

Prevalence of Coursework in Equine-Assisted Activities and Therapies at Universities and Colleges in the United States: A Scoping Review

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An increasing number of universities and colleges in the United States are offering coursework related to equine-assisted activities or therapies. We conducted a scoping review to determine the prevalence of such coursework at higher education institutions with information on geographic location, number of courses and their focus, department through which coursework was delivered, and level of study (undergraduate or graduate). We identified 39 higher education institutions in 29 states that provided coursework in the following areas: therapeutic riding/horsemanship ($n = 71$, 64.5%), equine-assisted mental health ($n = 23$, 20.9%), equine-assisted learning ($n = 7$, 6.4%), and hippotherapy ($n = 1$, 0.9%). Survey or overview courses ($n = 8$, 7.3%) were also identified. A total of 110 courses that met inclusion criteria were offered in the 2016-2017 academic year, both at undergraduate ($n = 92$) and graduate levels ($n = 17$), with just over half of institutions delivering coursework through social science or liberal arts departments ($n = 20$, 51.3%) and the rest through animal science departments ($n = 19$, 48.7%). Several challenges emerged based on the review process related to use of terminology, understanding of professional scope and the lack of educational standards for equine-assisted fields. Our suggestions for future research include examination of curriculum content and instructor qualifications to increase understanding of the role university and college coursework has in equine-assisted practice.

Keywords: equine-assisted activities, equine-assisted therapy, therapeutic riding, university, higher education, academic institution, coursework

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The fields of equine-assisted activities (services that have learning goals but are not therapy, such as therapeutic riding) and equine-assisted therapy (treatment delivered by a credentialed therapist as part of their scope of practice) have been subject to increasing interest and growth over the past two decades (Ekholm Fry, 2013). Coursework in equine-assisted activities or therapies at universities and colleges in the United States is becoming more common, but most training opportunities in these areas are still offered outside of higher education and are unregulated. While there are many options

for non-academic training, there is also great variability among programs, particularly in the fields of equine-assisted mental health and equine-assisted learning in terms of prerequisites, level of formal education and equine competencies required of trainees, as well as length, curriculum content, and cost.

With growing numbers of courses in higher education covering content related to equine-assisted activities or equine-assisted therapies, the questions of what to teach, to whom, by whom, and how content relates to existing professional standards are central. In the United States,

professional practice standards exist for hippotherapy, provided by occupational therapy, physical therapy, and speech-language pathology professionals (American Hippotherapy Association, 2017a), but not yet for mental health professionals who include horses in treatment, outside of specific models. The same is true for the more eclectic field of horses in learning and coaching services. The Certification Board for Equine Interaction Professionals (CBEIP) provides independent certification for mental health professionals who include horses in practice and, separately, for educators and those who provide learning services. Therapeutic riding, also known as therapeutic horsemanship, constitutes a large part of non-therapy services with horses in the United States. PATH International provides practice standards for therapeutic riding and has announced that they will create an independent certification process in 2019 (PATH Intl., 2016). There are no formal educational standards provided by the two aforementioned associations, but curricula overviews for courses they provide can be found on their respective websites.

Without practice standards in some fields and lack of clarity on educational standards, it can be hard for academic institutions to know what kind of coursework to offer, and the topic of coursework in equine-assisted activities or therapies has not yielded much discussion. A search for journal articles in common database providers such as ProQuest, EBSCO and JSTOR on the topic of equine-assisted activities or therapies coursework in higher education yielded six English-language articles, out of which four were part of proceedings from the 2011 Equine Science Society Symposium and published as abstracts in a special issue of the *Journal of Equine Veterinary Science* (Brady,

Hernandez, & Guay, 2011; Burk & Gramlich, 2015; Murphy, 2011; Nicodemus, 2011). The remaining two were published in the *North American Colleges and Teachers of Agriculture Journal* (Cepica, 2005; Colston, Shultz, & Porr, 2015). One doctoral dissertation and one master's thesis were also identified (Mullen, 2010; Colston, 2014). Both discussed feasibility of implementing coursework at a specific higher education institution of their choice. All publications but one (Murphy, 2011) were U.S. specific. Two additional resources for equine coursework in higher education are publications by Almos (2013) and Bump (2009). In 2014, Middle Tennessee State University hosted a conference titled "Uniting Equine Assisted Activities and Therapies with Higher Education" (Middle Tennessee State University, 2014). No proceedings or materials were published from the meeting.

