The Elements of Two-Year Equine Degree Programs in the Mid-Western U.S.: A Delphi Study

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Abstract

Horses are becoming an increasingly significant sector of the animal industry resulting in an increased need in post-secondary equine degree programs; yet there is little research describing what elements these academic programs should contain. This Delphi study was conducted to determine the objectives, courses, resources, and curriculum necessary for a successful two-year equine degree program. Results of the study show the three most important program objectives were to prepare students to successfully compete for employment in the equine industry, develop skills needed by utilizing hands-on experiences and applied study, and produce students who have a working knowledge of all facets of equine management. Regarding coursework, respondents unanimously supported a course on equine health, while an internship and a course on equine conformation earned high levels of agreement, along with equine nutrition, equine anatomy, equine business management, and horseshoeing and farrier science. Additional components for an equine program were recruiting materials along with external support. The most popular curriculum resources were specific equine textbooks and handouts from breed and horse associations as well as teaching technology and video equipment. Although this research is limited in scope, it can serve as a foundation for future research in this area.

Introduction

In the U.S., horses' contribution to the human race is quality of life. "Most livestock feed our bodies; the horse feeds our being" (Damron, 2009, p. 518). This characteristic creates an industry unique to all other livestock species in that the horse industry has one foot (or should we say a hoof) in agriculture and another in sports, recreation, and entertainment (Damron, 2009). This distinctive characteristic creates an industry that is positively correlated with equine curriculums being offered in U.S. colleges and universities (Rudolph, 1979). The horse population in the U.S. peaked in the 1910s at around 26.5 million, with the most popular horses being draft horses used for agricultural production and some light breeds

¹M.A., Suite 23, Agriculture Building ²Assistant Professor, 121 Four Towers used for transportation (Damron, 2009; Parker, 2008). At this point in time equine instruction consisted mainly of classes focusing on judging animals and raising quality work horses as a part of animal science or agriculture programs. Later, with the replacement of the horse by machinery coupled with the Great Depression and World War II, horse numbers were severely reduced; by the late 1950s the population had declined to around three million (Damron, 2009; Kentucky Equine Research, Inc., 2007; Washburn, 1958) and many colleges and universities eliminated horse classes entirely (Rudolph, 1979). With an improving post-war economy and an increase in leisure time, there was a surge in the popularity of the horse (Damron, 2009; Parmenter, 1978); however, instead of the focus being on draft horses used for farm work, it was now on light breeds used in recreational and performance activities (Parker, 2008; Rudolph, 1979).

In a 1966 conference on undergraduate teaching in the animal sciences Cowan (1967) noted the growing popularity of horses and emphasized the need to consider equine when developing animal science curricula. Throughout the 1970s animal science programs were placing an increased emphasis on horses (Taylor and Kauffman, 1983) and as time passed, specific equine curriculums began appearing in college and university course offerings (Rudolph, 1979).

While the number of equine programs throughout the nation was increasing, some institutions were slow to develop and reestablish equine programs (Borton as cited by Rudolph, 1979). As these programs became established and grew, there was much variation in the coursework offered at colleges. Despite this variation in curriculum, a number of programs faced similar challenges which limited their ability to include an equine program (Parmenter, 1978) such as a lack of administrative and faculty interest and support, the high start-up and maintenance costs associated with equine programs, or the perception that horses should not be part of animal science programs because they are not food animals (Cunha, 1978).

Today the equine industry has many employment opportunities, especially for people that hold an

equine degree. Currently, there are 9.2 million horses in the U.S. which create over 1.4 million FTE jobs. Of those jobs, only 453,000 FTE are directly working with horses while about 957,000 FTE are indirectly involved with horses (American Horse Council, 2005). These numbers imply approximately twothirds of jobs in the horse industry have little or no contact with horses, but still require knowledge of horses and their industry.

Hollis (as cited by Matte, 1994) made the observation that more and more horse farms and related businesses were seeking employees with equine knowledge in addition to other skills needed to perform a wide range of duties. Jim Heird, the Director of Teaching and Outreach for Colorado State University's Equine Sciences Program, stated in an interview that a few jobs have gone away within the horse industry, while new and better ones are opening in different avenues such as sales, finance, and banking (as cited in Nyland, 2007). Public relations, graphic designers, accountants, and office managers are all prospective careers that have little contact with horses, but employers in these areas consider horse knowledge a bonus (Burgess, 2007). Within these career areas there is a need for employees with equine knowledge. Institutions can help fill this educational need with equine programs that not only train students to work with horses, but also introduce them to the depth and breadth of the industry.

