has many needs from food to water to medications to exercise and of course LOVE! Write, draw, sketch or collage about what you give to your horse.

## **Airplanes and Bending**

Doing exercises on the back of your horse is a great way to get comfortable in your saddle. Exercises can also help you learn how it feels to move with a horse.

Have the students complete the following exercises with a ground walker as the student will not be able to simultaneously hold the reins:

### **Airplane wings**

Students should have both arms extended at their sides parallel to the ground while moving. Have them tilt their airplane wings slightly to the left and to the right. Have them swivel so their airplane wings become parallel to the horse's back and one hand is pointed towards the horse's ears and the other is pointed towards their horse's tail.

### **Bending**

Start in the airplane position then have students alternate touching their right toes in the stirrup and their left toes in the stirrup. Have students reach forward to touch their horse's ears and then switch to lie down on their horse's back.

Adding a pole to these exercises can increase the need for and use of balance and good riding position. Put one pole on the ground across the walking path and have the riders encourage their horses over it. Have the students complete the pole while doing the above exercises (again there is a need for ground walkers).

## **Caring for Another – Learning About Riding Aftercare**

After you are done riding your horse your work is not done – they still need some extra TLC! Horses get warm and sweaty during exercise just like you do. They need our help to help cool down and get comfortable after a tough day in the ring. Below are the steps you should take to help your horse settle in for the night.

1. Walk your horse around the ring after riding.
2. Test to make sure they are cool by feeling their chest area between their front legs. Still warm? Keep walking. Sometimes taking off their saddle and hand walking them is a faster way to help them cool down on especially warm days.
3. Make sure to remove the saddle if you haven't already done so. You may see a saddle mark from sweat where the saddle and girth touched your horse's skin.
4. Hosing your horse can be important to remove sweat build-up and to help them cool down (complete a demonstration of hosing and scraping for the students).
5. After hosing you should use a scraper to remove excess water and help dry your horse.
6. Once your horse is cooled down and rested remember to complete their evening routine for food and fresh water. You may also need to pick their stall of any manure before tucking them in for the night!

## **Week Four Lesson Plans**

### **Day One: Feeding and Nutrition**

#### Classroom Goals

Horse feed

Preparing a horse meal (prepare a meal for an EAT horse)

Demonstration in the barn on watering and feeding (have students observe either the morning or evening routine for your barn)

#### Therapeutic Activity

Preparing dinner for your horse

Create a feeding chart for your horse's barn door

Feeding and watering horses, as well as learning their daily routine for turn-out, lessons, exercise etc. is another step in the participant learning how to care fully for their horse. The goal is to get these skills to transfer to caring for other animals, and eventually other humans as well as for the participants to practice some self-care. These care-taking skills and abilities may not have been modeled for participants before and are valuable for use in everyday life – especially in the demanding environment of a residential school.

#### Riding Goals

Mastering the walk

Airplanes and other bending activities

Handout 9: Horse feeds

Activity Page 6: My Horse's Feeding Chart

### **Day Two: Games to Practice Basic Riding Skills\***

Simon Says on Horseback

Red Light Green Light

Egg and Spoon

Letter Carrier

Instructor's Choice (Feel free to add any games you have enjoyed in the past!)

Games help participants work as a team with their horse by moving together and depending on one another to make progress towards a common goal. The bond between participant and horse should be deepened through completing the Basic Riding Skills games. The stronger the bond and the trust between participant and horse the better they will most likely do with the games. Also, many of the games require the participants to remain calm and maintain their patience with their horse. Participants may have to practice coping skills to best utilize the bond they have with their horse towards completing the games successfully. The game descriptions included on page 30 give more details about each specific game's goals.

## Horse Feeds



Handout 9: Horse feeds

Activity Page 6

\_\_\_\_\_’s Feeding Chart

MONDAY	TUESDAY	WEDS	THURS	FRIDAY
AM	AM	AM	AM	AM
PM	PM	PM	PM	PM

Additional Notes:

## **Games to Practice Basic Riding Skills**

### **Simon Says on Horseback**

This is the classic game just on horses! The instructor yells out various commands such as “Simon says touch your left toe” which riders have to follow. However, if the instructor yells out a command without saying “Simon says” you DO NOT do the command. Those who do the command are eliminated and should move their horse to the middle of the ring to practice standing. The last rider walking is the winner!

This game helps students to practice their bending and airplane exercises as well as reverse direction and other ring figures.

