SELECTED POTENTIAL EMPLOYERS' ASSESSMENT OF COMPETENCIES TAUGHT IN THE D.E. KING EQUINE PROGRAM AT THE UNIVERSITY OF ARKANSAS

Abstract

The purpose of this study was to determine if current competencies described in the curriculum of the University of Arkansas' D. E. King Equine Program matched the competencies desired by selected potential employers. Members of the Arkansas Thoroughbred Breeders and Horsemen's Association were asked to participate in the study, and participants responded to a traditional or electronic survey. Respondents were asked to rate curriculum competencies and to suggest competencies that they considered important in potential employees. Findings suggest that positive work ethic, honesty, and selected hands-on abilities are very important to potential employers. Over three-fourths of the potential employers indicated they would be more likely to hire a graduate of an equine science program than a non-graduate.

Introduction

This study explored which skill sets acquired by students pursuing a minor in Equine Science at the University of Arkansas matched the competencies desired by selected potential employers. A study by Shah, Pell and Brooke (2004) determined that the student outcomes most useful in improvement of career prospects included oral and written communication, team working, personal organization, self-motivation, and subject knowledge. Areas recommended for curriculum development were subject specific practical skills (Shah, et al., 2004). This research attempted to answer the question "Do expected learner competencies in the University of Arkansas Equine Program match the competencies expected by potential employers?"

In the 1997 study, *Employer Assessment of the Skill Preparation Of Students From The University Of Nebraska-Lincoln: Implications For Teaching And Curriculum* (Andelt, Barrett, and Bosshamer, 1997), it was determined that colleges must be sensitive to the needs of employers by conducting studies every 3 to 5 years to determine desirable skill sets.

This study determined if potential employers' desire competencies addressed in the Equine Program course of study at the University of Arkansas. The literature supports this problem in various other fields of study. In their 2004 study, Wilson, Flowers, Croom and Moore stated that "Pre-service Agricultural Education departments should evaluate their academic programs to determine if the courses being taught and the instruction in these courses are adequately preparing their students to be able to perform desired program outcomes" (p. 19). In matching student competencies with skill sets required by employers, educators can ensure that graduates will be employable and enrollment in the Equine Program will flourish. Proper preparation of students for the workforce ultimately will lead to higher enrollment and increased revenue for the University. The information gleaned from this study can be used to modify the curriculum at the University of Arkansas, so that it is better aligned with skill sets desired by potential employers.

Theoretical Framework

The assessment of outcomes of educational programs has been brought to the attention of educators at all levels, in part due to federal legislation such as the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990. Focus on accountability of educational programs has changed from a review of program inputs to an assessment of program outcomes (Wilson et al, 2004).

Regardless of career path or education, potential employers deemed certain characteristics important in potential employees. Integrity, honesty, attitude, and self-motivation are important to potential employers. This finding was recurrent, not only in recent studies conducted by Mariani (1994), but in studies by Belcher, McCaslin & Headley (1996) and Wilson et al. (2004).

Both employers and employees described oral and written communication as important skills necessary for employability. Alumni from land-grant universities majoring in agriculture evaluated the relevance of their curriculum competencies and skills with respect to their careers. Action-based competencies, including oral communication, rated higher overall than agricultural skills-based competencies (Wheelock and Zekeri, 1988).

In 1997, Andelt and Barrett performed a study in which competencies were identified and ranked by potential employers from the College of Agricultural Sciences and Natural Resources (CASNR) at the University of Nebraska. Additionally, these authors sought to determine if graduates from the College of Agricultural Sciences and Natural Resources (CASNR) exhibited the level of competency employers desired in potential employees. The highest mean ranking of all categories of competencies were personal qualities. A positive work attitude and self-motivation were top-ranked skills. They also reported that although subject matter was important to potential employers, skills in communication, leadership, interpersonal competence, and computer literacy were described as areas recent graduates needed to be strongest in to survive in the current agribusiness environment.

In Graham's 2001 study conducted at the University of Arkansas, she found that Agricultural and Extension Education (AEED) graduates, in general, were prepared for entry-level positions. The only skill that was rated as "unprepared" by employers was the ability to speak a second language. Interpersonal skills were also reported as needing improvement (Graham, 2001). Employers rated dependability, honesty, and integrity as very important abilities. Graham stated that "when compared to the level of importance placed on the interpersonal skills and abilities, it appears that our students need to improve in the area of professionalism. Our graduates need to demonstrate the ability to work in groups, show leadership, dedication, and initiative more than they are now doing" (Graham, 2001, p.15). Employers indicated that although students are book smart, they would benefit from exposure to real-life situations. Another point that Graham discussed was the need for students to become internet savvy (Graham, 2001).