The horse industry is becoming an increasingly significant sector of the animal industry (Cunningham et al., 2005). As a result, educational horse programs are needed in many areas, yet there is little research that describes what elements these academic programs should contain. By examining the industry and current programs, academic administrators can improve existing programs as well as establish new programs which can appeal to a variety of audiences (Finch and Crunkilton, 1999). With that in mind, this current study was conducted to determine the objectives, curriculum, and resources necessary for a successful two-year equine degree program.



Conceptual Framework

Periodically, it is beneficial to review curriculum to determine if it is meeting the needs of graduates (Doerfert and Miller, 2006). To accomplish this, the systems program model proposed by Finch and Crunkilton (1999) was utilized in this research (Figure 1).

Based on the model, feedback is received from the graduates to influence the program, yet ultimately the academic program is changed by the faculty. The model also includes other factors that influence curriculum: university/college, industry, government, and resources.

For this study, equine faculty at two-year colleges were sought out as experts for curriculum change, who are the recipients of feedback from graduates and other stakeholders. Furthermore, Sell and Lounsberry (1997) posited that faculty should be included in the curriculum improvement process to insure support for curriculum changes; therefore, it is important to have a greater understanding of their perspectives on curriculum. In addition, previous studies have consulted faculty to determine curriculum needs (Morgan et al., 2004; Simon et al., 2005; Sprecker and Rudd, 1997). Indeed, Flatt (1991) thought it wise to include faculty input in curriculum development as did Kupperschmidt and Burns (1997), who felt that curriculum was an "...extension of the faculty's psychological self..." (p. 90). In this study, faculty from several colleges were sought out to provide their expert opinion and establish credibility among similar equine educators (Brink, 1994; Lewis et al., 1999; Patterson et al., 2001). The results of this research may provide a baseline to help better understand academia's adoption of graduate and stakeholder suggestions.

Purpose

The purpose of this study was to determine the curriculum and resources necessary for an effective two-year equine degree program. With this information two-year institutions may have a framework to use when implementing new programs or evaluating existing programs. Specifically, the following questions were addressed to current academic practitioners: (1) What should be the objectives of a successful two-year equine degree program? (2) What courses, labs, and student experiences should be included in a successful two-year equine degree program? (3) What additional components should be included in a successful two-year equine program (e.g. facilities, faculty, students owning their own equipment, etc.)? (4) What textbooks and other curriculum resources do you currently use or would you like to use in a twoyear equine program?

Methods and Procedures

To address the study questions the Delphi method was chosen, which is useful for obtaining consensus among a purposively selected group of experts (Dalkey, 1969; Linstone and Turoff, 2002; Stufflebeam, et al., 1985). The Delphi method consists of assembling a panel of experts to answer a question and then contacting these experts through a series of iterations to elicit expert opinions and draw them to consensus. Linstone and Turoff (2002) stated the Delphi method is appropriate for "...planning university campus and curriculum development" (p. 4) and has been useful for curriculum evaluation in past studies (Morgan et al., 2004; Akers et al., 2001).

The expert panel was selected from faculty at two-year public institutions offering either an Associate of Science or an Associate of Applied Science in an equine specific area (e.g., Equine Science, Equine Management, Equine Business Management, Horsemanship, etc.) that were located in either Zone 7 or 8 of the Intercollegiate Horse Show Association (ISHA, n.d.). The researchers believe colleges within these geographical regions will provide a representative sample of equine programs in the western United States. For this study directors or instructors of the equine degree programs were asked to participate because they are the people implementing these programs on a day to day basis and should have suggestions for improving or building upon equine programs. A total of 21 faculty were mailed a letter inviting them to participate in this study and explaining the procedure to be followed. Each participant was randomly assigned a Participant Identification Number (PIN) from 1 to 21. The study consisted of three rounds and all participants were invited to participate in each round, regardless of past participation, in an effort to gain representative input from all institutions. At the beginning of each round an e-mail with a link to the online survey was sent to participants, followed by two e-mail reminders during the following two weeks. Round one had five respondents and as did round two, with the same participants responding in both rounds, for a response rate of 24%. Round three had a 29% response rate with the same participants from the previous rounds, plus one additional individual completing the survey.

