

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Theses and Dissertations in Animal Science

Animal Science Department

---

Winter 12-3-2021

## Utilizing Online Resources to Enhance Distribution of Competitive Animal Evaluation Knowledge and Benefits

Brooke L. Parrish

University of Nebraska-Lincoln, bparrish2@huskers.unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/animalscidiss>



Part of the [Agriculture Commons](#), and the [Animal Sciences Commons](#)

---

Parrish, Brooke L., "Utilizing Online Resources to Enhance Distribution of Competitive Animal Evaluation Knowledge and Benefits" (2021). *Theses and Dissertations in Animal Science*. 225.  
<https://digitalcommons.unl.edu/animalscidiss/225>

This Article is brought to you for free and open access by the Animal Science Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Theses and Dissertations in Animal Science by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

UTILIZING ONLINE RESOURCES TO ENHANCE DISTRIBUTION OF  
COMPETITIVE ANIMAL EVALUATION KNOWLEDGE AND BENEFITS

by

Brooke L. Parrish

A THESIS

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Master of Science

Major: Animal Science  
Under the Supervision of Professor Kathleen Anderson  
Lincoln, Nebraska

November 2021

# **UTILIZING ONLINE RESOURCES TO ENHANCE DISTRIBUTION OF COMPETITIVE ANIMAL EVALUATION KNOWLEDGE AND BENEFITS**

Brooke L. Parrish, M.S.

University of Nebraska, 2021

Advisor: Kathleen Anderson

In recent years, the shift toward online education has revealed new challenges for learners to retain information, and for educators to find new and engaging ways to present content. This mixed methods, action research study explores the need and creation of online resources for competitive horse judging through surveys and pilot groups. The study was broken into four cycles. The first was an adult learner analysis survey, distributed through email Listservs and extension social media pages, to aid in answering the research questions: what expert horse judging instructors indicate their students should be learning, and what resources they need. Based off the feedback from the learner analysis survey, three online interactive modules were created including: *What is a Horse Judging Contest?*, *Getting Started with Oral Reasons: Competitive Horse Judging*, and *The Basics of Conformation Evaluation*. Cycle two was an expert panel review of each module. Cycle three and four were pilot/focus groups with 10 participants each from various locations across the United States. Cycle three was considered the experienced horse judging group, while Cycle four was the inexperienced group. Following each cycle, edits were made to improve the modules based off of reviewer feedback. Each reviewer in cycles three and four participated in individual interviews and post surveys. Results found both the experienced and inexperienced group rated all three

modules highly effective with least squares means estimates no lower than 7.8 out of 10 and highly valuable with least squares means estimates no lower than 8.3 out of 10, with 10 being “extremely effective” or “extremely valuable”. Moreover, this study shows the need and value of more online resources for horse judging and, these concepts could be applied to other competitive judging programs.

## ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Kathy Anderson, for her encouragement and guidance throughout the past two years while working on this project. To my committee members Dr. Colleen Brady and Dr. Nathan Conner, thank you for your all of your help and advice. Thank you to Emily Robinson for your help on the statistical analysis. I would also like to thank the team at APHA for their support in the development of this project, namely Dave Dellin and Elizabeth Lawhorn. To my reviewers, thank you so much for your time and assistance in making these modules better for future users.

In my time thus far at the University of Nebraska, I have met so many amazing people that have taken an interest in me as an individual and have offered so much encouragement and support. Lori Jaixen, Dr. Lena Luck, Dr. Ty Schmidt, Dr. Ruth Woiwode, and Karen Conway, thank you for believing in me and taking the time to provide assistance when needed. I am so grateful for each of you.

Thank you to my mentors, Paul Rogers, Aaron and Kindra Callahan, and John Pipkin, for pushing me to be my best self. Words cannot describe how much each of you mean to me. To my friends at UNL: Walker Carson, Minho Kim, Hannah Wiese, Kylie Butterfield, Hannah Speer, Jessica Sperber, Blaire Gibbons, and Grace Kim. Thank you all so much for being there for me. I couldn't have done it without you all! Also, a big shout-out to Catherine Johnson and Courtney Coffman for your incredible friendships. I love you both!

Last and most importantly, thank you to my family. I am so blessed by your desire to help me succeed in life. I certainly would not be where I am today without you all.

## Table of Contents

<b>ABSTRACT.....</b>	<b>II</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>IV</b>
<b>LIST OF FIGURES.....</b>	<b>VII</b>
<b>LIST OF TABLES .....</b>	<b>IX</b>
<b>1. CHAPTER I INTRODUCTION .....</b>	<b>12</b>
<b>2. CHAPTER II LITERATURE REVIEW .....</b>	<b>14</b>
2.1. HISTORY OF ANIMAL EVALUATION.....	14
2.2. DISTANCE EDUCATION IN EXTENSION PROGRAMS .....	17
2.3. MOTIVATION THEORY IN RELATION TO ONLINE LEARNING .....	18
2.4. HORSE IQ™ .....	20
2.5. ACTION RESEARCH .....	22
2.6. COGNITIVISM AND CONNECTIVISM THEORETICAL FRAMEWORKS .....	23
2.7. ANDRAGOGICAL PROCESS MODEL.....	24
2.8. SUMMARY .....	27
<b>3. CHAPTER III METHODOLOGY .....</b>	<b>27</b>
3.1. RESEARCH QUESTIONS .....	28
3.2. ACTION RESEARCH PLAN .....	28
3.3. STATISTICS .....	31
3.4. INSTITUTIONAL REVIEW BOARD .....	32
<b>4. CHAPTER IV: LEARNER ANALYSIS SURVEY .....</b>	<b>33</b>
4.1. POPULATION .....	33
4.2. INSTRUMENT DEVELOPMENT.....	33
4.3. RESULTS AND DISCUSSION .....	33
<b>5. CHAPTER V: MODULE DEVELOPMENT.....</b>	<b>56</b>
5.1. EXPERT PANEL REVIEW.....	61
<b>6. CHAPTER VI: PILOT/FOCUS GROUPS .....</b>	<b>61</b>
6.1. POPULATION .....	62
6.2. QUALITATIVE DATA ANALYSIS .....	63
6.2.1. <i>Trustworthiness</i> .....	64
6.3. RESULTS AND DISCUSSION .....	65
6.3.1. <i>Themes from Experienced Focus/Pilot Group Interviews for What is a Horse Judging Contest?</i> .....	65
6.3.1. <i>Themes from Experienced Focus/Pilot Group Interviews for Getting Started with Oral Reasons: Competitive Horse Judging</i> .....	70
6.3.2. <i>Themes from Experienced Pilot/Focus Group Interviews for The Basics of Evaluating Conformation</i>	76
6.3.3. <i>Themes from Inexperienced Focus/Pilot Group Interviews for What is a Horse Judging Contest? .....</i>	80
6.3.4. <i>Themes from Inexperienced Focus/Pilot Group Interviews for Getting Started with Oral Reasons: Competitive Horse Judging</i> .....	83
6.3.5. <i>Themes from Inexperienced Focus/Pilot Group Interviews for The Basics of Evaluating Conformation</i> .....	87
<b>7. CHAPTER VII: FOCUS GROUP POST SURVEY .....</b>	<b>91</b>
7.1. INTRODUCTION .....	91
7.2. INSTRUMENT DEVELOPMENT.....	91

	vi
7.3. RESULTS AND DISCUSSION .....	92
7.3.1. <i>What is a Horse Judging Contest?</i> .....	92
7.3.2. <i>Getting Started with Oral Reasons: Competitive Horse Judging</i> .....	98
7.3.3. <i>Basics of Conformation Evaluation</i> .....	103
<b>8. CHAPTER VIII: CONCLUSIONS &amp; IMPLICATIONS .....</b>	<b>111</b>
8.1. RESEARCH QUESTION 1 & 2.....	111
8.2. RESEARCH QUESTION 3.....	112
<b>REFERENCES .....</b>	<b>115</b>
<b>APPENDIX A: LEARNER ANALYSIS SURVEY RELATED INSTRUMENTS.....</b>	<b>121</b>
APPENDIX 1.1 LEARNER ANALYSIS SURVEY .....	121
<b>APPENDIX B: PILOT/FOCUS GROUP INTERVIEW QUESTIONS .....</b>	<b>139</b>
APPENDIX 2.1 PILOT/FOCUS GROUP INTERVIEW QUESTIONS FOR WHAT IS A HORSE JUDGING CONTEST? .....	139
APPENDIX 2.2 PILOT/FOCUS GROUP INTERVIEW QUESTIONS FOR GETTING STARTED WITH ORAL REASONS: COMPETITIVE HORSE JUDGING .....	139
APPENDIX 2.3 PILOT/FOCUS GROUP INTERVIEW QUESTIONS FOR THE BASICS OF CONFORMATION EVALUATION .....	140
<b>APPENDIX C: POST SURVEY RELATED INSTRUMENTS .....</b>	<b>140</b>
APPENDIX 3.1 WHAT IS A JUDGING CONTEST POST SURVEY .....	140
APPENDIX 3.2 GETTING STARTED WITH ORAL REASONS... POST SURVEY.....	143
APPENDIX 3.3 THE BASICS OF EVALUATING CONFORMATION POST SURVEY .....	146
<b>APPENDIX IRB APPROVAL LETTER .....</b>	<b>151</b>

## List of Figures

**Figure 1.** Action Research Process

**Figure 2.** Action Research Cycles 2-4

**Figure 3.** Participant Demographics for the Learner Analysis Survey

**Figure 4.** Respondents Equine Organization Involvement from the Learner Analysis Survey

**Figure 5.** Respondents' Goals for Increasing their Knowledge in Judging

**Figure 6.** Relationship Between Coaching Experience and Overall Comfortability Teaching

**Figure 7.** Relationship Between Industry Involvement and Overall Comfortability Teaching

**Figure 8.** Amount of Students Taught/Coached Per Year from the Learner Analysis Survey

**Figure 9.** Learner Analysis Survey Respondents on Usefulness of an Online Judging Contest

**Figure 10.** Learner Analysis Survey Respondents on Oral or Written Sets for an Online Horse Judging Contest

**Figure 11.** Learner Analysis Survey Respondents on Official Panel Feedback for Classes in an Online Horse Judging Contest

**Figure 12.** Usefulness of Individual Feedback on Oral Reasons from Learner Analysis Survey

**Figure 13.** Amount Willing to be Paid for Unlimited Access to Educational Horse Judging Content and Practice Horse Judging Classes

**Figure 14.** What Type of Subscription Would be Preferred for Unlimited Access to Educational Horse Judging Content and Practice Horse Judging Classes

**Figure 15.** Course Content Page for *What is a Horse Judging Contest?* Module

**Figure 16.** Quiz Question Example from *The Basics of Evaluating Conformation* Module



**Figure 17.** Screen Capture of Testimonial Video from *Getting Started with Oral Reasons: Competitive Horse Judging*

**Figure 18.** Example of Direct Question Feedback from the *What is a Horse Judging Contest?* Module

**Figure 19.** Example of Review Feature for Quiz Questions from Modules

**Figure 20.** Example of Expert Panel Review Comments

**Figure 21.** Action Research Cycles 2-4

**List of Tables**

**Table 1** Description of Action Research Cycle Components for Modules

**Table 2.** Age Range Demographics for the Learner Analysis Survey

**Table 3.** Gender Demographics from Learner Analysis Survey

**Table 4.** Usefulness of Horse Judging Topics from the Learner Analysis Survey

**Table 5.** Equine Industry Involvement from Learner Analysis Survey Respondents

**Table 6.** Effect of Geographic Region on Industry Involvement

**Table 7.** Learner Analysis Responses for a Questions Division in an Online Horse Judging Contest

**Table 8.** Usefulness of Information Topics Pertaining to Oral Reasons from Learner Analysis Survey

**Table 9.** Effect of Geographic Region on Ranking the Value of Importance on Including Various Classes that are Commonly Seen in Horse Judging Contests