The desire of potential employers to obtain employees who are dependable, honest, and exhibit good oral and written communication skills was a recurring theme in

the literature. Skill sets that were specific to a particular job were not as important to many of the employers surveyed. Sincoff and Owen (2004) addressed the issue of specific skill sets desired by potential employers, indicating that job opportunities would be limited for graduates who did not possess certain skills. Sincoff and Owen (2004) recommended that human resources curriculum focus on precise goals, and thus optimize program effectiveness. Additionally these authors stated that a 'niche' approach that provides in-depth training in specific areas, internship, and training in communication and teamwork skills is recommended.

An external group of consultants commissioned by Colorado State University (CSU) suggested revisions be made to the CSU Equine Program in 2005. These findings were presented in a PowerPoint presentation to department heads and deans by Dr. Jim Heird, Director of Teaching and Outreach, CSU Equine Science. Applicable recommendations of this external review included a reconsideration of the importance of some courses, addition of other courses, and some courses that should remain unchanged. Additional communication courses and the requirement of an 'experience' course (internship, study abroad, or independent study) were suggested. Additionally, the development of a marketing/sales course, an introductory equine handling/behavior course, a sales prep course (using donated horses), and a show management program was recommended. Business, management and finance courses were recommended as well (Heird, 2005).

Support through the literature can be seen for employer-desired competencies with respect to specific skill sets. Shah et al. (2004) recommended that curriculum become developed for subject specific skills. Graham (2001) suggested that graduates must be able to apply the science that they have learned, and Sincoff and Owen (2004) suggested that in-depth training and internships are desirable in selected curriculum.

Although job specific skill sets are desired by potential employers, the ability to work with others, good verbal and written communication and a good work ethic were highly desired by potential employers. From the review of literature, it can be seen that regardless of the type of education and potential job, employers are more willing to hire an employee who exhibits certain qualities.

Purpose and Objectives

The purpose of this study was to determine if current competencies described in the curriculum of the University of Arkansas' D. E. King Equine Program matched the competencies desired by selected potential employers. To accomplish this purpose, the following research objectives were identified:

1. Describe selected demographic data of potential employers in the Arkansas horse industry.
2. Describe the curriculum objectives of the D. E. King Equine Program at the University of Arkansas.
3. Determine the perceptions of potential employers concerning the importance of competencies currently taught in the D. E. King Equine Program at the University of Arkansas.

4. Identify additional competencies desired by potential employers not currently included in the curriculum of the D. E. King Equine Program at the University of Arkansas.
5. Determine the likelihood of potential employers hiring a graduate of an equine science program.

Procedures

Research Design

This was a census study, employing descriptive survey research. The study proposed to ascertain if current competencies described in the curriculum of the University of Arkansas D. E. King Equine Program matched the competencies desired by selected potential employers in Arkansas. Institutional Review Board (IRB) approval was applied for and received prior to the start of the study. All letters, postcards, and the 52 item instrument were approved by the IRB prior to contacting participants in the study.

Population

The population used for this study was derived from the 130 members of the Arkansas Thoroughbred Breeders' and Horsemen's Association (ATBHA) in the Spring of 2005, listed in the ATBHA Stallion and Farm Directory for 2005 (Echols, 2005). Members of the ATBHA were invited to participate in the survey via e-mail or traditional mail if an e-mail address was not available in the ATBHA Stallion and Farm Directory for 2005. A self-addressed stamped envelope was included with the traditional mailing, for acceptance by respondents. Of the 130 invitations sent either electronically or traditionally, only 17 prospective participants initially opted to complete the survey.

Non-respondents of traditional or electronic mail invitations were contacted by telephone, using protocol set forth by Salant and Dillman (1994), and invited to participate in the survey. Of the initial 130 members of the ATBHA, 104 had viable contact information (e-mail address, phone number or mailing address). The number of ATBHA members who opted to participate in the survey, either through initial contact or telephone contact, totaled 54. This became the accessible population used in the study.