Although the response rate does appear to be low, this is higher than what is expected in many disciplines. Response rates in education, marketing, and applied health typically range from 1% to 31% (Fox et al., 1998), while business marketing survey research rates are usually below 15% (Wilson, 1999). At the same time, response rates from healthcare organizations range from 8.2% to 24.8% (Hikmet and Chen, 2003). Even more dramatic are the response rates found in direct mail, which are typically 1% to 10% (Response Rates, 2000; Souccar, 2000; Teichgraeber, 2001). Based on this information, the response rate of the current study is reasonable for this population, and above the expectations of some disciplines.

In round one, participants were asked to answer four open-ended questions. The responses were then

grouped using content analysis to produce statements for the subsequent questionnaires. Round two listed the statements for each question and then, utilizing a one-to-five point Likert-type scale, participants rated each statement on their level of agreement (1 = strongly disagree, 2 = disagree, 3 =neutral, 4 = agree, 5 = strongly agree). In addition to the statements, text boxes were placed at the bottom of each Web page to capture any additional comments participants may have had regarding the questions or statements. The third and final round consisted of statements from round two that achieved an 80% level of agreement, presented by their level of agreement, highest to lowest. A one-to-five point Likert-type scale used by the respondents indicated their level of agreement (Moreno-Casbas et al., 2001; Morgan et al., 2004; Simon et al., 2005; Stitt-Gohdes and Crews, 2004).

Findings and Discussion

The first question asked "What should be the objectives of a two-year equine program." In round one, seven statements emerged in response to this question and while in subsequent rounds none of these statements received unanimous support, only one earned a level of agreement less than 80% (Table 1). When developing a curriculum, it is important to first determine the ultimate goal of the program (Coffey, 1915) in the form of objectives which are the foundation of curriculum (Cole and Johnson, 1981). The objectives receiving the highest level of agreement were "prepare students to successfully compete for employment in the equine industry" (96%) along with "develop skills needed by utilizing hands-on experiences and applied study" (96%). Similarly, Rudolph (1979) found that providing students with a fundamental background in horse management was the highest ranked objective and providing training for students entering horse related careers and to enhance students' personal enjoyment was the next highest ranked objective.

The statement to "produce students who have a working knowledge of all facets of equine management" had a high level of agreement as well (92%). However, one respondent stated that it might be difficult to develop knowledge in all facets of the equine industry within a two-year time period. As this statement is most likely true, it emphasizes the notion that formal education should prepare students for life-long learning, as the needs, knowledge, and technology in most career fields will continue to change.

The objective with the lowest level of agreement was that of preparing students to successfully transfer to a four year institution (68%). Rudolph (1979) also found that the lowest ranked objective was to prepare students to continue in advanced study toward a higher degree. However, several comments were made by participants stating that although students may not have intentions to pursue further

formal education, they should be provided an education that can help them be successful at a fouryear institution or in the workforce. One respondent stated, "I feel this [a wellrounded education to include general education and elective courses] is important because for the most part the customers served within the equine *industry are non-agriculture* people" (Participant 2). Moreover, Heird (as cited in Nyland, 2007) indicated that employers are looking for workers who can effectively communicate, in both written and oral form, and possess management skills (e.g., leadership, personnel and financial management, teamwork, etc.). Similarly, Smith (1989) defined an "educated" animal science graduate as someone who can think critically, communicate effectively, and be a leader. As gleaned from this discussion, many of the skills necessary for successful employment are valuable for success at a four-year institution as well.

The second question of this study asked "What courses, laboratories, and student experiences should be included in a successful two-year equine degree program." All of the respondents agreed a course on

dents agreed a course on equine health was important (100%, Table 2). In addition, participants indicated a 96% level of agreement for an internship, along with a course devoted to equine conformation. The following coursework also found favor: Equine nutrition (92%), equine anatomy (88%), equine business management (88%), and horseshoeing and farrier science (84%). Some respondents further stated that many of these curriculum areas could either be optional (i.e. electives) or incorporated into other courses. For example, equine business management may not need to be a semester long course but should at least be introduced in other courses because it is a very important aspect of the equine industry, yet is often overlooked.