**Table 10.** Comparison between Experienced vs Inexperienced in their Difficulty of Understanding for the What is a Horse Judging Contest? Module

**Table 11.** Experienced and Inexperienced Groups with their Estimated Means Ratings on each Section for What is a Horse Judging Contest? Module

**Table 12.** Experienced vs Inexperienced Group Showing their Difference in Ratings, Looking for Significant Effects for the What is a Horse Judging Contest? Module

**Table 13.** Simplified Table for Experienced vs Inexperienced Difference in Overall Ratings for Clarity, Effectiveness, and Value for the What is a Horse Judging Contest? Module

**Table 14.** Comparison between Experienced vs Inexperienced in their Difficulty of Understanding for the Getting Started with Oral Reasons Module

**Table 15.** Experienced and Inexperienced Groups with their Estimated Means Ratings on each Section for the Getting Started with Oral Reasons Module

**Table 16.** Experienced vs Inexperienced Group Showing their Difference in Ratings, Looking for Significant Effects for the Getting Started with Oral Reasons Module

**Table 17.** Simplified Table for Experienced and Inexperienced Groups with Estimated Means for Overall Clarity, Effectiveness, and Value Ratings for the Getting Started with Oral Reasons Module

**Table 18.** Simplified Table for Experienced vs Inexperienced Difference in Ratings if Clarity, Effectiveness and Value Overall for the Getting Started with Oral Reasons Module

**Table 19.** Comparison between Experienced vs Inexperienced in their Difficulty of Understanding for The Basics of Evaluating Conformation

**Table 20.** Experienced and Inexperienced Groups with their Estimated Means Ratings for Clarity and Value on each Section for The Basics of Evaluating Conformation Module

**Table 21.** Experienced and Inexperienced Groups with their Estimated Means Ratings for Clarity and Value of the Practice Classes and the Overall Effectiveness for The Basics of Evaluating Conformation Module

**Table 22.** Experienced vs Inexperienced Group Showing their Difference in Ratings, Looking for Significant Effects for The Basics of Evaluating Conformation Module

**Table 23.** Simplified Table for Experienced and Inexperienced Groups for their Overall Estimated Means for Clarity, Effectiveness, and Value Overall for The Basics of Evaluating Conformation Module

**Table 24.** Simplified Table for Experienced vs Inexperienced Difference in Ratings if Clarity, Effectiveness and Value Overall for The Basics of Evaluating Conformation Module

## **1. Chapter I Introduction**

A common mission of educators or coaches is to help share their knowledge and experiences (Janes et al., 2016). The present-day advances in technology have greatly assisted in the distribution of information across various subjects (Derry, 2016).

However, certain subjects still have yet to be distributed in a fashion that allows easy access to factual, interactive information. Specifically, the subject of animal evaluation (Derry, 2016).

There is information available in pieces scattered across a variety of platforms. Yet, this information can be relayed by anyone with the technology to do so. A common problem learners of animal evaluation find themselves in is finding quality examples from expert sources. Typically, the experts of animal evaluation tend to hold in-person clinics, teach traditional evaluation courses, or simply pass on their knowledge by word of mouth (Derry, 2016).

The confines of traditional education limit the number of participants for a variety of reasons including, but not limited to location, transportation and time (Li et al, 2008). The study of online education has proven to be attractive in many factors. Online education resources are more accessible, teach independent learning and accountability and much more (Li et al, 2008).

The benefits of animal evaluation, specifically horse evaluation, is also taken into consideration. The broad range of skills obtained through competitive judging teams has been previously evaluated and deemed beneficial in several areas. Skills such as: communication, teamwork, critical thinking, anxiety control, and others have been identified (Cavinder et al, 2011; White, et al., 2012; Reed, 2018).

In a 2021 study, past participants of the Indiana 4-H Livestock judging programs were surveyed on how competitive judging has impacted certain life skills (Martin & Rusk). It was observed that on a scale of, (1) not influential at all, to (5) almost essential to my ultimate development of that attribute, verbally defending a decision, livestock industry knowledge, and oral communication were all highly influenced by the respondents time on a competitive judging team. The categories of decision making, self-confidence, problem solving, teamwork, self-motivation, self-discipline, and organizational skills were all indicated as moderately influenced by time on a competitive judging team (Martin & Rusk, 2021).

There is evidence to suggest the benefits of teaching competitive judging through an online platform (Cavinder et al, 2011 & Li et al, 2008) will only enhance the learning ability and participation of competitive evaluation. Even so, transferring content online can be a challenging task in and of itself. Creating online programs in a way that is as engaging as an in person classroom can be challenging (Bauman, 2010). Typically, what is seen in the development of online programs is the use of the top-down method (Bauman, 2010). However, the lecture only method is proven to be ineffective in at times (Davenport, 2018). In this method, “rarely do the ideas and concerns of the participant and practitioner make a direct impact on the design and development of the curriculum, it tends to be an afterthought” (Bauman, 2010, p. 4). With this in mind, the method of research being utilized in this project will be action method research. Although other methods of research allows for the concepts of ideas, personal thoughts, concerns, and experiences to be taken into account throughout the development process, action research is centered around these concepts (Herr & Anderson, 2005).

The purpose of this action research study is to develop and refine, based on participant feedback through surveys and focus groups, an interactive online education tool to distribute horse judging information across the United States utilizing Storyline 360™ in partnership with eXtension Horse Inc. and the American Paint Horse Association.

## **2. Chapter II Literature Review**

This literature review will establish the need for online interactive beginner horse judging material. To accomplish this, the literature review will provide background information on the history of animal evaluation and distance education within extension programs and looking at motivation of learning theories in relation to online learning. Additionally, this literature review will provide a review of an existing interactive horse judging program called, Horse IQ™, and identify the need to continue to create these online programs to reach a variety of participants through utilizing action research. The action research background and process will be discussed, as well as Cognitivism and Connectivism theoretical frameworks .

### **2.1. History of Animal Evaluation**

Throughout history, animals have been a staple for human survival. Animals have been used for food, tools, transportation, farming and more (Kennedy, 1903). The significance of animal evaluation emerged as buyers and sellers were trying to get the most out of their products. In the beginning of animal domestication and breeding, people were breeding for quantity instead of quality and eventually, this became a problem. Specifically, in the horse market, breeders were faced with the issue of having low class animals that were not worth much and, or, were not capable of much (Kennedy, 1903).

The growing quantity of essentially useless horses was saturating the market and driving prices down (Kennedy, 1903).

There were characteristics and types of horses that were desired and therefore worth more (Kennedy, 1903). In the 1900s and prior, horses that could be used for transportation and farming purposes were needed (Kennedy, 1903). The conformational characteristics of working horses were even defined, such as: “CHEST: Deep and comparatively broad, giving plenty of volume and lung room, which indicates stamina” (Kennedy, 1903). To be able to see and evaluate whether or not these characteristics were a match with the ideal standard was crucial to buying and selling and especially breeding.

Similarly, in the livestock industry, farmers wanted to breed and raise animals that produce the most meat (Kempster, Cuthberston & Harrington, 1982). These producers also had a set of standards that were desirable in the conformation of an animal, but also in carcass evaluation (Kempster, Cuthberston & Harrington, 1982). Knowing these standards and being able to apply them becomes vital in the production of these animals. This will not only save the producers money and allow them to make more, but it will also allow the market to have higher quality choices. This fact is still true today (Hewitt, Green & Hudson, 2018). While the description of standards has been modified over time, the end goal remains the same, to produce effective, quality livestock (Hewitt, Green & Hudson, 2018).

“Then, in late 1950s, early 60s in the United States horses were increasingly used for showing and recreation and horse numbers started to rebound”. (C. Brady, 2021). In a study by Reed (2018), it was found,



Horse judging is an activity that develops critical thinking, decision making, and communication skills through the process of analyzing given information and organizing and presenting brief oral presentations. Horse judging requires individuals to use critical thinking and decision-making skills to evaluate (commonly known as judge) groups (commonly known as classes) of horses, and rank the horses based on the standard of what is the ideal in each class (p. 6-7).

Many judges can even make an income out of judging shows. According to Janicki, “the average price of a well-established, breed -carded judge is \$500 a day” (2006, p. 2). It is mentioned most shows also pay for the judge’s expenses for the day of the show (Janicki, 2006). Today, for the most part, each breed association or organization has its own set of rules and standards that the animals are to be compared to (Reed, 2018). These groups include but are not limited to the: American Angus Association, National Swine Registry, American Paint Horse Association (APHA) and many more.

Due to many associations having their own set of standards, this has created a niche for specialization of different styles and breeds of animals. For example, the APHA organizes shows that only registered paint horses are allowed to enter (APHA, 2021). Another example of specialization would be the National Reining Horse Association (NRHA). These shows only have the class of reining available for competitors (NRHA, 2020).

In the horse industry, the majority of associations require judges to go through a testing process to become a professional judge under their association (NRHA, 2021; AQHA, 2021; APHA 2021; WCHA, 2021). This is to ensure the exhibitor is receiving accurate and quality feedback and ranking. To become a successful judge or exhibitor, is

it important to know and be able to evaluate the traits of each style or type of class a person is involved in.

## **2.2. Distance Education in Extension Programs**

Distance education has become a staple in the current educational career of many students (Garcia-Morales et al., 2021). A study by Lavoie (2019) stated, “research by North Carolina State University in 2017 found that 90% of students in the College of Agriculture and Life Science took online classes (p. 8). Not only is distance education being used as a method of formal education, but it is also used in other circumstances, such as extension programs (Steede et al., 2018).

The Cooperative Extension (CE) program was created through the Smith-Lever Act in 1914 with the original purpose to improve upon rural life (Gornish & Roche, 2018). CE is tied to land-grant universities that were originally focused on the areas of applied science, agriculture and engineering. Extension’s goal is to conduct research and provide outreach to families and communities, particularly in the areas of, “nutrition, agriculture, natural resources, youth development, and economics” (Gornish & Roche, 2018, p. 1051).

One of the main ways CE accomplishes outreach is through 4-H programs. 4-H is a youth development program created in 1902 and has evolved into a program that serves more than six million children across the United States (Romano, 2018). In 4-H, youth have the opportunity to have hands-on projects in areas such as livestock, sewing, cooking, and so many more (National 4-H Council, 2018). In addition to these hands-on projects, there also became a need for programs that allowed participation without having a physical animal to work with. Not everyone has the opportunity to own an animal and

programs such as the Horseless Horse Program allowed for more participation (Bauman, 2010).

Horseless Horse Programs include teaching areas such as breeds, equipment, management techniques and horse judging (Bauman, 2010). Though some do not realize, horse judging can be taught solely through photos and videos (Reed, 2018). Even in a classroom or practice setting for horse judging, typically photos and videos are used out of convenience (Reed, 2018). The challenge is finding worth-while practice classes or examples. Resources such as eXtension.org, run by Extension Specialists from across the United States, provide information that can be utilized in those both classroom and informal learning settings (Bauman, 2010).