Development of the Survey Instrument

The researcher-developed, 39-item instrument was created based on the curriculum objectives described in the syllabi of courses taught in the University of Arkansas D. E King Equine Program. The five courses offered in the Program were *Introduction to the Equine Industry* (ANSC 2003), *Horse Production* (ANSC 4283), *Horse and Livestock Merchandizing* (ANSC 3723), *Equine Behavior and Training* (ANSC 2304), and *Topics in Equine Law* (ANSC 3822). The curriculum objectives for these courses were grouped into categories: (1) General (non-equine specific); (2) General (equine specific); (3) Basic Horsemanship; (4) Equine Breeding and Foaling; (5) Horse Sales; (6) Equine Behavior and Training; and (7) 'Hands-on' Equine Skills. At the end of each category, respondents were invited to submit and rank additional competencies they deemed important, but not included in the category. Each item was measured using a 1 to 4 Likert scale (1 = not important, 2 = of little importance, 3 = somewhat important, 4 = very important). Higher mean scores indicated higher levels of importance by participants for specific items.

In addition to ranking the curriculum competencies, the respondents were asked if they would be more likely to hire a graduate of an equine science program rather than someone who is not a graduate of an equine science program.

Expert Panel

The expert panel consisted of one University of Arkansas professor who had experience as an equine nutritionist for a national equine feed company, one University of Arkansas research assistant who owned and managed a horse boarding and training operation for 20 years, and one University of Arkansas facility manager, who had a strong teaching and livestock management background. The expert panel was contacted by phone on June, 6, 2005 and asked to participate in the study. All three agreed to participate.

After the researcher designed the instrument using the curriculum competencies and categories, the expert panel was asked to evaluate the instrument for face and content validity. Additionally, they were asked to develop a list of competencies not included in the equine curriculum that they felt should be considered as equine curriculum additions. Their list of 13 competencies was included in the instrument. The addition of competencies selected by the expert panel resulted in a 52 item instrument, adapted for a traditional mail-out survey and an electronic survey.

Pilot Test

Prior to mailing the 52 item instrument to the designated population, a pilot test was performed in order to determine instrument reliability. Subjects for the pilot test were identified through a database of horse farm owners in Arkansas who were not included in the population. The pilot test was conducted with 10 horse farm owners who were similar to those asked to participate in the main study. To determine instrument stability, the instrument was administered to the pilot-test group twice, at a two-week interval. The coefficient of stability for the 52 item instrument was .94.

Data Collection

Data used were collected from owners or managers who in 2005 belonged to the Arkansas Thoroughbred Breeders and Horsemen's Association (ATBHA), using an internet survey or traditional mail-out survey booklet.

The 19 participants who wished to participate in the survey electronically were e-mailed a link to the 52-item instrument and a letter of explanation formatted using SNAP 8 survey software. Electronic surveys were tracked using SNAP 8, and respondents were linked with corresponding demographics as reported in the ATBHA directory. Data collected from the electronic survey were automatically stored in SNAP 8 (http://www.snapsurveys.com/).

The 35 participants who wished to participate in the survey by traditional mail were sent the 52-item instrument formatted in booklet form which adhered to guidelines set forth by Salant and Dillman (1994) and a letter of explanation. A self-addressed stamped envelope was enclosed with the instrument and letter of explanation. Each survey booklet was coded to insure respondents were linked with corresponding demographics reported in the ATBHA directory.

Data from surveys returned by traditional mail were manually entered into the SNAP 8 program in which the data collected electronically were stored.

A follow-up post card was mailed traditionally or via e-mail to study participants eight days after the survey was sent out, thanking those who responded and requesting a response from those who did not.

Three weeks after the instrument was sent, participants who had not returned a completed survey were contacted by phone to check on the status of their response. Duplicate instruments, if needed, were sent out traditionally or electronically. Of the 54 members of the ATBHA who agreed to participate in the study, 15 responded by e-mail and 27 responded by traditional mail, for a total of 42 respondents. Thus a 77% response rate was achieved.

Analysis of Data

Descriptive statistics were reported regarding individual farms by the farm owners. Curriculum objectives of the D. E. King Equine Program were ascertained from the 2005 syllabi of all Program courses. Analysis of survey data doesn't require complex statistical analysis as reported by Ary, Jacobs, and Razaveih (2002). Descriptive statistics were reported from responses to the survey instrument. Additional competencies not currently included in the D. E. King Equine Program curriculum, but desired by members of the ATBHA, were reported.