The goal of this scoping review is to determine the prevalence of coursework related to equine-assisted activities or therapies in higher education since no formal registry of such courses could be identified at the time of this review. We seek to answer the following questions: how many courses related to equine-assisted activities or therapies at universities and colleges exist in the United States? What is the geographic location (state), course focus, department through which course is delivered, and level of study (undergraduate or graduate) for each course?

Methods

A scoping review was chosen to determine prevalence of coursework since this approach is appropriate when a topic has not yet been extensively reviewed (Mays, Roberts, & Popay, 2001). Scoping

reviews are commonly undertaken to examine the extent and nature of activity in a topic area and is a relatively new approach (Arksey & O'Malley, 2005). Since reporting guidelines do not currently exist for scoping reviews, we followed the recommendation of Pham and colleagues (2014) and consulted the preferred reporting items for systematic reviews and meta-analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009) in performing this review.

Eligibility Criteria

The following inclusion criteria were used to select coursework for review:

- Course offered by an accredited, post-secondary academic institution (university or college) in the United States
- Course listed for the 2016–2017 academic year in a publically accessible, online course catalog (in the case of academic certificates, an online record of certificate being offered during 2016 or 2017)
- Course title and content specifically related to equine-assisted activities or therapies (as opposed to addressing the broader fields of animal-assisted activities or therapies, or having a multispecies approach)
- Course title and content clearly identifiable in the institution's course catalog (electives for which students generate their own course content and which are listed without a topic-specific titles could not be included in this review)
- Course content delivered in a course format (as opposed to an opportunity to work with professors on current research outside of a formal course structure)

- Course content taught directly by faculty at an academic institution (as opposed to an opportunity for field placement with a community program)

Undergraduate programs offering opportunity to combine a minor, major or emphasis in equine studies with human development, psychology or similar under a title related to equine-assisted activities or therapies but without offering any dedicated coursework on the integration of the two fields of study could not be included in this review.

Search Procedure

Coursework was identified through use of the search engine Google between March and May of 2017. Search terms *equine*, *horse*, *therapeutic*, *assisted* and *facilitated* were coupled with *university* and *college* to generate links to web pages of universities or colleges that display the search terms. The undergraduate and graduate course catalogs for the 2016–2017 academic year of each higher education institution were then examined to identify courses meeting the inclusion criteria. The list of universities and colleges with identified coursework was crosschecked against the registry of institutions that maintain voluntary higher education membership with PATH International, an association promoting equine-assisted activities and therapies (PATH Intl., 2017a), to identify potential gaps.

Undergraduate and graduate programs offering equine science or equestrian studies were identified in a separate process by reviewing *Horse School: The International Guide to Universities, Colleges, Preparatory and Secondary Schools, and Specialty Equine Programs* (Almos, 2013) and two online

directories (www.horseschools.com and www.horsechannel.com). Each program’s course catalog was then examined to identify potential majors, minors, or single courses meeting inclusion criteria. The results were crosschecked against the list of identified higher education institutions and coursework.

Data Extraction

The following data items were extracted from online records for each course that met the inclusion criteria: geographic location (state), course focus (determined by course title and, if available, course description), department through which course was delivered, and level of study (undergraduate or graduate). All items could be accessed for each course.

Results

A total of 110 individual courses meeting inclusion criteria were identified. These courses were offered by 39 higher education institutions in 29 U.S. states during the 2016–2017 academic year.

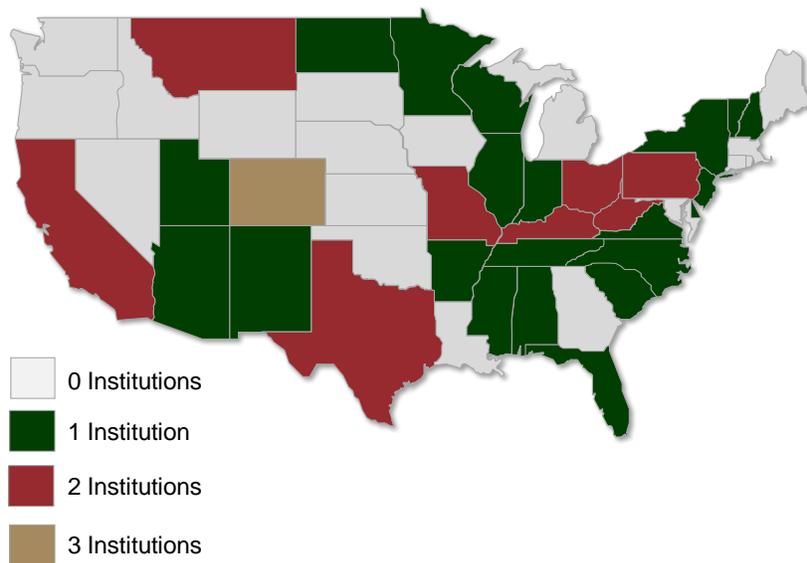
Geographic Location

Out of the total 50 states, 58% ($n = 29$) had higher education institutions that offered equine-assisted activities or therapies-related coursework. One state had three institutions offering coursework, eight states had two institutions offering coursework, and 20 states had one institution offering coursework, leaving 21 states without academic institutions offering any coursework. All major geographic areas of the contiguous United States, except for the Pacific Northwest, have higher education institutions offering coursework in equine-assisted activities or therapies (figure 1).