### **2.3. Motivation Theory in Relation to Online Learning**

There are a variety of theories for learning motivation. One of those theories is the ARCS Model for Motivation. ARCS stands for attention, relevance, confidence, and satisfaction (Keller, 2010). The attention factor is the component of grasping the learners focus with engaging content. Keller (2010) suggests ideas such as real-world examples and humor to accomplish this. Relevance means the learner is aware of the purpose of the learning activity (Keller, 2010). Allowing students to have self-confidence in the material will also aid in motivation (Keller, 2010). Learner satisfaction is also taken into consideration in Keller's model by stating learner satisfaction will occur if the previous three components are fulfilled (Keller, 2010).

The ARCS model is grounded in the expectancy-value motivation theory. Expectancy-value motivation theory is comprised of the, "expectation of success and perceived value" (Cook & Artino, 2016, table 1). Due to this, intrinsic motivation comes

into play within this theory, as well (Cook & Artino, 2016). Based on the individual's view on how successful they will be and what value they would gain from the information or task will determine whether or not he or she will seek out the information or attempt the task (Cook & Artino, 2016). In other words, if an individual is not confident he or she will succeed, the person is less likely to participate.

There have been several studies conducted using the ARCS model to develop curriculum for both online based classes and in-person (Milman & Wessmiller, 2020; Li & Moore, 2018; Feng & Tuan, 2005). However, there are differences in the application of the model whether it is used in an online setting or in-person. For example, in the 2005 study by Feng and Tuan, facilitators were able to conduct hands-on activities to aid in grasping the learner's attention and instilling confidence in finding solutions to problems with a difficult subject, chemistry. Li and Moore's 2018 study discusses the challenges of voluntary learning options, such as MOOC's, being that learner's motivation is directly tied to continuation, and perhaps procrastination, of learning. With the asynchronous online module, it is harder to maintain connection and engagement with the learner (Li & Moore, 2018). These ideas could be connected to extension based or informal learning.

Therefore, with the application of the ARCS motivation model in mind, courses for extension based online learning could be improved (Milman & Wessmiller, 2020). There are some practical suggestions to consider. As far as attention grasping and sustaining, Milman and Wessmiller (2020) suggest ideas such as videos, comic strips, and graphics. It is also mentioned, the more interactivity throughout the course, the more likely it will be to maintain attention (Milman & Wessmiller, 2020). As far as maintaining relevance, making sure the content is connected to real-world situations and

allowing the learner to have choice in subject area helps fulfill this category (Milman & Wessmiller, 2020). For example, during registration of a particular course, a facilitator may provide the opportunity for learners to fill out a pre-survey to indicate their interests.

Moving on, learner confidence can stem from items such as web site design, providing rubrics or learning objectives, and providing practice questions and reviews (Milman & Wessmiller, 2020). Making sure the website is professional in appearance and being organized and up front with learner expectations is a very practical way to allow for learner confidence. Finally, learner satisfaction can be reached by making sure the learner receives feedback throughout the course, as well as hands on practice (Milman & Wessmiller, 2020). This goal can be reached simply by providing an interactive quiz that automatically responds to learner responses stating whether or not the answer was correct, and potentially what to review if the answer is incorrect.

Although it does seem to be more challenging to reach learners from an online platform (Li & Moore, 2018), steps can be taken using the ARCS motivation model to aid in connection and continued learning (Li & Moore, 2018). Maintaining the learner's attention, allowing for relevance of topic, building up learner confidence, and increasing learner satisfaction can all be completed with some practical applications of the ARCS model (Milman & Wessmiller, 2020).

#### **2.4. Horse IQ™**

It is important to understand what the American Paint Horse Association (APHA) has already accomplished in regards to interactive online education of the classes that are offered at their shows in order to understand the purpose of this project.

APHA saw a need for understanding of the evaluation of classes that are provided at horse shows. Exhibitors often struggle to understand why they placed a certain way in a class for a variety of reasons. One of the reasons that can be controlled is the understanding of the rulebook. This is where APHA stepped in to assist in bridging the knowledge gap with the creation of Horse IQ™ (Hein, 2016).

With the help of some technological partners, APHA designed a website, Horse IQ™, devoted to interactive learning of individual classes that provided a way for learners to apply the knowledge learned with activities and questions. These activities include comparing your knowledge against a pro. This entails the learner ranking a group of horses and when the learner submits the answer, they can get written and voiceover feedback on how a professionally trained judge ranked the group. There are also video and voiceover lessons to show the ideal characteristics, as well as the undesirable characteristics for each class (Hein, 2016).

Currently, HorseIQ™ does not have any modules pertaining to competitive horse judging, or very basic judging concepts for beginner judges. This project aided in providing this information.

## 2.5. Action Research

Action research causes the educators to continuously be thinking about the impact of their choices and actions while they are being utilized (Ary et al., 2014), and can be extremely beneficial in practical research .

Action research has been defined as any systematic inquiry conducted by professionals or other practitioners with vested interests in learning more about how their particular organizations or other collaborative communities operate, how they lead or collaborate within the organization, and the extent to which their desired outcomes are met. It is research done *by* practitioners *for* themselves (Burkholder et al., 2019, p. 275).

Burkholder and colleagues (2019) suggest action research is a planned and systematic approach, collaborative, practical and relevant to practitioners, an open-minded process that allows testing of ideas, and a justification of one's professional practices.

Kurt Lewin was accredited with the creation of action research (Herr & Anderson, 2005). He felt there needed to be a design of research that lent itself to real life situation problem solving (Herr & Anderson, 2005). This type of research is a circular, or recursive design. The spiral design is a process of repeating and revising the project (Creswell, 2010). The steps of the process are depicted in an easy to understand diagram in Figure 1.

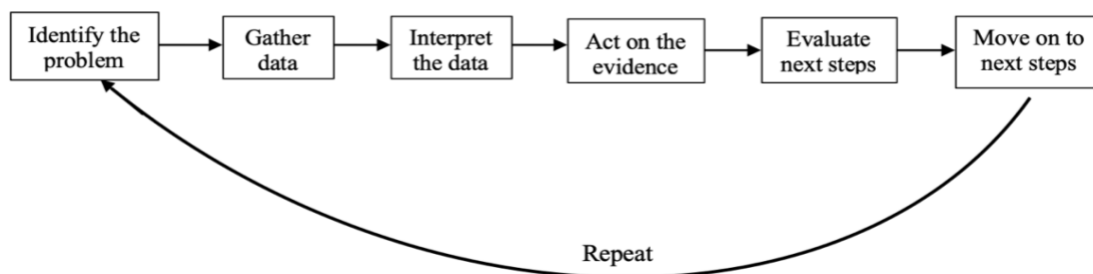
**Figure 1. Action Research Process**

Figure 1 shows the pattern of the research, while identifying the steps in easy to understand language. These are the steps utilized in this project. Step one- *identify the problem*, Step two- *gather data*, Step three-*interpret the data*, Step four- *act on evidence*, Step 5- *evaluate results*, Step 6- *move on to next steps*, and start the process over for the next step (Ferrence, 2000).

## **2.6. Cognitivism and Connectivism Theoretical Frameworks**

This study integrated the benefits of utilizing an online education tool and competitive horse judging within the framework of a combination of cognitivism (Haugeland, 1978) and connectivism (Siemons, 2017). Cognitivism and connectivism are theoretical frameworks used to help evaluate and explain the way learners learn (Haugeland, 1978 & Siemons, 2017).

Cognitivism is simply explained as the idea that only experiences truly matter in learning. However, the mental processes are important in this framework, as well (Haugeland, 1978). Cognitivism theory helps describe information such as, “concept formation, long-term memory, ability of students to build up new knowledge during their learning, and their capabilities of reasoning” (Al-Jarrah et al., 2019). Cognitivism deals with the concepts of assimilation and accommodation. Assimilation is the process of combining new knowledge with previously learned knowledge (Al-Jarrah et al., 2019).



Accommodation is the process of altering old knowledge due to the new knowledge, or experience (Al-Jarrah et al., 2019). Cognitivism can be applied to this project by allowing the learner to learn new concepts through the experience of interactive learning, and applying the concepts of assimilation or accommodation, depending on the prior knowledge of the learner.

Connectivism is a framework that demonstrates how online learning environments have allowed for different opportunities for learning (Siemons, 2017). With the connectivism theory, a learner realizes and connects information to help learn. Learning occurs within a network, social or technologically enhanced, allowing for recognizing and interpreting patterns (Siemons, 2017). Some key concepts of Connectivism include, “learning may reside in non-human appliances, ability to see connections between fields, ideas, and concepts is a core skill, decision-making is itself a learning process” (Goldie, 2016, p. 1064-1065).

## **2.7. Andragogical Process Model**

Malcom Knowles’ is well known in the education field for his use of the term andragogy. Andragogy can be defined as, “the art and science of helping adults learn” (Knowles, 1980). Knowles created a model with six key components of andragogy. These six items are: need to know, self-concept, prior experience, readiness to learn, orientation to learning, and motivation to learn (Knowles et al., p.5). Each of these areas are critical to successful adult learning.

The first component of Knowles’ andragogical model is the need to know. Before learners can really buy into a topic or skill, they need to know why it matters to them as an individual. What value would this new information bring to the individual?

Additionally, from the opposite perspective, what would the negative side effects be of actively not learning the information? Due to this driving factor of adult learning, one of the facilitator's main goals should be assisting the learners with understanding their reason for obtaining the knowledge or mastering a skill (Knowles et al., p. 43). For example, let's say there is a seminar on the effects of drunk driving at a high school. Most high schoolers are going to think, *why do I need to attend this?* Then, at the beginning of the seminar, a mother of a deceased child that was taken by a drunk driver comes and speaks about what happened to her child. This will, hopefully, cause the students to think about what could happen and why this seminar is important.

According to Knowles (2020), the next component of the adult learning model is self-concept (p. 43). Self-concept is formed around the idea that as adults, learners should be moving from dependent learners, to more self-directed, or independent learning. Knowles (2020) discusses the trouble with forced education on adults and the negative connotation adults have on not being in control (p. 43). The more the adult learners can feel as though they are in control of the content they are taking in, the more open they will be to learn.

Moving on, the next area to look into is the role of learners' experiences. As an educator or facilitator, it is naïve to think that adults would come into an educational experience at the same level as a youth learner would. To put it simply, adults have lived longer, and thus had far more experiences with a variety of backgrounds. Due to this, individualization of learning is far more important on the adult side of learning because every person has a unique history. Plus, it is important to realize that unlike children, adults start to view experiences as who they are, rather than something that happened to

them. Consequently, if an individual's experiences are viewed as unimportant, the individual will feel as though they themselves are unimportant (Knowles et al., p. 43).

Following learners' experiences is the idea of readiness to learn. Readiness to learn resides in the concept of pairing the, "timing of learning experiences to coincide with developmental tasks" (Knowles et al., p. 43). For example, college freshmen typically will not be interested in learning about the requirements of graduate school. But, when they are almost complete or completed with their undergraduate degree and have decided on graduate school, they will then be ready to learn about graduate school requirements.