Participant comments suggested that the actual courses taught were not as important as the material

Table 1. Objectives of a Two-Year Equine Degree Program			
Statement	Level of Agreement	Mean ^A	SD
Prepare students to successfully compete for employment in the equine industry.	96%	4.8	0.45
Develop skills needed in the equine industry by utilizing hands-on experiences and applied study.	96%	4.8	0.45
Produce students who have a working knowledge of all facets of equine management (including basic care and management, health and nutrition, anatomy and conformation, etc.).	92%	4.6	0.55
Students should be aware of and develop a working knowledge of all facets of the equine industry (including business and economics, reproduction, nutrition, advertising and marketing, etc.).	88%	4.4	0.55
Produce students who have a working knowledge of basic training and horsemanship.	84%	4.2	0.84
Offer students a well-rounded education beyond equine (including general education courses and electives outside of the equine program).	84%	4.2	0.45
Prepare students to successfully transfer to a four-year institution.	68%	3.4	1.34
A- 1=Strongly Disagree, 5=Strongly Agree		-	

Table 2. Courses, Labs and Student Experiences that should be Included in a Successful Two-Year Equine Degree Program

Course, Lab, or Experience	Level of Agreement	Mean ^A	SD
Equine Health (vaccinations, deworming, wound care, etc.)	100%	5.0	0.00
Equine Conformation (selection and evaluation, form to function, etc.)	96%	4.8	0.45
Internship	96%	4.8	0.45
Introduction to Equine Science (history, breeds and general information)	92%	4.6	0.55
Equine Breeding and Reproduction (management of stallion, mare, and foal; reproductive anatomy, hormones, etc.)	92%	4.6	0.55
Equine Nutrition (feeding, digestion, etc.)	92%	4.6	0.55
Equine Anatomy (Internal, skeletal, external, etc.)	88%	4.4	1.34
Equine Business Management (to include advertising and marketing, record keeping accounting, economically sound decisions, etc.)	88%	4.4	0.55
Horseshoeing and Farrier Science	84%	4.2	0.45
^A - 1=Strongly Disagree, 5=Strongly Agree			

learned and the hands on experience to back up classroom theories.

"Hands on is very important. So many times I see students who can give you the text book definition of a procedure, but have never had the opportunity to perform the procedure themselves. Applied study is also an important assessment tool to see if students truly [understand] the concepts that [they] have learned" (Participant 13).

Respondents also stated hands-on experiences benefit students who arrive on campus without a significant experience base. "A large percent of my students come from a non-horse background and lack in hands-on experiences. Some of the ones that have some experiences have many bad and unsafe habits around all horses" (Participant 2).

This comment supports Howell (1932): "The student must actually perform the experiment and

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see with his own eyes the manner of the reaction. In the same way the animal husbandry student needs a certain refinement of his techniques, familiarization with his working tools and actually see and do many of the so-called practical and empirical tests in the handling of animals (Howell, 1932, p. 103)."

Question three asked "What additional components should be included in a successful two-year equine program (ex. Facilities, faculty, students owing their own equipment, etc.)?" (Table 3). All respondents agreed that for equine programs to succeed, support is needed which includes administrative and financial support along with support from faculty, staff, and other offices on campus (100%). These findings are similar to those of Parmenter (1978) who discovered that community and student interest were some of the deciding factors in establishing a riding program. Conversely, Rudolph (1979) found that when compared to student support, administration and industry support ranked low. In the current study, support from the students was not articulated; however, participants did find agreement in the recruitment of and support for quality students (80%).

Participants also provided unanimous agreement that qualified faculty were needed for a program. If faculty are not knowledgeable about equine and dedicated to the program, students will recognize this, which may lead to low enrollment and a phasing out of the program. Taylor and Kauffman (1983) identified that "...teachers must be knowledgeable, interested, enthusiastic and capable of challenging students to think as well as to memorize..." (p. 172).