Focus Area

Five areas of course focus were identified for the 110 courses (figure 2): therapeutic riding ($n = 71, 64.5%$), equine-assisted mental health ($n = 23, 20.9%$), equine-assisted learning ($n = 7, 6.4%$), hippotherapy ($n = 1, 0.9%$), and

Figure 1. Number of higher education institutions offering coursework related to equine-assisted activities or therapies by state. No institutions were identified in Alaska or on Hawaii (not pictured).



overview/other ($n = 8$, 7.3%). They are defined as follows:

Therapeutic riding/horsemanship.

An equine-assisted activity for the purpose of contributing positively to the cognitive, physical, emotional and social well-being of individuals with special needs (PATH Intl., 2017b).

Equine-assisted mental health.

How mental health professionals (psychologists, counselors, social workers, marriage and family therapists, psychiatrists, psychiatric nurse practitioners) include equines and the equine environment in conjunction with their clinical orientation and scope, with the purpose of enhancing treatment outcomes for the client (Ekholm Fry, 2013).

Equine-assisted learning.

As no commonly used definition exists, we used the following characterization for this review: equine-assisted learning refers to services designed to promote educational, professional and personal skills and growth through equine interactions and the equine environment.

Hippotherapy. How occupational therapy, physical therapy, and speech-language pathology professionals use

evidence-based practice and clinical reasoning in the purposeful manipulation of equine movement to engage sensory, neuromotor, and cognitive systems to achieve functional outcomes. In conjunction with the affordances of the equine environment and other treatment strategies, hippotherapy is part of a patient's integrated plan of care (American Hippotherapy Association, 2017b).

Overview / other. This category comprised academic institutions offering a single overview course covering several focus areas or a sequence of courses that did not fit solely within one of the main four areas.

Department

Out of the 39 academic institutions, nearly half (48.7%, $n = 19$) offered coursework through agriculture or animal science departments, and just over half (51.3%, $n = 20$) through social science or liberal arts departments. All graduate-level courses were offered by the latter category.

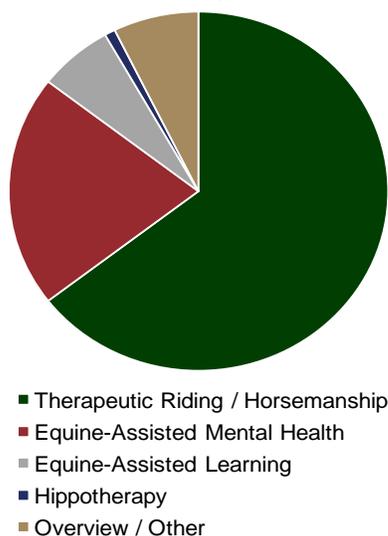
Courses by Level

The majority of coursework was offered at the undergraduate level, here defined as both 2- and 4-year degrees, in conjunction with existing equine or equestrian programs ($n = 93$, 84.5%). There were 17 graduate level courses offered, all with content related to either equine-assisted mental health ($n = 11$) or equine-assisted learning ($n = 6$).

Discussion

An issue that emerged in this review, and which Mullen (2010) also addressed in the context of coursework, is terminology. This is not surprising since terminology is a known problem in the

Figure 2. Coursework by focus area.



fields of equine-assisted activities and therapies (Ekholm Fry, 2013). A clear distinction is needed between therapy, that is, treatment, which is provided by professionals with master's or doctoral degrees in specific professions in the United States, versus instruction of therapeutic riding, or facilitation of equine-assisted learning activities, which is provided by a range of professionals. There were several undergraduate programs providing courses in "equine-assisted therapy," which, upon review of course title and contents, focused on therapeutic riding instruction. While it might be practical to use terms such as *equine-assisted activities and therapies* (EAAT), it can make it difficult to discern what is actually offered.