The next step of the andragogical model is orientation to learning. Unlike children, adults are, "life-centered" (Knowles et al., p. 43.) around learning. This means adults want to learn information or a skill to assist them in a real-life situation. For example, an adult may not be motivated to sign up for an Algebra class, but if the title of the class was something such as, *Taxes Made Easy*, more adults would be interested in attending because taxes are something all adults learn how to manage.

Finally, one of the later components to be added to the andragogical model was motivation. Typically, children are driven by external motivators, such as grades in classes or a reward like candy. Although some adults are driven by external motivators as well, such as salary, intrinsic motivation is a much more valuable motivator (Tough, 1979). Intrinsic motivation would be areas including quality of life, self-esteem, and more (Knowles et al., p. 43). To many adults feeling appreciated and happy within their jobs is just as valuable as material benefits.

Each area of Knowles' andragogical model has great importance to a successful learning experience. To recap these areas are: need to know, self-concept, prior experience, readiness to learn, orientation to learning, and motivation to learn (Knowles et al., p. 6). If one of these areas are not met, it can greatly affect the retention of information and attitude towards learning. Facilitators can aid in this process by helping the learner understand why they need to learn, allowing the learner to be self-directed, individualizing the learning experience, pairing learning with developmental tasks, making the material life-centered, and allowing realization of motivating factors.

## **2.8. Summary**

This review of the literature provided information that validated the value of learning the skills associated with horse judging. This information showed how these skills can be transferred to other areas of the learners' lives. Additionally, the literature provided the need for more information to be available in an online platform to be able to be readily available to a larger population of learners. After reviewing the literature, it became clear the action research model was the best fit for developing and revising this interactive online beginner horse judging program due to the ability to include learners in the process of the development (Creswell, 2010).

## **3. Chapter III Methodology**

The purpose of this action research project is to develop and refine, based on participant feedback, an interactive online education tool to distribute horse judging information across the United States utilizing Storyline 360 in partnership with eXtension.org and the American Paint Horse Association. An action research model allows for on-going user input to be collected throughout a cyclical process.

### **3.1. Research Questions**

1. What kind of resources are those participating in horse judging looking for?
2. What do experts (horse judging coaches) feel their students need to be learning about horse judging?
3. Do the modules included in this study provide valuable and effective content to aid in teaching horse judging?

This project included building beginner level interactive modules educating participants about equine evaluation through Storyline 360™. These modules were accessible to participants online at all times. Being able to distribute this knowledge in an online fashion allows for greater participation. First, the areas coaches/professors felt learners need more information on were determined. Then, the modules were developed based off of the learner analysis responses. Evaluations of the content were completed through an expert panel review and two cycles of pilot/focus groups.

### **3.2. Action Research Plan**

The cycles utilized by action research in this project are described in Table 1. There are four cycles in this study. The first cycle used a quantitative learner analysis survey through Qualtrics. The purpose of this survey was to identify what resources were needed for horse judging training. This survey was completed in April 2020. The information gained was utilized in the first draft of developing the modules. This survey was completed by adults who are currently involved in teaching or coaching horse judging.

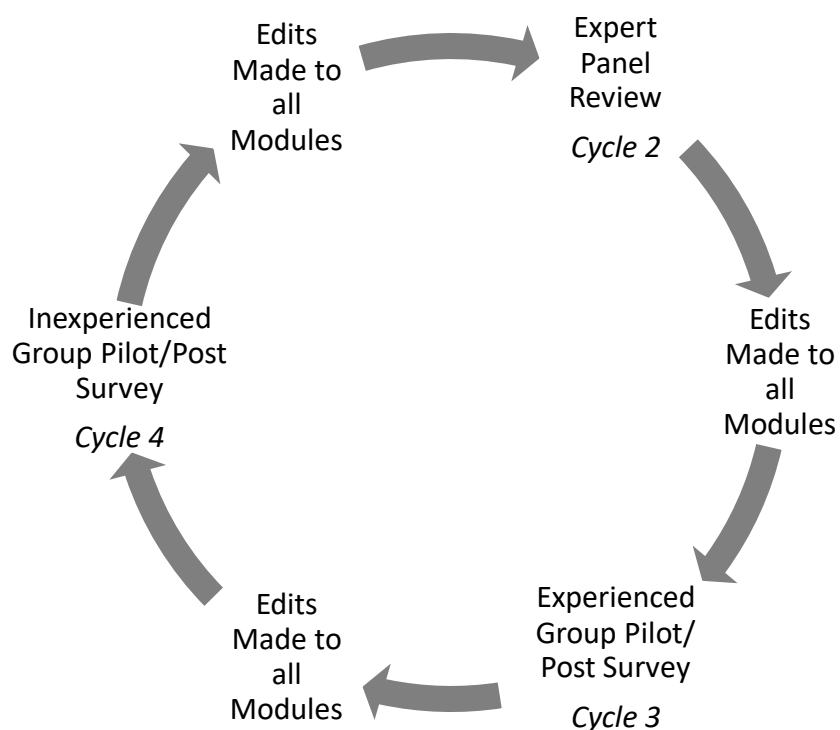
**Table 1** *Description of Action Research Cycle Components for Modules*

	<b>Purpose</b>	<b>Method Used</b>	<b>Desired Outcomes</b>	<b>Timeline</b>	<b>Number of Participants</b>
<b>Cycle 1</b>	To gain knowledge on what resources current horse judging teachers/coaches need	Learner Analysis Survey	-Identify what information to include in the modules and what information to focus on -Utilize findings in the first draft of the modules	March-April 2020	N=104 Adult
<b>Cycle 2</b>	To review content to include in the second draft	-Expert Panel Review (Extension Educators)	Identify areas for improvement to be incorporated in second draft	May-August 2020	N=3
<b>Cycle 3</b>	To pilot the content and provide feedback to be included in the third draft	Experienced Pilot/Focus Group	Identify areas for improvement to be incorporated in third draft	October 2020-April 2021	N=10
<b>Cycle 4</b>	To pilot and review third draft of modules	Inexperienced Pilot/Focus Group	Identify areas of improvement to be incorporated in the final draft	April-August 2021	N=10

The second cycle (Figure 2) is an expert panel of reviewers. This panel consisted of eXtension educators who are experienced with Storyline 360, education content, and horse judging. These experts provided feedback on different additions or changes that were edited into the Storyline files. They have also had formal training in online

education and provided information on transforming the content to a higher standard for online education. Additionally, they all had experience in horse judging and were able to provide feedback on whether or not the content is relevant.

**Figure 2.** *Action Research Cycles 2-4*



In the third cycle, experienced horse judging participants piloted the modules and participated in individual focus groups. For this study, experienced was defined as more than 5 years coaching or teaching horse judging. Following the review of each module, the participant would complete a 5 question Qualtrics survey and a Zoom call with the PI to discuss thoughts and concerns. This cycle included a group of current horse judging coaches that are a subset of the overall survey population. Participants were selected by recommendation from extension horse specialists from various states. There were 2 4-H leaders, 2 FFA advisors, 2 collegiate professors or coaches, and 2 extension

personnel, and 2 youth. Ary (2014) states, “focus groups typically consist of 6 to 12 people (p. 469).

The participants provided feedback on whether or not the content is realistic to use in a competitive horse judging environment, as well as a classroom environment for a beginner level judge. The desired outcome of this pilot and focus group was to identify areas of improvement within the first draft to incorporate in the second draft.

Finally, in the fourth cycle another pilot/focus group was utilized. Another group of horse judging coaches/professors from the subset of the overall survey population were be asked to pilot the modules. This group had the same responsibility of completing a one-on-one Zoom call to answer the same set of qualitative questions that the cycle 3 group answered. The goal, again, was to identify areas of improvement. However, this group of individuals were less inexperienced in horse judging. For this study, less experienced was defined as less than 5 years of experience coaching or teaching horse judging.

### **3.3. Statistics**

Tests that were ran for analysis of this study include: Analysis of Variance, (ANOVA), Fisher’s Exact Tests, and Linear Regressions.

ANOVA’s were used to test whether there was a difference between a particular mean value and another parameter. For example, the data was tested to find whether there was a difference in mean experience level of coaching or teaching between the different geographic regions.



Fisher's Exact Test is a form of a Chi-square test where there is a 2x2 table, with category labels on each side of the table, where each cell belongs to a certain group. This test determines whether the two categorical variables are independent of one another.

Linear Regressions were used to see if there was a positively, negatively, or no correlated relationship between two values of interest.

A Linear Mixed Model (LMM) was implemented using the glimmix procedure (PROC GLIMMIX) in SAS 9.4 (2017) to analyze the Rating for each module in Chapter V11, the Focus Group Post Surveys. Fixed effects included Group, Question, Subquestion and their interactions with a random participant effect accounting for participant variation. Residual and qq-plots were used to assess normality. For each question and subquestion, differences between the experienced and inexperienced group were reported at the  $\alpha = 0.05$  level. In other words, each module was evaluated separately with the following model: Rating = Group + Question + Group x Question + Question(Subquestion) + Group x Question(Subquestion) + participant variation + error.

### **3.4. Institutional Review Board**

Before starting this project, the principal investigator (PI) completed the training program titled, *Group 2 Social / Behavioral Research Investigators and Key Personnel*. This training program is for human research subjects. The PI was verified by the Collaborative Institutional Training Initiative (CITI, 2019). Prior to sending out the learner analysis survey, approval was granted by the University of Nebraska-Lincoln's Institutional Review Board (IRB) to conduct ethical and informed research (IRB # 20200320092EX).

## **4. Chapter IV: Learner Analysis Survey**

### **4.1. Population**

The population for this study is individuals involved in coaching, teaching, or competing in horse judging. The learner analysis was available for adults that coach or teach horse judging and was sent out to a variety of email list serves that cover multiple states in the U.S. These email list serves were chosen on the premise of those currently involved with coaching or teaching horse judging. This group of adults represented a broad variety of backgrounds, experiences, and locations. The adult pilot groups were recruited through contact with eXtension personnel and assistance from their local Extension staff.

### **4.2. Instrument Development**

The survey was created and through Qualtrics. These questions were distributed through an email link invitation send out to a variety of list serves to target 4-H, FFA, collegiate, and youth coaches, as well as professors of horse judging. The survey questions are included in the Appendix A. This survey was designed by the PI and a group of Extension Specialists. Prior to the survey being sent out, it was also reviewed by the IRB.

### **4.3. Results and Discussion**

Figure 3 shows a map of the United States with colored in states being ones that had responses. The number of participants from each state are included in each respective state outline. As seen on the map, Nebraska had the largest amount of responses. This was to be expected due to the survey originating in Nebraska and both the PI and Co-PI being from Nebraska.