Recruiting material garnered 96% level of agreement with respondents, though none stated what specific type of materials to utilize or activities that are successful. Literature on the topic of recruitment shows a varied picture. Fanno and Cole (1999) determined that recruitment efforts need to convey information about academic majors and the required knowledge base needed to be successful. Graham (as cited in Dyer and Breja, 2003) noted that quality of

Table 3. Additional Components that should be Included in a Successful Two-Year Equine Program			
Component	Level of Agreement	Mean ^A	SD
Program needs support from administration, faculty, staff, and offices on campus	100%	5.0	0.00
Qualified faculty	100%	5.0	0.00
Financial	100%	5.0	0.00
Recruiting materials (brochures, flyers, website, etc.)	96%	4.8	0.45
Support from horse industry	92%	4.6	0.55
Daily used equipment (stall pickers, wheelbarrows, brooms, etc.)	92%	4.6	0.89
Arena equipment	92%	4.6	0.55
Transportation equipment (vehicles, tractors, etc.)	92%	4.6	0.55
Program must be able to recruit and support quality students	88%	4.4	1.34
Introductions to professionals in the industry to see what the industry is really like (guest speakers, judges for events, etc.)	88%	4.4	0.55
Stall barn(s)	88%	4.4	0.89
Working pens (round and square pens)	88%	4.4	0.89
Basis for recruitment	88%	4.4	0.89
Support from general community	88%	4.4	0.55
Indoor arena	84%	4.2	0.84
Breeding lab with modern equipment	84%	4.2	0.84
Access to quality horses	84%	4.2	0.84
Storage space	84%	4.2	0.84
Outdoor arena	80%	4.0	0.71
Pastures and Paddocks	80%	4.0	1.00
Pleasing overall appearance	80%	4.0	1.22
Students should own their own equipment	80%	4.0	1.22
^A - 1=Strongly Disagree, 5=Strongly Agree			

academic programs, academic reputation, the atmosphere/appearance of campus, and the quality of faculty were positive influences on prospective students. Strauss (as cited in Poock, 2001) found that the majority of high school students now use the Internet for their college search process, which is supported by research from The Arts and Science Group, LLC (2003). Based on this information, it appears that individual college programs need to be on the web and be accessible for students and advisors.

External support from the horse industry received a high level of agreement as well (92%). Horse owners want information on how to better care for and enjoy their horses and are seeking information and pursuing educational opportunities (Damron, 2009). Horse owners are more likely to attend evening seminars and read short publications to obtain that information (Martinson et al., 2006). By involving local horse owners through short courses or weekend seminars, an institution can generate

funds for the program as well as gain recognition for offering quality programs. These short courses offer a different avenue for institutions to tap into the horse industry. By offering continuing education programs, an institution can generate additional funding for the program and promote (publicize) the program to students who would not otherwise be exposed to equine education.

The final question asked was "What textbooks and other curriculum resources do you currently use or would you like to use in a two-year equine program?" As part of the courses offered, students need to be given resources and supplemental material to support learning. In addition, the program needs to have access to a variety of materials to make learning more efficient. To supplement courses, specific equine textbooks and handouts from breed and horse publications received a high level of agreement (92%, see Table 4). One respondent stated that breed and horse publication handouts were great resources for current information versus textbooks which do not get updated as frequently. There was a high level of agreement among respondents to increase the use of technology (92%) which includes using LCD projectors, visual presenters (e.g., ELMOs), and PowerPoint class notes. Videos recorded of students performing various riding maneuvers for selfevaluation also received agreement from participants (88%).

In addition, the results suggest students should graduate with a broad knowledge of "all facets of equine management" and have a "working knowledge of all facets of the equine industry" (Participant 13). While this seems an impossible feat given the vast amount of knowledge housed under the umbrella of equine science, with a sufficiently rigorous curriculum it does seem plausible that students could gain a cursory knowledge base, and perhaps deeper in the specific areas which emerged from this study: basic care and management, health and nutrition, anatomy and conformation, breeding and reproduction, business, economics, and marketing.

Furthermore, participants felt students need a "*well-rounded education*" that is developing a knowledge base that goes "*beyond equine*" (Participant 2). These academic skills beyond a specific technical expertise are found in most programs of study and are commonly referred to as "core" or "general education" courses (Kranz, 1995). These baseline educational components are expected of most higher education graduates and were intended to provide "knowledge and skills necessary for responsible citizenship in a free society" (Kranz, 1995, p. 48). Further studies should be conducted to determine what academic skills are essential for a "well-rounded" student and to determine if these skills differ from those expected at a four-year institution.