### **Red Light Green Light**

Riders line up side by side at one end of the ring or a fenced field. When the instructor yells “green light” the riders should start moving their horses as quickly as possible without breaking the walk. When the instructor yells “red light” all riders should come to an immediate stop. Those riders that break the walk and start trotting are eliminated. Those riders that don’t stop at the red light are eliminated. The first rider to make it to the instructor is the winner!

This game helps riders practice getting their horse to do a productive walk as well as practice halting. It also has horse and rider working together towards a common goal.

### **Egg and Spoon**

Riders each start with a spoon and hard boiled egg. They are asked to complete various basic riding skills of the instructor’s choice all while balancing the egg on the spoon. A dropped egg means elimination for that round and the horse and rider should advance to the center of the ring.

This game focuses on balance and concentration while in the saddle. It helps riders to practice their seat and position while on the horse.

### **Letter Carrier**

Each rider is given a letter that they have to deliver to the mailbox set-up in the riding ring. The rider is instructed to enter the gate, deliver the letter, close the mailbox, and return to the starting gate. They have to do this as quickly and as safely as possible. Riders are allowed to trot during this exercise.

This game also has horse and rider working together towards a common goal. It helps the rider to practice steering, standing still, as well as moving quickly but safely.

**Week Five Lesson Plans**

## Working as a Team with Your Horse

## Therapeutic Activity

Part one of a Monty Roberts video on his “Join-Up” method  
Monty Roberts “Join-Up” available at [www.montyroberts.com](http://www.montyroberts.com)

The Monty Roberts Join-Up method is an excellent visual presentation of forming a trusting and therapeutic bond with a horse. Monty is often working with horses that have been traumatized and need to learn how to trust humans again. The Join-Up method is also the basis for the Invisible Lead game presented in this program during week six. A conversation should be held with participants after the viewing about their observations of what happens between Monty and his horses. Specific attention should be paid to the process the horses go through to trust Monty, the levels of trust they observe, and the bond that is formed between the two following the Join-Up. This video will hopefully give participants an idea of the type of relationship they can form with their horse and how that can be therapeutic for both the participant and the horse.

Practice the games learned in week four

Open Riding Time – Moving From the Walk to the Trot

Activity Page 7: Me and My Horse Collage

## **Activity Page 7: Me and My Horse**

Create a collage about the relationship and bond you have with your horse

**Week Six Lesson Plans**

Learning to Trust Your Horse and the Riding Process

Therapeutic Activity

Part two of a Monty Roberts video (see above for title and information)

Invisible Lead game\*

Trusting Your Two-Legged Friends game\*

The games introduced during week six focus on participants learning how to trust their horse, learning how to get their horse to trust them, and learning how to trust their fellow participants. These games also focus on communication and social interaction between both participants and their horses and between the participants themselves. Participants should be encouraged to discuss the themes of trust and bond during the week. They should also be encouraged to think about how communication and social interactions play into trusting another being – horse or human.

Open Riding Time – Moving From the Walk to the Trot

Activity Page 8: Letter of Trust

## Activity Page 8: Letter of Trust

Write a letter to a human you trust about the bond you have with you have developed with your horse. What does your horse do that makes you feel safe, listened to, trusted, and well liked.

## **Games to Learn Trust**

### **Invisible Lead**

This exercise is all about spending some time in the ring with your horse without a lead, saddle, or bridle. It's just you, your horse, and the open ring. Oh, and there's no talking! Use your body language to talk to your horse instead. What happens if you turn your back to your horse? What can you do to communicate with your horse to get them to follow you around the ring with no lead? What happens if you start running? What happens if you leave the ring? Make observations as a team when one of your fellow riders is in the ring with their horse. Have a discussion afterwards about what each rider experienced and observed. Be sure to use the words "trust", "relationship", "bond", etc. when describing what happened in the ring.

### **Trusting Your Two-Legged Friends**

Each rider will take a turn ground walking their horse through a trail obstacle course.... blindfolded! The rider leading the horse will have to depend on their fellow riders to guide them using their voices to shout out directions. This game helps to build trust amongst not only the rider and their horse but also the rider and their fellow riders.

**Week Seven Lesson Plans**

## Making Friends on Horseback

## Therapeutic Activity

- Remind students of horse social cues from week two

- Learning the rules of the road (passing and directions)

- Practicing ring figures – social interaction on horseback\*

Social interactions between the horses in the program are the focus of week seven. The participants should observe the way the horses respond to each other while they are moving together in the ring and practicing ring figures. The participants should then be encouraged to think about how the horse social interactions relate to human interactions the participants may have observed in their lives outside the ring. How do they relate to their friends? Family? People they don't get along with? Learning the basics of communication, both verbal and nonverbal, will help the participants navigate the social world they live in when attending a residential school.