**Figure 3.** *Participant Demographics for the Learner Analysis Survey*

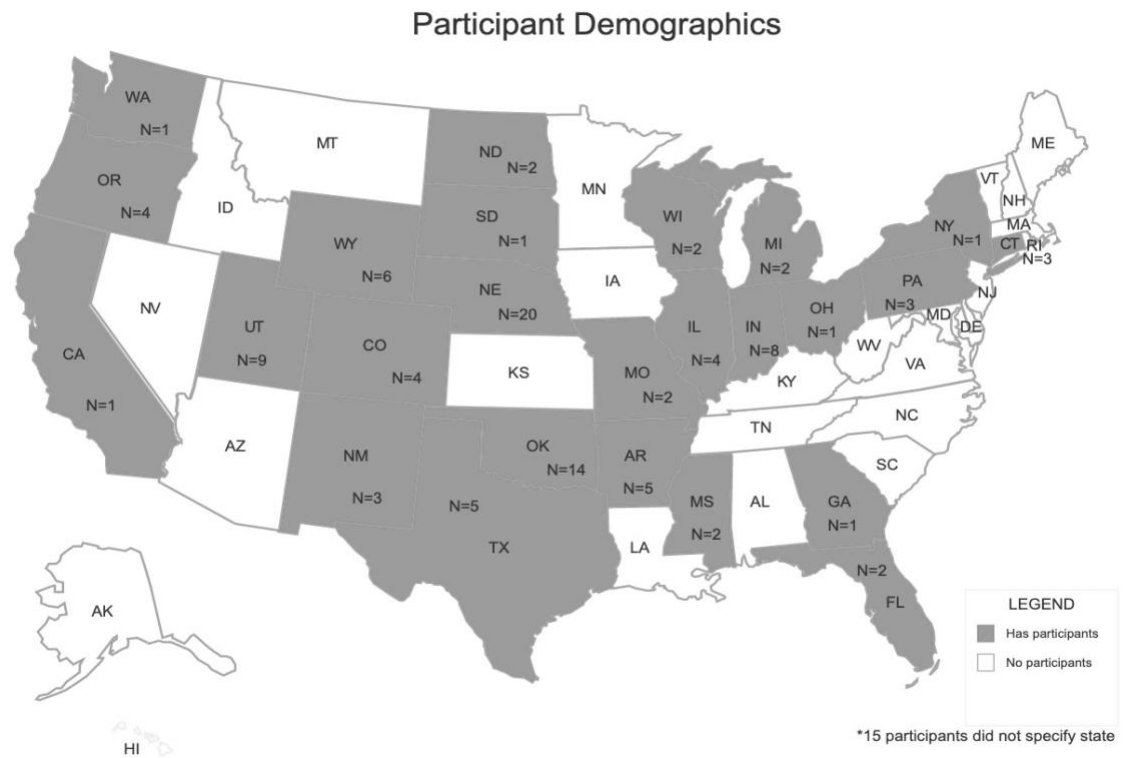


Table 2 displays the age demographics for the respondents. The age range of 18-29 had the largest amount of participants at 32% (n=34). Ages 30-39 were not far behind with 23% (n=25). Ages 40-49 are the next largest response rate group with 19% (n=21). 50-59 years of age made up a total of 13% (n=14) of respondents, 60-69 had 10% (n=11), 1 individual replied as other, and 2 individuals preferred not to respond. Relating this information to a survey done on horse ownership, this study differs from the population of horse ownership. The Brakke Equine Marketing Mega Study conducted in 2014 shows 76% of a horse owners are between 30-59 years of age (Brakke, 2014).

**Table 2.** *Age Range Demographics for the Learner Analysis Survey<sup>1</sup>*

<b>Age Range</b>	<b>Percentage %</b>	<b>Total Number (n)</b>
<b>18-29</b>	32	34
<b>30-29</b>	23	25
<b>40-49</b>	19	21
<b>50-59</b>	13	14
<b>60-69</b>	10	11
<b>Other</b>	1	1
<b>Prefer Not to Respond</b>	2	2
<b>Total</b>	100	108

<sup>1</sup>108 responses

Table 3 displays the gender demographics of the learner analysis survey. 76% of respondents were female and 23% male. 1 individual did prefer not to respond. The demographics are similar to a study by Kibler and others in 2018, showing the majority of horse owners are female at 94%.

**Table 3.** *Gender Demographics from Learner Analysis Survey*

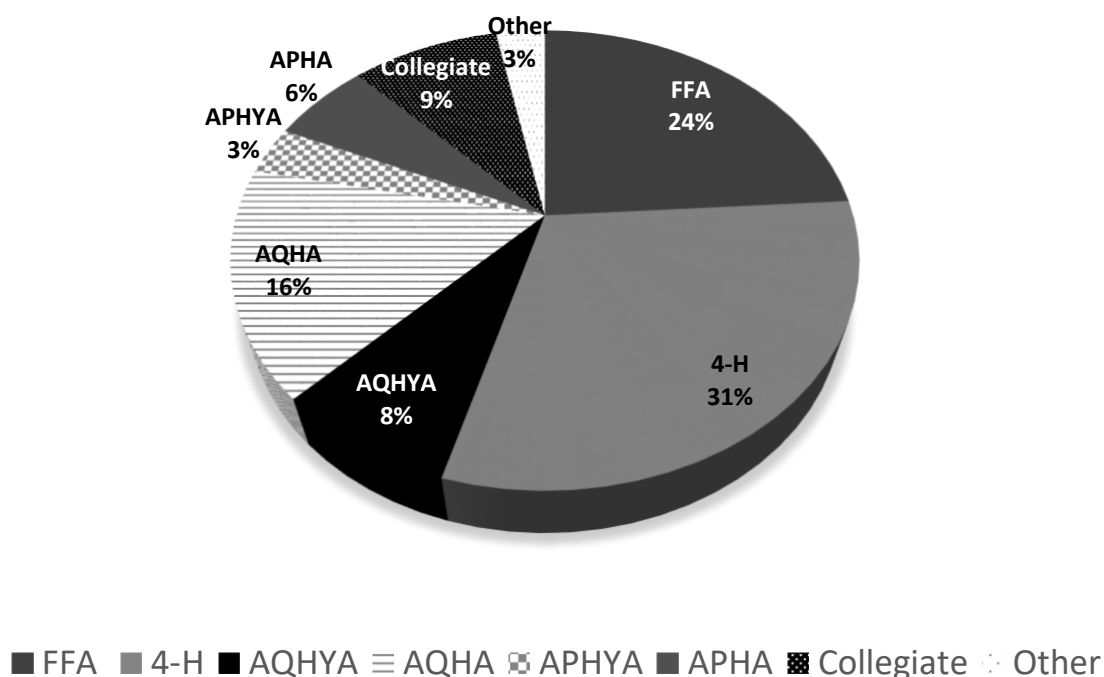
<b>Gender</b>	<b>Percentage, %</b>	<b>Total Number (n)</b>
<b>Female</b>	76	82
<b>Male</b>	23	25
<b>Other</b>	0	0
<b>Prefer Not to Respond</b>	1	1
<b>Total</b>	100	108

Figure 4 shows equine organization involvement of respondents. The listed organizations were 4-H (31%, n=80), FFA (24%, n=63), American Quarter Horse Association (AQHA) (16%, n=42), College/University (9%, n=24), American Quarter Horse Youth Association (AQHYA) (8%, n=21), American Paint Horse Association (APHA) (6%, n=16), American Paint Horse Youth Association (APHYA) (3%, n=9), and Other (3%, n=8). Responses for Other included:

- “USDF”
- “AMHR/ASPC”
- “Local and state breed associations”
- “NRCHA, SRCHA”
- “NASDMA”
- “NRCHA, NSBA, PHBA, ABRA”
- “IHSA”
- “USEF, USDF, USPC”
- “OHSET”.

Due to the nature of the participant recruitment through extension Listservs and social media pages, it was not surprising to see the majority of respondents were involved with 4-H (31%), and FFA (24%).

**Figure 4.** Respondents Equine Organization Involvement from the Learner Analysis Survey<sup>1</sup>



<sup>1</sup>Could select multiple organizations, 263 total “yes” responses to the listed organizations

<sup>2</sup> FFA=National FFA Organization

<sup>3</sup> 4-H=U.S. based youth organization

<sup>4</sup> AQHA=American Quarter Horse Association

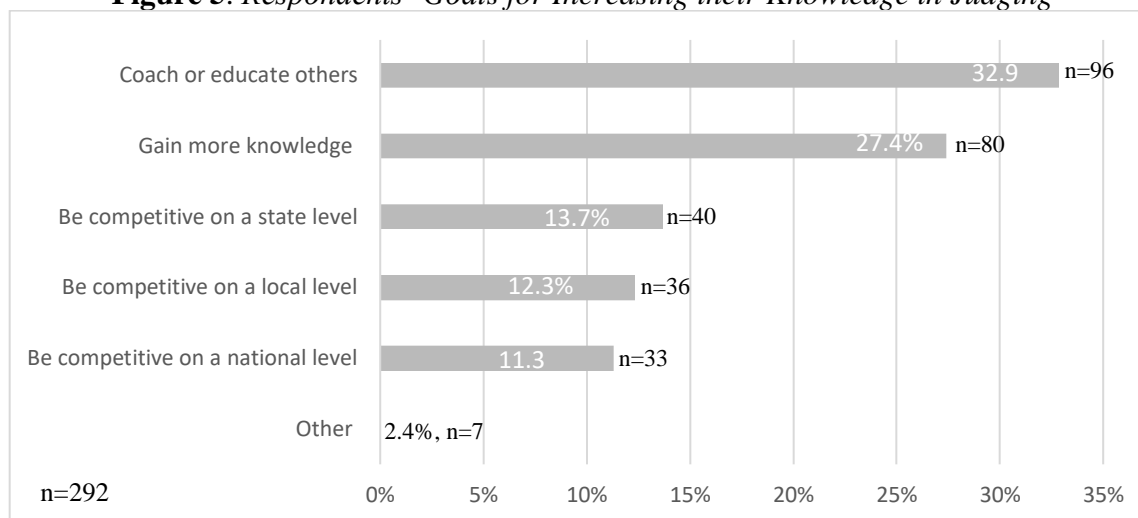
<sup>5</sup> AQHYA= American Quart Horse Youth Association

<sup>6</sup> APHA= American Paint Horse Association

<sup>7</sup> APHYA= American Paint Horse Youth Association

<sup>8</sup> Collegiate= College or University

The respondents indicated their primary goals of learning more about horse judging was to educate or coach others 32.9% (n=96) or to gain more knowledge themselves 27.4% (n=80), as shown in Figure 5. It is important to note, respondents could choose more than one response for this question (n=292 responses). These results are in agreement with a 2016 study done by Janes and others, showing educators or coaches want to learn more to be able to share that information with others.

**Figure 5.** *Respondents' Goals for Increasing their Knowledge in Judging*

<sup>1</sup>Respondents could select more than one response.

<sup>2</sup>108 responses, 292 options were selected.

The usefulness of various horse judging topics was also surveyed. For each topic listed, the majority of respondents indicated each topic would be very useful to extremely useful. These topics included sample classes 94% (n=99), scoring of classes 85% (n=89), rules and standards of classes 83% (n=87), penalties and faults of classes 83% (n=87), and basic horse knowledge, such as parts of the horse and saddle 69% (n=72), as shown in Table 4. Additional responses included:

- “Knowledge about horses conformation helps make more knowledgeable purchases”
- “Give youth the opportunities for skill development, greater education about the equine industry, and development for college/post high school experiences. I want them to appreciate the different disciplines in the equine industry and give them tools to help their own equine projects improve”
- “Judge professionally”
- “I have no goal”

- “Extension assistant needing more guidance”
- “Support young learners in their knowledge gaining”
- “Coach on the college level”

To interpret, all topics listed were marked by respondents as very or extremely useful, as a whole.