Findings

Findings for Research Objective One

Personal and demographic data of the selected potential employers in the Arkansas horse industry was described in the 2005 *Arkansas Thoroughbred Breeders' and Horsemen's Association Stallion and Farm Directory.* The demographics, as reported by farm owners, were listed in the catalogue as: name of farm owner; name of farm manager; physical address; contact information (phone number, FAX number, and e-mail address); location of farm by county; farm acreage; and services offered by the farm. Farm services offered as listed by farm owner were: foaling; sales preparation; breaking; lay-up and rehabilitation; boarding; breeding; and training.

The average size of farm for the 42 respondents was 71.24 acres (SD = 182.99), with a range of 5.00 – 1200.00 acres. Of the total respondents, 38.1% of the farms were located in Garland and Hot Springs Counties. Of the 16 counties represented by respondents of this survey, only five counties had greater than two respondents.

Farm owners reported services offered to the general public by their farms. Of the respondents, 54.8% reported that their farm was a boarding operation, and 28.6% reported their farm as a breeding operation. Many farm owners reported multiple services offered by their farms. The average number of services offered to the general public, per farm, was two (M = 1.52). Of the 42 respondents, only four owned farms that offered the service of breaking horses to the general public.

Findings for Research Objective Two

Curriculum objectives for the Equine Courses offered at the D. E. King Equine Program at the University of Arkansas were taken directly from the 2005 syllabi of the six courses offered within the Equine Program. Many courses had similar objectives. Most notable were those objectives in the general (non-equine) category. Many of the objectives set forth are incorporated University-wide, and are not specific to equine programs. Group participation, computer skills, oral and written communication, and honesty and integrity are desired outcomes of University coursework. Objectives taught in only one course included equine training and sales specific courses.

Findings for Research Objective Three

Competencies, as reported in the syllabi of equine courses offered in 2005 by the D. E. King Equine Program, were divided into areas or categories. Survey respondents (N = 42) ranked the competencies offered by the Equine Program on a 1 – 4 Likert scale (1 = not important, 4 = very important). Means and standard deviations for individual competencies and area competencies were reported. Individual competencies reported as very important (M = 4.0) by respondents were: safely handle horses; possess a positive work ethic (arriving to work on time, diligent, hard worker, dependable); and demonstrates honesty. Individual competencies receiving the lowest average scores (below M = 3.0) were: able to advertise, manage, and produce a purebred horse sale (M = 2.57) and able to plan horse care management a year in advance (M = 2.88). The category which resulted in the highest overall mean average was character traits and professional qualities (M = 3.90).The category which resulted in the lowest mean average was horse knowledge (M = 3.33). The complete results are reported in Table 1.

Table 1
Respondent Rated Means (M) and Standard Deviations (SD) for Equine Curriculum Objectives (N = 42).

D.E. K. Equine Program 2005 Curriculum Objectives Listed by Group	***M***	***SD***
Hands-on abilities		
Safely handle horses	4.00	0
Know basic pre-foaling signs, and can monitor pregnant mares for foaling	3.79	.47
Can give vaccs and routine health care under the direction of a veterinarian	3.76	.48
Can keep proper health, financial and training records	3.74	.50
Able to safely train all ages of horses, using non-traumatic, proven methods	3.67	.53
Be able to show-prep' or sale-prep' a horse	3.52	.55
Overall mean for Hands-on Abilities	3.75	.42
Horse Knowledge		
Is able to determine when vaccs and standard veterinarian care are needed	3.74	.59
Knows that keeping good horse management records is important	3.71	.60
Knows that keeping good financial records is important	3.64	.62
Determine feeding and health care programs for various ages of horses	3.64	.62
Use of proper terms when discussing horses	3.52	.55
Knows structure of horses' hooves & legs and relate to soundness/movement	3.45	.80
Knows what criteria are important when selecting breeding horses	3.33	.87
Knows various horse breeding methods, and the pros and cons of each	3.29	.86