## Open Riding Time – Mastering the Trot

Activity Page 9: Horse Social Interaction Observation Sheet

## **Activity Page 9: Horse Buddies or Enemies?**

It's your turn to be a horse detective! Observe how the horses interact with one another in the lesson. Do certain horses like each other or dislike each other? What body signals do they use to let the other horse know? You can use words and/or pictures to record your observations.

### **Ring Figures**

(Have students draw each ring figure after demonstration)

**Full school** – riding all the way around the ring

**Half-school** – riding in only half of the ring

**20 Meter Circle** - essentially, a 20 meter circle is a half-school circle and for beginners is the only size circle that is recommended

**Diagonals** – the rider moves from one corner on the long side to the opposite corner across the center of the ring. This is usually done to change direction.

**Tear Drops** – also used to change direction. The rider has their horse ride through the corner and then the team makes its way back towards the long side making a tear drop shape.

**Down the Centerline** – riders have their horses turn towards the center at the halfway point on the short side and move directly down the center to the opposite short side. When they reach the end the rider can alternate turning left and right to switch directions.

**Figure Eights** – another common way to switch direction. The rider literally creates a giant “8” in the ring essentially connecting two diagonals.

**Serpentines** – a great way for riders to practice steering. The serpentine cuts the ring into thirds by having the rider guide the horse through several turns.

**Week Eight Lesson Plans**

What Have We Learned Through Our Relationship with Horses

Day One Therapeutic Activity

    Create a binder of handouts and lessons

    Create a riding memento of the horse rider relationship

Day Two Therapeutic Activity

    Horse show\*

    Pony party – use your creativity for food and decorations!

Activity Page 10: Instructions for Horse Memento Project

The horse memento project has two parts. The first part is a haiku that each student creates about the relationship they have developed with their horse as well as a picture to go with the haiku. This is created on Activity Page 10.

The second part is a horse shoe picture frame. Each student should be given a used/leftover horse shoe to decorate. Each student should then have their picture taken with their horse to put behind the horse shoe like a picture frame. Finally, the students should use horse hair collected from brushes over the 8 weeks to create braids to hang the horse shoe picture frames.

Both parts of the Horse Memento Project are meant to finalize the bond between the participants and their horses. The project should be a way for participants to look back on what they've done over the past eight weeks with their horse and realize everything they've learned and the relationships they have created.

The horse show should also emphasize this bond through having the participants join with their horse to compete in various tasks that highlight the skills they've learned over the eight weeks. During the horse show the participants also dress like their horse in order to show their unity and bond. Awards at the horse show should focus on the bonds created between various participant horse dyads in addition to the riding competitions.

## Activity Page 10: Horse Memento Project

This project has two parts. The first part should go on this page: write a haiku about the relationship you have developed with your horse over the past eight weeks. A haiku has three lines with 5 syllables, 7 syllables, and 5 syllables. Add a picture to go with your haiku.

5...

7...

5...

## **Horse Show**

### **Team Uniforms**

There is a lot of preparation to get ready for the big show day! Remember to groom your horse extra well, clean all their tack, and don't forget about your clothes too. Each horse and rider is going to be competing as a team, so make sure everyone knows which horse is "yours". Make yourself matching outfits; pick a common theme, color, or pattern to make you and your horse stand out!

### **Award Categories**

Best Bond

Best Social Cues Reader

Red Light Green Light Master (repeat with all games)

Invisible Lead Pro

Best at Following Directions and Best at Giving Directions (Trust in Two-Legged Friend game)

Also have students compete in more traditional beginning show categories such as trail, and hunter hack under saddle where both rider and horse performance are judged. Instructors have some flexibility with the awards and competitions. Use your creativity and give awards for "inside jokes" that have come up during the eight weeks such as "Least Likely to Pick up Manure" or "Best at Getting Down and Dirty."

### References

The following resources can be referenced to teach many of the basic concepts in the lesson plans for this Equine Assisted Therapy Program.

Edwards, E.H. (1993). *Horses: The visual guide to over 100 horse breeds from around the world*. London: Dorling Kindersley.

Harris, S.E. (1994). *The united states pony club manual of horsemanship basics for beginners*. New York: Howell Book House.

Haw, S. (1990). *The new book of the horse*. New York: Howell Book House.