**Table 4.** *Usefulness of Horse Judging Topics from the Learner Analysis Survey<sup>1</sup>*

<b>Topic</b>	<b>Not Useful At All %</b>	<b>Slightly Useful %</b>	<b>Moderately Useful %</b>	<b>Very Useful %,</b>	<b>Extremely Useful %</b>	<b>Total (n)</b>
<b>Sample Classes</b>	1.0% n=1	0.0% n=0	4.8% n=5	20.0% n=21	74.3% n=78	105
<b>Scoring of Classes</b>	1.0% n=1	3.8% n=4	10.5% n=11	41.0% n=43	43.8% n=46	105
<b>Rules and Standards of Classes</b>	0.0% n=0	6.7% n=7	10.5% n=11	47.6% n=50	35.2% n=37	105
<b>Penalties and Faults of Classes</b>	0.0% n=1	2.9% n=3	14.4% n=15	34.6% n=36	48.1% n=50	104
<b>Basic Horse Knowledge</b>	2.9% n=3	13.3% n=14	15.2% n=16	36.2% n=38	32.4% n=34	105

<sup>1</sup>Respondents could select one choice per topic.

The respondents reported their level of experience in coaching or teaching horse judging on a Likert scale of 0-10 (Figure 6). They also reported their comfortability level of coaching or teaching a variety of classes commonly seen in a horse judging contest.

The classes are listed in Figure 6. The respondents ranked their comfort level coaching or teaching each class on a scale of 1-5. These individual's scores for each class were then added up to get an “Overall Comfortability Score”. The linear regression model was used to analyze the relationship. The data shows, the more experience an individual has, the more comfortable they are coaching or teaching a particular class. To interpret, there was



evidence to conclude there is a significant linear relationship between experience level and overall comfortability ( $t = 11.28$ ,  $p\text{-value} < 0.0001$ ). The estimated model is:

$$\text{Overall Comfortability} = 12.25 + 2.58 \cdot \text{Experience Level}.$$

This means for every 12.25 point increase in comfort level, there was also a 2.58 increase in experience level points. To interpret further, more experience greatly influences a rise in comfort level.

An ANOVA was also ran to see if there was a difference in mean experience level between the different geographic regions. The p-value was 0.17, meaning there was not evidence of a significant relationship between geographic location and experience level.

**Figure 6.** *Relationship Between Coaching Experience and Overall Comfortability Teaching*

Categories Include:

Rail Classes (Western  
Pleasure/Hunter Under  
Saddle)

Western Horsemanship

Hunt Seat Equitation

Hunter Hack

Ranch Riding

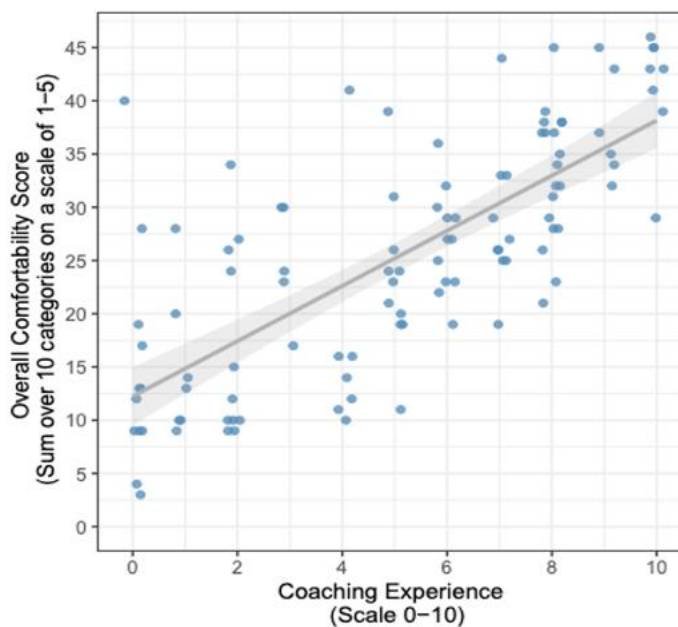
Reining

Western Riding

Oral Reasons

Halter

Other



It was of interest to see if there was a correlation between involvement and comfort level coaching or teaching, as well. The linear regression model was used to analyze this. The respondents reported their involvement in various organizations. The

organizations are listed in Figure 7. They also reported their comfortability level of coaching or teaching a variety of classes commonly seen in a horse judging contest. The classes are listed in Figure 6. The respondents ranked their comfort level coaching or teaching each class on a scale of 1-5. These individual's scores for each class were then added up to get an "Overall Comfortability Score". The data shows, the more involvement an individual has, the more comfortable they are coaching or teaching. To interpret, there is evidence to conclude there was a significant linear relationship between overall involvement and overall comfortability ( $t = 4.219$ ,  $p\text{-value} < 0.0001$ ). Our estimated model was:

$$\text{Overall Comfortability} = 11.62 + 0.82 \cdot \text{Overall Involvement}.$$

This means for every 11.62 point increase in comfort level, there was a 0.82 increase in involvement points. To interpret further, involvement greatly influences a rise in comfort level of coaching and teaching.

**Figure 7.** *Relationship Between Industry Involvement and Overall Comfortability Teaching*

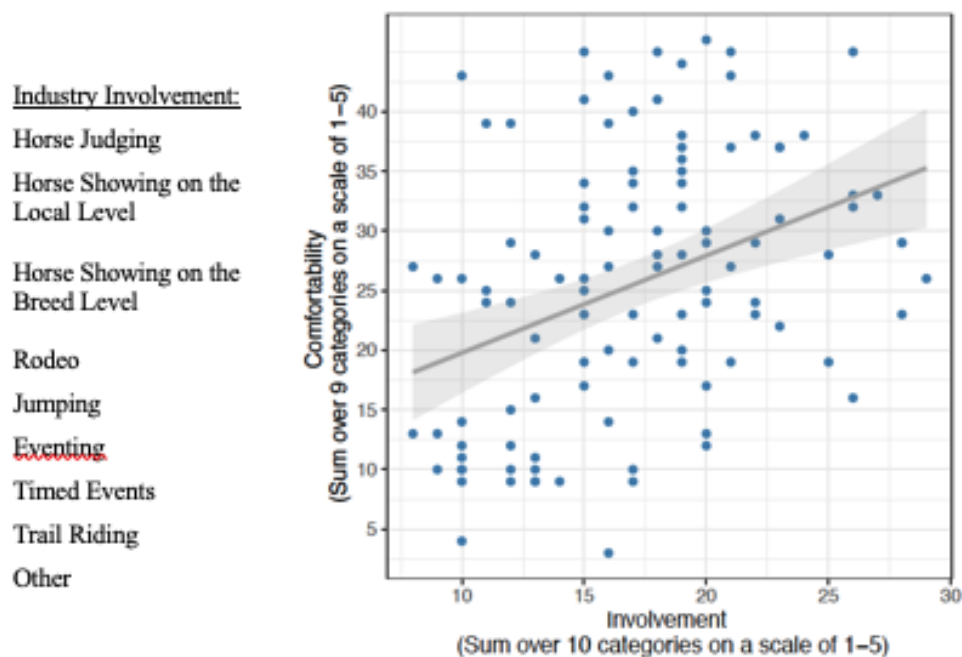


Table 5 shows the responses for equine related industry involvement. The participants were able to choose involvement levels of none, minimal, moderate, very and extremely involved. The equine industry involvement options were: horse judging, horse showing on the local level, horse showing on the breed level, jumping, eventing, timed events, trail riding, and other. The other response did have a text box where respondents could fill in another option. Other responses included:

- “Parent of kids with horse project”
- “4-H horse shows”
- “Horse Bowl/Hippology”
- “Dressage”

- “Working horse shows”
- “IHSA Equestrian Teams”
- “Driving”
- “Polo”
- “Horse riding lessons”
- “Breeding”
- “Queen [contests]”
- “Putting on 4-H Horse Shows”

The trends for Table 5 are as follows. The categories of horse showing on a breed level, rodeo, jumping, eventing, and timed events all had lower involvement levels with a 50% response rate, or greater, to “no involvement”. The industry involvement option of “horse judging” responses were numerically closer throughout the “minimal involvement” to “extremely involved” categories. The large percentage difference was in the “no involvement” category at 6.48% (n=7). Horse showing on a local level also received similar response rates for each involvement rating with “extremely involved” being the lowest at 9.35% (n=10). Similarly, trail riding was fairly even across the “no involvement” through “moderate involvement” options with “very involved” and “extremely involved” being lower at 9.43% (n=10), and 5.66% (n=6), respectively. This does not align with the 2014 marketing study showing the majority of horses are used for recreation or trail riding (Brakke). However, with the nature of this survey being geared toward horse judging, it was expected to see more individuals involved with judged events.

**Table 5.** *Equine Industry Involvement from Learner Analysis Survey Respondents*

<b>Industry Involvement</b>	<b>No involvement %</b>	<b>Minimal Involvement %</b>	<b>Moderate Involvement %</b>	<b>Very Involved %</b>	<b>Extremely Involved %</b>	<b>Total (n)</b>
<b>Horse Judging</b>	6.48 (n=7)	21.30 (n=23)	30.56 (n=33)	18.52 (n=20)	23.15 (n=25)	108
<b>Horse Showing on the local level</b>	28.04 (n=30)	17.76 (n=19)	23.36 (n=25)	21.50 (n=23)	9.35 (n=10)	107
<b>Horse Showing on the breed level</b>	55.14 (n=59)	14.02 (n=15)	10.28 (n=11)	15.89 (n=17)	4.67 (n=5)	107
<b>Rodeo</b>	52.88 (n=55)	33.65 (n=35)	8.65 (n=9)	3.85 (n=4)	0.96 (n=1)	104
<b>Jumping</b>	72.38 (n=76)	18.10 (n=19)	3.81 (n=4)	3.81 (n=4)	1.90 (n=2)	105
<b>Eventing</b>	80.58 (n=83)	15.53 (n=16)	2.91 (n=3)	0.97 (n=1)	0.00 (n=0)	103
<b>Timed Events</b>	49.52 (n=52)	26.67 (n=28)	15.24 (n=16)	6.67 (n=7)	1.90 (n=2)	105
<b>Trail Riding</b>	32.08 (n=34)	33.96 (n=36)	18.87 (n=20)	9.43 (n=10)	5.66 (n=6)	106
<b>Other</b>	42.11 (n=16)	5.26 (n=2)	5.26 (n=2)	23.68 (n=9)	23.68 (n=9)	38

The involvement was then broken down into geographic location to determine if there was a relationship between geographic region and type of involvement. Table 6 shows the p-values of the Fisher's Exact Test. If the p-value is  $> 0.05$ , there is a significant relationship. As seen in Table 6, the Horse Judging was the only involvement category with significant relationships with geographic location. This shows horse judging involvement was impacted by geographic location. Looking further into the percentages, 70% of Southeastern individuals indicated they were extremely or very

involved in Horse Judging. While 43% of Northeastern respondents selected “moderately involved” and 29% indicated minimal or no involvement with Horse Judging.

Eventing had a p-value of 0.051, showing a trend of geographic location in relation to eventing. Looking at the percentage breakdown, the Southeast, Southwest, West and Midwest regions reported 100%, 95%, 100%, and 97% respectively with no or minimal involvement in eventing. Meanwhile, the Northeast respondents were 14% moderately involved and 14% very involved in eventing. Meaning, the Northeast has a larger population of respondents involved in eventing.