Table 1 continued

D.E. K. Equine Program 2005 Curriculum Objectives Listed by Group	*M*	*SD*
Horse Knowledge (cont.)		
Is able to create a training program to increase a horse's value or it's ability	3.29	.71
Can make judgments about the effectiveness of different training methods	3.29	.67
Knows the legal issues associated with owning horses and the horse business	3.24	.98
Knows different methods of training a horse	3.24	.69
Knows the different types of horse sales for various classes of horses	3.07	.78
Is able to plan horse care management a year in advance	2.88	.74
Able to advertise, manage, and produce a purebred horse sale	2.57	.86
Overall mean for Horse Knowledge	3.33	.73
Leadership and Organizational Skills		
Shows initiative when accomplishing tasks	3.86	.35
Demonstrates effective time management skills	3.83	.38
Demonstrates effective organizational skills	3.81	.40
Demonstrates effective problem solving skills	3.76	.43
Demonstrates effective decision making skills	3.71	.46
Demonstrates effective management skills	3.71	.46
Demonstrates effective leadership skills	3.67	.48
Overall mean for Leadership and Organizational Skills	3.76	.42
Communication and Interpersonal Skills		
Demonstrates ability to listen and carry out instructions	3.88	.33
Demonstrates effective verbal communication skills	3.71	.46
Works cooperatively in groups (team player)	3.67	.48
Demonstrates effective written communication skills	3.40	.59
Demonstrates computer skills (word processing, spreadsheets, Internet, etc.)	3.02	.64
Overall mean for Communication and Interpersonal Skills	3.54	.50
Character Traits and Professional Qualities		
Possess a positive work ethic (diligent, hard worker, prompt, dependable)	4.00	0
Demonstrates honesty	4.00	0
Demonstrates integrity	3.95	.47
Demonstrates fairness	3.93	.26
Dresses appropriately for various situations	3.69	.47
Overall mean for Character Traits and Professional Qualities	3.90	.23

Note. Based on a 4 point Likert-type scale (1 = not important, 2 = of little importance, 3 = somewhat important, 4 = very important)

Findings for Research Objective Four

The 13 competencies which were not currently in the D. E. King Equine Program, and deemed as potential inclusions in the curriculum by the expert panel, were rated on a 1 – 4 Likert scale (1 = not important, 4 = very important) by the respondents (N = 42). Means and standard deviations are reported for these competencies in Table 2.

Table 2
Respondent Rated Means (M) and Standard Deviations (SD) for Potential Equine Curriculum Objectives (N = 42).

Additional Competencies Considered	*M*	*SD*
Can visualize a "perfectly healthy horse" & recognizes illness/lameness	4.00	.22
Can identify various types of equine specific equipment and knows the proper use (twitches, bits, martingales, leg wraps, etc.)	3.93	.26
Has basic knowledge of facilities (safe fencing, size of stall, etc.)	3.64	.48
Demonstrates ability to 'plan ahead'	3.64	.48
Has the knowledge/ability for basic farm equipment use	3.48	.74
Knows proper pasture management (soils report, planting, etc.)	3.36	.79
Demonstrates the ability to successfully hand-breed a mare	3.21	.92
Demonstrates effective teaching skills	3.12	.86
Demonstrates ability to ride	3.07	1.02
Demonstrates the ability to successfully collect a stallion	2.81	1.02
Demonstrates the ability to evaluate semen/sperm quality	2.81	1.09
Demonstrates the ability to artificially inseminate, or infuse a mare	2.81	.94
Demonstrates the ability to properly extend and ship semen	2.60	1.01

Note. Based on a 4 point Likert-type scale (1 = not important, 2 = of little importance, 3 = somewhat important, 4 = very important)

Of the 13 competencies rated, "Can visualize a perfectly healthy horse, and therefore recognizes the early onset of illness or lameness" was rated by the respondents as very important (*M* = 4.00). The ability to identify various types of equine specific equipment and knows the proper use (twitches, bits, martingales, leg wraps, etc.) was rated high (*M* = 3.93) by respondents. The demonstrated ability to successfully collect a stallion (*M* = 2.81), evaluation of semen/sperm quality (*M* = 2.81), artificially inseminating or infusing a mare (*M* = 2.81), and properly extend and ship semen (*M* = 2.60), were the lowest rated by respondents.

Respondents were given the opportunity to suggest competencies they deemed important for possible inclusion in the D. E. King Equine Program curriculum. These suggestions were broken down by specific category. Respondents made 22 suggestions for the area of hands-on abilities. A total of five suggestions were made for desirable character traits and professional qualities, four suggestions were made for additional horse knowledge, and one suggestion was reported for leadership and organizational skills desired.