Therapeutic riding was the focus area greatest number of courses overall ($n = 71$) and accounted for the majority of coursework offered at the undergraduate level (76.3%). Several undergraduate programs advertised a therapeutic riding focus as a specialty for their department, and one program offered as many as eight courses on the topic. Therapeutic riding in the U.S. comprises instruction of riding and horsemanship skill to individuals with disabilities, and does not require a base profession, which makes it an attractive offering at the undergraduate level (no therapeutic riding-focused courses were offered at the graduate level). The focus on riding and horsemanship instruction also fits well within traditional equestrian studies programs.

Just over half of the institutions identified in this review offered courses through social science or liberal arts-focused departments (51.3%) and the rest through animal science or agricultural departments. There could be benefits to both approaches. Social science or liberal arts-focused departments are well-positioned to examine human-horse

interactions from a health and wellbeing context for *all* involved by, for instance, recognizing practices that are convenient for humans but might be harmful to horses, and considering whether ethical and effective inclusion of horses in services that support human physical health, mental health, and learning requires a new way of thinking about our relationship with horses. The base professions required for providing therapies that involve horses also receive education in departments of this kind. One undergraduate program offering equine-assisted mental health courses specifically advertised its affiliation with the institution's social science programs as opposed to their equine studies program. On the other hand, the addition of coursework in agricultural or animal science departments, where horse and animal coursework already exist, makes sense from a practical perspective. It might also make sense from the point of view of offering more options for students' careers and to accommodate the growing interest in and understanding of human-animal connection, beyond production and study of horses as a species.

While the popularity of courses linked to existing equine science or equestrian programs might signify offering broader opportunity in these fields, clarity around professions and roles (who can provide what service) and scope of practice (what can be done within that service) for equine-assisted activities or therapies is important. For instance, the difference between independent certification (separate from membership and education) and internal certifications, the latter which is not profession-wide, and how this relates to the educational content that programs provide should be communicated so as to not mislead students about the education they are receiving. Understanding that accreditation evaluates institutions and

programs while certifications involve individuals can also be helpful for students to know.

A total of 12 undergraduate courses and 11 graduate courses in equine-assisted mental health were offered. Four undergraduate programs offered minors in equine-assisted mental health. Here it is important that the institution clearly communicates that the student cannot provide these services without further graduate training. Mental health professionals, such as counselors, psychologists, social workers and marriage and family therapists, need education, training and supervision when adding a new treatment strategy to their scope, as per applicable code of ethics and practice standards. This naturally applies to graduate students in mental health-related programs who want to add equine-assisted mental health as a treatment strategy. The American Counseling Association (2016) has provided a competency document for counselors who provide animal-assisted therapy in their counseling practice and we recommended that regardless of focus profession, graduate coursework beyond a single course, such as a concentration or an academic certificate in equine-assisted mental health, meet these competencies until national educational standards in equine-assisted therapy for mental health professionals have been developed.

Only one undergraduate, introductory course and no graduate courses in hippotherapy for physical therapists, occupational therapists and speech-language pathologists were identified, which might be attributed to the nature of the existing curricula that the American Hippotherapy Association offers to those with existing master's degrees. The American Hippotherapy Certification Board accepts graduate course training as part of eligibility criteria for their *ACHB*

Hippotherapy Certified Status (American Hippotherapy Certification Board, 2017) but as mentioned, none exist.

The presence of coursework in equine-assisted activities or therapies in academic institutions has the potential to increase development and recognition of these fields through critical assessment and research. Our literature review revealed that there has not been much discussion on the topic of coursework, which is surprising, as over one hundred courses were delivered in the 2016-2017 academic year in over half of U.S. states.

Limitations and Future Directions

This review was limited to examining geographic location, focus area, department of delivery and level of study, leaving out variables such as student numbers and instructor qualifications. Since inclusion criteria specified that there be an online record of the course, courses might have existed for which information was not accessible online or where information was not searchable due to being placed behind a password-protected web area. It is also possible that there were student-designed elective courses taking place during the 2016-2017 academic year with content related to equine-assisted activities or therapies. However, electives designed by the student for a particular semester do not constitute a standard course offering by the university or college, nor are they accessible to the public for review, and so they were not included in this scoping review. A mixed-methods review could be used to understand this area of coursework further.

Our suggestion for future research is to examine content of curricula for these courses and the connection to: a) current standards for professional practice, and b) the advancement of professional practice in

each field. In addition, course instructor qualifications, which may impact how coursework is delivered, have not yet been examined and could be of relevance. We foresee that careful attention to terminology and the emergence of national educational standards will further increase the quality of coursework related to equine-assisted activities or therapies in higher education.

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