**Table 6.** *Effect of Geographic Region on Industry Involvement<sup>1,2</sup>*

<b>Industry Involvement</b>	<b>Fisher’s Exact p-value</b>
<b>Horse Judging</b>	0.023
<b>Horse Showing on a Local Level</b>	0.379
<b>Horse Showing on a Breed Level</b>	0.614
<b>Rodeo</b>	0.499
<b>Jumping</b>	0.186
<b>Eventing</b>	0.051
<b>Timed Events</b>	0.267
<b>Trail Riding</b>	0.447
<b>Other</b>	0.242

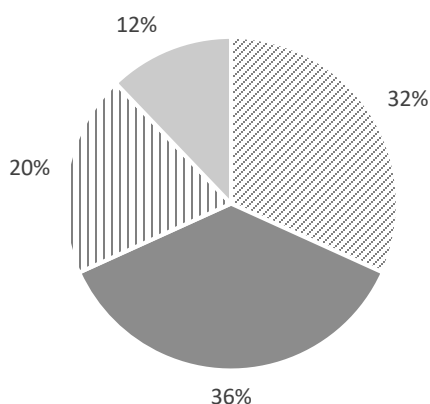
<sup>1</sup>Significant p-values are > .05

<sup>2</sup>Northeast: Connecticut, Pennsylvania, New York  
Southeast: Georgia, Arkansas, Mississippi, Florida  
Southwest: Texas, Oklahoma, New Mexico,  
West: Utah, Oregon, Washington, Wyoming, Colorado  
Midwest: Indiana, Illinois, Ohio, Wisconsin, Nebraska, South Dakota,  
North Dakota, Missouri, Michigan

Figure 8 shows the respondents answers on how many students they teach or coach per year. Participants reported 36% (n=39) coach or teach 5 or less students a year. 32% (n=34) have 5 to 10 students, 20% (n=21) have 10 to 20, and 12% (n=13) coach or teach 20 or more students a year.

**Figure 8.** *Amount of Students Taught/Coached Per Year from the Learner Analysis Survey,<sup>1,2</sup>*

▨ Five and under   ■ Five to ten   ▨ Ten to twenty   ■ Over twenty

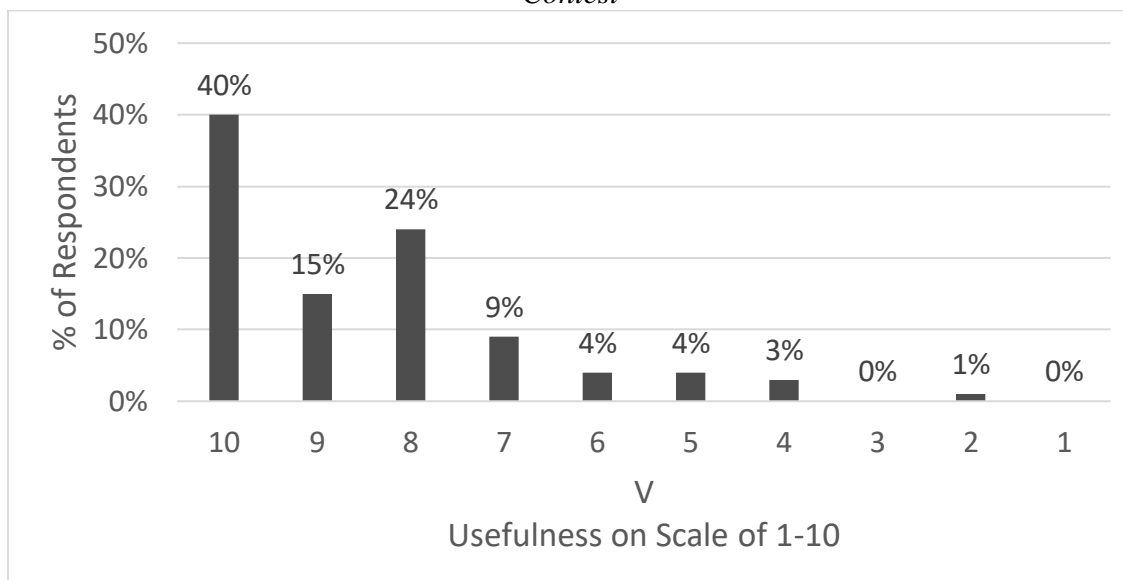


<sup>1</sup> Respondents reported how many students they teach or coach per year.

<sup>2</sup> 121 total survey participants, 107 responses to this question

Respondents were asked about how useful an online horse judging contest would be. The question format was a Likert scale of 1- 10, with 10 being “extremely useful”. As seen in Figure 9, 92% (n=99) of respondents selected a 6 or higher out of 10. A ranking of 10 out of 10 was the most frequent with 40% (n=43) of respondents choosing 10. While, 4% (n=4) chose a rating of 5, and 4% (n=4) marking a rating under 5. Meaning, an online horse judging contest would be considered useful to some degree by the majority of respondents.

**Figure 9.** *Learner Analysis Survey Respondents on Usefulness of an Online Judging Contest<sup>1,2</sup>*



<sup>1</sup> Respondents were asked to rank the usefulness of an online horse judging contest on a scale of 1-10 with 10 being “Extremely useful”

<sup>2</sup> 107 responses to this question

As shown in Table 7, the survey asked respondents if a questions division should be included in an online horse judging contest. 89% (n=96) of respondents answered “yes”, a questions division should be included. While only 11% (n=12) reported a questions division should not be included. In other words, a questions division should be included in an online judging contest, based on responses.

**Table 7.** *Learner Analysis Responses for a Questions Division in an Online Horse Judging Contest<sup>1,2</sup>*

Should Questions Division be in Online Judging Contest?	Yes	No	Total
Percentage, %	89	11	100
Total Number (n)	96	12	108

<sup>1</sup> Respondents were asked if a Questions division should be included in an online horse judging contest, with options of “yes” or “no”.

<sup>2</sup>108 responses to this question.



Table 8 shows the responses for the usefulness of information topics pertaining to oral reasons. The response options were on a 5 point Likert scale with “0” being “Not useful at all” and “5” being “Extremely useful”. The “Other” option did have a fill in the blank for additional topics. Other responses included: “Other people taking reasons”, “I seldom need oral reasoning, and when I do, it is very easy.”, “New pedagogy”, “Stages of coaching reasons (ex: beginner, intermediate, advanced goals/ability levels”. No other participants that selected “Other” chose to utilize the text box to elaborate. To interpret, as a whole, respondents felt all topics listed would be either very or extremely useful.

**Table 8.** *Usefulness of Information Topics Pertaining to Oral Reasons from Learner Analysis Survey,<sup>1,2</sup>*

<b>Topic</b>	<b>Not Useful At All %</b>	<b>Slightly Useful %</b>	<b>Moderately Useful %</b>	<b>Very Useful %</b>	<b>Extremely Useful %</b>	<b>Total (n)</b>
<b>Terminology</b>	0.00 (n=0)	0.93 (n=1)	7.48 (n=8)	36.45 (n=39)	55.14 (n=59)	107
<b>Presentation/ Delivery</b>	0.00 (n=0)	2.86 (n=3)	9.52 (n=10)	35.24 (n=37)	52.38 (n=55)	105
<b>Organization</b>	0.94 (n=1)	4.72 (n=5)	11.32 (n=12)	35.85 (n=38)	47.17 (n=50)	106
<b>Memorization</b>	1.90 (n=2)	7.62 (n=8)	17.14 (n=18)	36.19 (n=38)	37.14 (n=39)	105
<b>Scoring</b>	1.90 (n=2)	6.67 (n=7)	16.19 (n=17)	36.19 (n=38)	39.05 (n=41)	105
<b>Other</b>	33.33 (n=4)	0.00 (n=0)	0.00 (n=0)	25.00 (n=3)	41.67 (n=5)	12

<sup>1</sup>Respondents were asked to rank each topic of oral reasons from not useful at all to extremely useful on a 5 point Likert scale.

<sup>2</sup>The “Other” option had a fill in the blank for additional topic suggestions.

Respondents were asked to rank a list of commonly seen classes in horse judging contest from “Not important at all” to “Extremely important” (Table 9). It was of interest to look into if geographic location played a role in the ranking of classes. The geographic regions were broken into: Northeast, Southeast, West, and Midwest. Table 9 includes

how states were broken into regions and only includes states that had participants. The Fisher's Exact Test of Independence was ran to see if there were any correlations.

It was found that Western Riding, Ranch Riding and Reining all were significant with p-values under 0.05. This means there is a relationship between location and ranking of Western Riding, Ranch Riding, and Reining. When looking at percentage breakdowns, 73% of individuals from the Southwest selected Western Riding was either extremely or very important. On the other hand, 57% of individuals from the Northeast chose only "slightly important".

For Ranch Riding, a similar trend occurred. Looking at percentage breakdowns, the Southeast, Southwest, and West all had no lower than 60% indicated Ranch Riding was either extremely or very important. However, the Northeast had 71% of individuals select "moderately important".

Similarly with Reining, again looking at the percentage breakdown of responses, 100% of individuals from the Southwest chose either extremely or very important. The Southeast, Midwest, and West all had percentages no lower than 56% for extremely or very important. But, the Northeast had 71% mark "moderately important" and 14% mark "not important at all".

This shows the Northeast did not find western riding, ranch riding, and reining as important to include in an online judging contest as the other regions did.

**Table 9.** *Effect of Geographic Region on Ranking the Value of Importance on Including Various Classes that are Commonly Seen in Horse Judging Contests<sup>1,2</sup>*

<b>Class</b>	<b>Fishers Exact p-value</b>
<b>Halter</b>	0.835
<b>Western Riding</b>	0.008
<b>Western Pleasure</b>	0.283
<b>Hunter Under Saddle</b>	0.821
<b>Hunter Hack</b>	0.433
<b>Western Horsemanship</b>	0.158
<b>Hunt Seat Equitation</b>	0.764
<b>Ranch Riding</b>	0.020
<b>Reining</b>	0.001
<b>Other</b>	0.638

<sup>1</sup>Significant p-values are > .05

<sup>2</sup>Northeast: Connecticut, Pennsylvania, New York

Southeast: Georgia, Arkansas, Mississippi, Florida

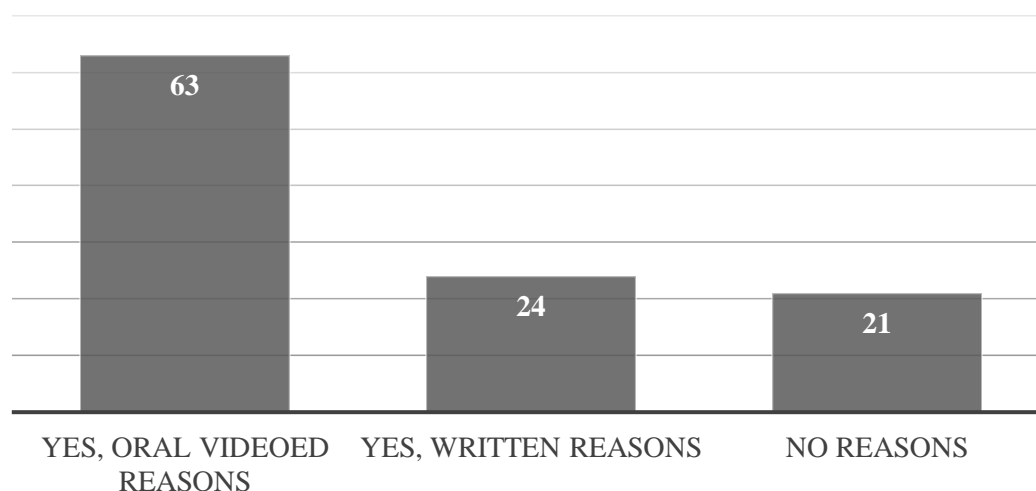
Southwest: Texas, Oklahoma, New Mexico,

West: Utah, Oregon, Washington, Wyoming, Colorado

Midwest: Indiana, Illinois, Ohio, Wisconsin, Nebraska, South Dakota, North Dakota, Missouri, Michigan

In Figure 10, a visual aid represents responses on whether or not oral reasons should be included in an online horse judging contest. The responses options were “yes, written sets”, “yes, oral videoed sets”, and “no”. 52% (n=63) chose oral videoed reasons, 20% (n=24) opted for written reasons, and 17% (n=21) selected “no” on including oral reasons in an online judging contest. Thus,, the majority of individuals (72%, n=87) would like reasons included in an online judging contest.