Findings for Research Objective Five

Respondents were asked if they would be more likely to hire a graduate of an equine science program than someone who was not a graduate of an equine science program. Of the 42 respondents, 33 (79%) indicated that they would be more likely to hire a graduate of an equine science program than a non-graduate.

Conclusions

Conclusions Related to Research Objective One

The typical respondent had a 71-acre horse farm within a two-hour drive of the racetrack in Hot Springs, boarded horses, and offered one additional service to horse owners. Over 25% of the respondents stood a breeding stallion on their farm. Unlike the large thoroughbred farms seen in other parts of the country, most of the thoroughbred farms in Arkansas are small, and offer few services to outside cliental. Demographics suggest that most are 'mom and pop' operations.

Conclusions Related to Research Objective Two

Curriculum objectives of the D. E. King Equine Program at the University of Arkansas, like other fields of study, incorporate general University objectives. Curriculum specific objectives incorporate teaching equine science with an eye on practicing hands-on skill sets.

Conclusions Related to Research Objective Three

Based on the results of this study, it can be concluded that many of the employer-desired skill sets are currently taught in the University of Arkansas' D. E. King Equine Program. Safe horse handling techniques, knowledge and administration of routine vaccinations and health care, and knowledge of basic pre-foaling signs and ability to monitor pregnant mares for foaling are specifically addressed in coursework, internships, and laboratories. Obviously, internships and laboratories in which students can practice horse-related skills are advantageous to students seeking employment in the horse industry.

Conclusions Related to Research Objective Four

A majority of the potential employers in the surveyed population were interested in hiring an employee with practical horse experience. This reoccurring theme suggests the desire of potential employers to have employees with horse experience, and those who know how to properly assess and treat routine equine herd health issues, and issues associated with farm management.

Conclusions Related to Research Objective Five

The respondents of this survey indicated that they were three times more likely to employ a graduate of an equine program to manage and care for their horses than someone who was not a graduate. In order to best prepare the D. E. King Equine Program graduates for equine farm related job opportunities, students must have the opportunity to practice skills and apply information gained in the classroom. Coordinating veterinarian and farrier appointments with student internships and laboratories would prove beneficial to student's knowledge of proper assessment and treatment of equine lameness' and health problems.

Recommendations

Recommendations for Practice

A graduate's demonstration of hands-on abilities and applied horse knowledge, coupled with positive character traits, were the desired competencies deemed important by the population

of selected potential employers. Recommendations for retention, practice, or inclusion into the D. E. King Equine Program, as a result of this study are:

1. Equine Program students should be taught to visualize a perfectly healthy horse, and recognize the early onset of lameness or illness.
2. Students should be taught proper identification and application of various types of equine specific equipment.
3. Students should continue to be given an opportunity to practice horse-related skills in equine laboratories and internships, under the supervision of industry professionals.
4. Students should have the opportunity to be exposed to various aspects of the horse-farm management, and should have the opportunity to master hands-on skills.
5. Students should be exposed to 'real-life' horse-farm experience through off-campus internships.
6. Initiative when accomplishing tasks, ability to listen and carry out instructions, effective time management, organizational, and problem solving skills are sought by potential employers, and should continue to be emphasized in equine related coursework.
7. Possession of a positive work ethic, demonstration of honesty, integrity and fairness should continue to be developed in equine studies.

Many of the aforementioned recommendations for hands-on abilities are taught in equine internships in the D. E. King Equine Program curriculum. Educators should make students aware of the importance potential employers place on these skills as well as positive character traits.

Recommendations for Further Research

Further research is needed in the area of curriculum assessment for the D.E. King Equine Program. Recommendations for further research as a result of this study are:

1. Further research is needed to determine if the desired competencies, as reported by the surveyed population, are desired by other potential employers of graduates with a minor in equine science from the D. E. King Equine Program at the University of Arkansas.
2. Other horse breed or discipline organizations should be surveyed on a state, regional or national level, to determine what competencies they deem necessary in a potential equine employee with a minor in equine science.
3. A more effective way to collect data should be explored. Suggestions from this researcher include the use of focus groups or collecting data at horse discipline or breed meetings or functions.
4. An on-going assessment by employers of D. E. King graduates should be conducted to determine what areas of knowledge and hands-on abilities should be included in the D. E. King Equine Program curriculum to maximize graduate employability.
5. Practical horse experience and hands-on skills learned by D. E. King graduates should be documented and made available to potential employers.

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