Table 4. Textbooks and Other Curriculum Resources Currently Used or Desired to be Used in a Two-Year Equine Degree Program				
Curriculum Resource	Level of Agreement	Mean ^A	SD	
Specific textbooks on equine	92%	4.6	0.55	
Handouts and articles from breed and horse publications (e.g. AQHA Journal)	92%	4.6	0.55	
Increase in use of technology (computer programs, projectors, ELMOS, etc.)	92%	4.6	0.55	
PowerPoint class notes	92%	4.6	0.55	
Videos from the industry (training videos for example)	88%	4.4	0.55	
Videos of students for self evaluation	88%	4.4	0.55	
Computer animations for visuals	80%	4.0	0.71	
A - 1=Strongly Disagree, 5=Strongly Agree				

emerged provided additional focus for faculty desiring to establish new or evaluate existing programs. Of highest importance is equine health, upon which all participants came to consensus. The courses with the next highest level of agreement were equine conformation and the internship. Both of these academic endeavors require the application of knowledge, which parallels previous findings regarding the desire for students to

Specific courses that

Conclusions and Recommendations

The findings of this study included a broad array of objectives, courses, components, and curriculum upon which an expert faculty panel came to consensus. The study revealed that the objectives of a twoyear equine program should be focused on preparing students to successfully enter the equine industry through the use of hands-on experiences so students can apply classroom knowledge in a career context. This conclusion concurs with other researchers who found hands-on teaching methods were significantly more academically beneficial to students than nonhands-on methods (Folsom-Meek et al., 1999; Stohr-Hunt, 1996). have hands-on experiences. Other courses which garnered agreement included an introductory course, breeding and reproduction, nutrition, and anatomy. Additional research should be conducted to determine what specific objectives and suggested activities should be included in each of these courses.

Additional components for a program were many and varied, beginning with support from the local institution and extending to include recruitment materials, facilities, and a suggestion that students should purchase their own equipment in the program. Several themes emerged from this list of requirements. First is that support for the program is

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important, not only from the administration, but also from the faculty and staff. Beyond institutional support, encouragement from the professionals in the equine industry is important as well, along with the blessings of the local community. For programs located in suburban or urban areas this support may be of greater importance due to the odors generated by the livestock required for hands-on learning experiences. These necessities seem obvious and are a good reminder of the importance of nurturing positive relationships with constituents both internal and external to the college. It may be useful to investigate how these relationships are established and maintained, and perhaps develop a list of best practices which could be implemented by other institutions.

Facilities were the second theme that emerged. Although required facilities will differ depending on the program's overall focus, barns, arenas (outdoor and/or indoor, depending on location), working pens, storage space, and pastures were all determined to be required elements for an equine program by the participants. To establish these facilities significant resources will have to be dedicated to their construction and maintenance.

Finally, equipment emerged as a third theme and, similar to the facilities, the equipment needed will be different for each program based on the overall focus of that program. Equipment for a breeding lab may include items such as microscopes, equine densimeter, foaling kits, equitainers, AV kits, and other basic lab supplies (syringes, sleeves, pipettes, etc.). In addition, daily used equipment would be needed to maintain the stalls, arenas, and paddocks. This list might include rakes, shovels, wheelbarrows, pitchforks, hoses, fencing supplies, and a tractor. If students do not supply their own tack and equipment, then various tack supplies will need to be provided. Feeders, waterers, hitching posts, and basic veterinary supplies may also be important. To round out this list, a truck and associated trailers may be needed as well. The equipment associated with an equine program is another reminder of the financial resources required to effectively prepare students for entry into the equine industry and reinforces the need for institutional and community support.

The participant curriculum recommendations that emerged from this study were somewhat general in nature, with none of the participants recommending specific textbooks or curriculum being used. However, they were in agreement that breed associations and industry publications are good sources of supplemental materials, which may be indicative of the dynamic nature of the industry.

Beyond standard curriculum materials, the use of technology was emphasized by participants. Computer programs, training videos, presentation software, digital presentation tools, and student video recordings of their riding demonstrations were popular among the expert panel. Research studies should be conducted to determine if the use of these technologies improves student learning and how they may be best incorporated into the learning environment.

By inquiring of programs already in existence as was done in this study, an institution can establish guidelines to help in development and improvement of programs. Additional research is needed for identifying any regional or discipline differences.

The authors are grateful to the participants of this study who provided this information. Although this research is limited in scope, it can serve as a foundation for future studies in this area, as no prior research was found that addressed what elements are necessary for a two-year equine program.. The results of this study may also prove useful to faculty and administrators desiring to establish an equine program at their two-year institution. Likewise, these findings may be beneficial to existing programs by providing them a "framework" or "benchmark" to which they can compare their current curriculum.

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