**Figure 10.** *Leaner Analysis Survey Respondents on Oral or Written Sets for an Online Horse Judging Contest<sup>1,2</sup>*

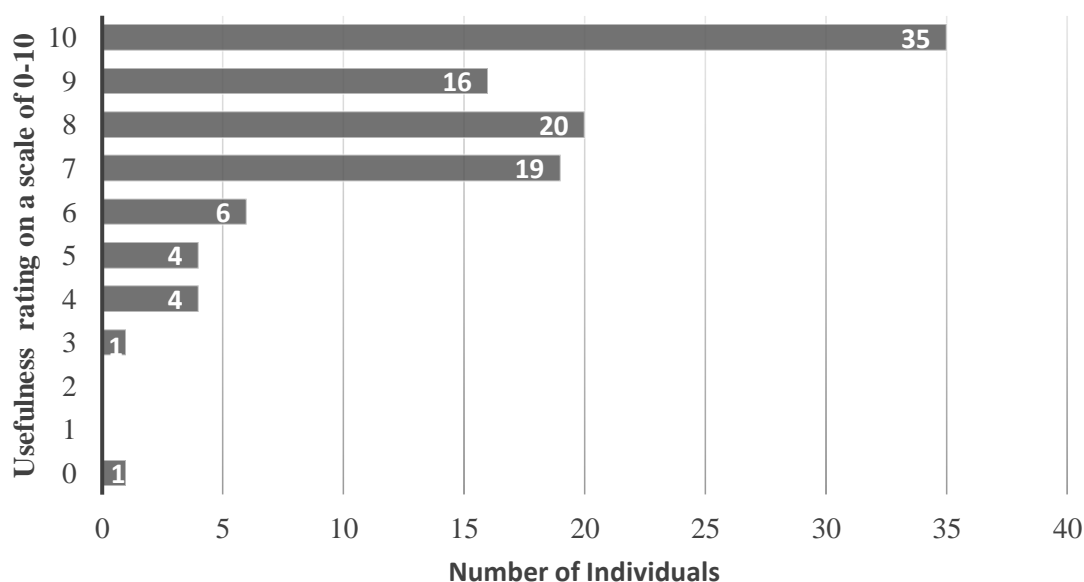


<sup>1</sup> Respondents were asked if Oral Reasons, Written Reasons, or no sets of reasons should be included in an Online Judging Contest. The response options were “yes, written sets”, “yes, oral videoed sets”, or “no”.

<sup>2</sup> 121 total survey participants, 14 individuals did not respond to this question.

It was asked if a feedback from an official panel for all classes within an online horse judging contest would be useful. As shown in Figure 11, the majority of respondents (85%), chose a 7 out of 10 rating or higher, meaning an online judging contest would be very to extremely useful. 13% selected in the 4-6 range, with 1% choosing 3 and 1% choosing 0 out of 10 on a usefulness scale. To simply, the majority of respondents (85%) felt an online judging contest would be at least very useful.

**Figure 11.** *Learner Analysis Survey Respondents on Official Panel Feedback for Classes in an Online Horse Judging Contest<sup>1</sup>*

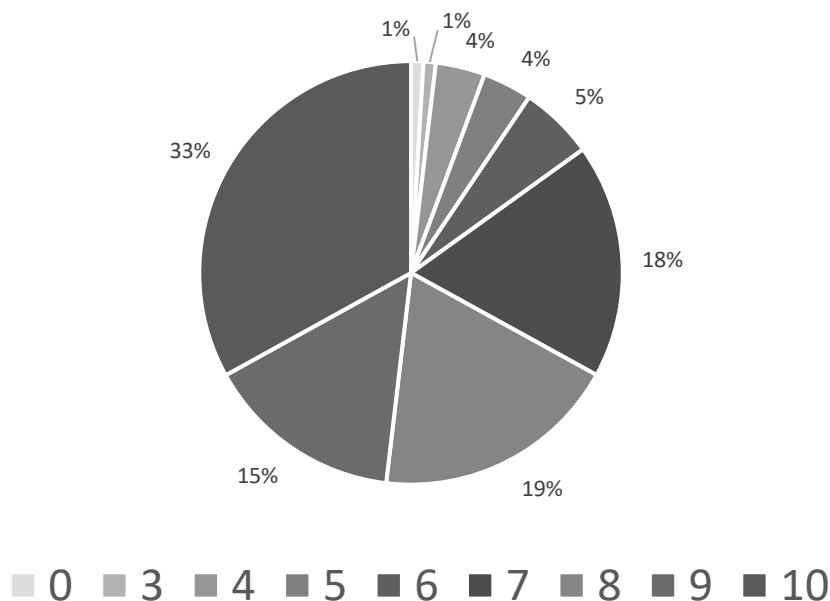


<sup>1</sup> Respondents were asked if official panel feedback on the placing of classes would be useful on a scale of 1-10 with 10 being “extremely useful”.

Figure 12 shows the responses of the usefulness rating of individual feedback on oral reasons. A 10 point Likert scale was utilized with a 10 being “Extremely useful”.

There was a response rate of 91% for a rating of 6 or higher, with a rating of 10 being the most frequent response at 33%. Similarly to the responses for an official panel feedback, respondents also felt, as a whole, individual feedback on reasons would be useful.

**Figure 12.** *Usefulness of Individual Feedback on Oral Reasons from Learner Analysis Survey<sup>1,2</sup>*



<sup>1</sup> Respondents were asked to rank the usefulness of individual feedback for oral reasons on a scale of 0-10 with 10 being “extremely useful”

<sup>2</sup> 106 responses to this question

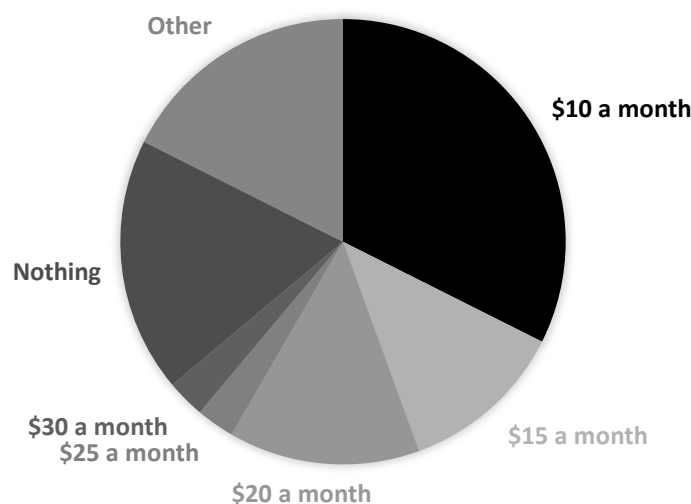
Represented in Figure 13, respondents were asked how much they would be willing to pay for unlimited access to educational horse judging content and practice horse judging classes. The listed options were \$10 a month (32%, n=35), Nothing (19%, n=20), Other (18%, n=19), \$20 a month (14%, n=15), \$15 a month (12%, n=13), \$25 a month (3%, n=3), \$30 a month (3%, n=3). Some additional responses included:

- “Fee based on usage”
- “No 4H/FFA budget for this”
- “Already have ample sources”
- “Yearly subscription of \$150”
- “Annual fee of \$20”.

There was a large variety in pricing suggestions. Other responses included various ranging in prices from \$5 a month to \$250 annually.

As seen from the comments made, budget was a concern of many individuals. In the interviews for the modules, discussed later, budget was also brought up by a few participants. Many reports show a cut in funding including a 50% reduction in funding for agriculture programs in California (Anderson, 2020).

**Figure 13.** *Amount Willing to be Paid for Unlimited Access to Educational Horse Judging Content and Practice Horse Judging Classes<sup>1</sup>*



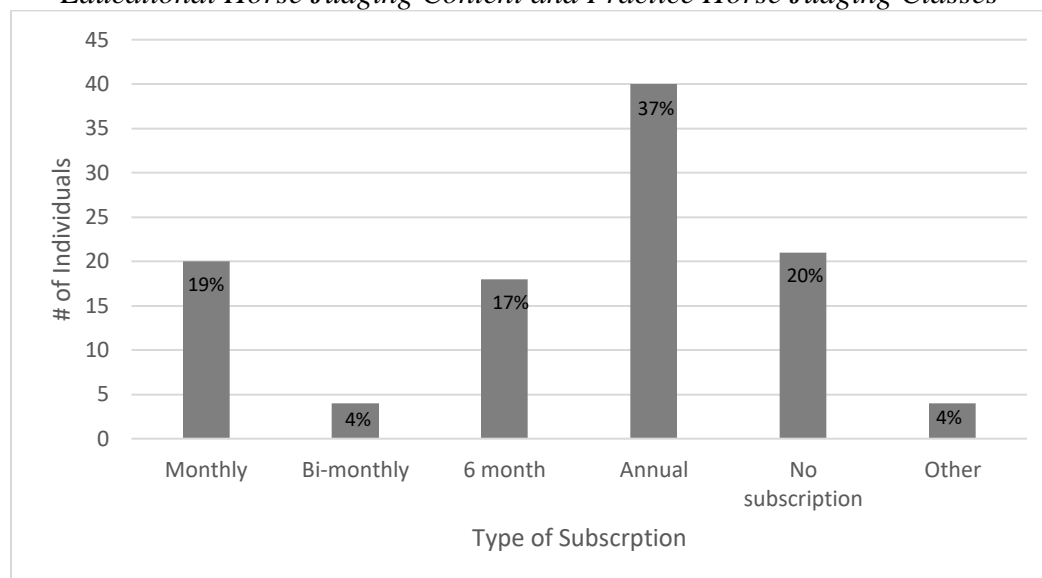
<sup>1</sup> 108 total responses

Figure 14 shows what type of subscription respondents would prefer for unlimited access to education horse judging content and practice horse judging classes. The choices listed were Annual (37%, n=40), No subscription (20%, n=21), Monthly (19%, n=20), 6 month (17%, n=18), Bi-monthly (4%, n=4), and Other (4%, n=4). Other responses were related to making the subscription be choice based so that each program can select what suits them.





**Figure 14.** *What Type of Subscription Would be Preferred for Unlimited Access to Educational Horse Judging Content and Practice Horse Judging Classes<sup>1</sup>*



<sup>1</sup>107 total responses

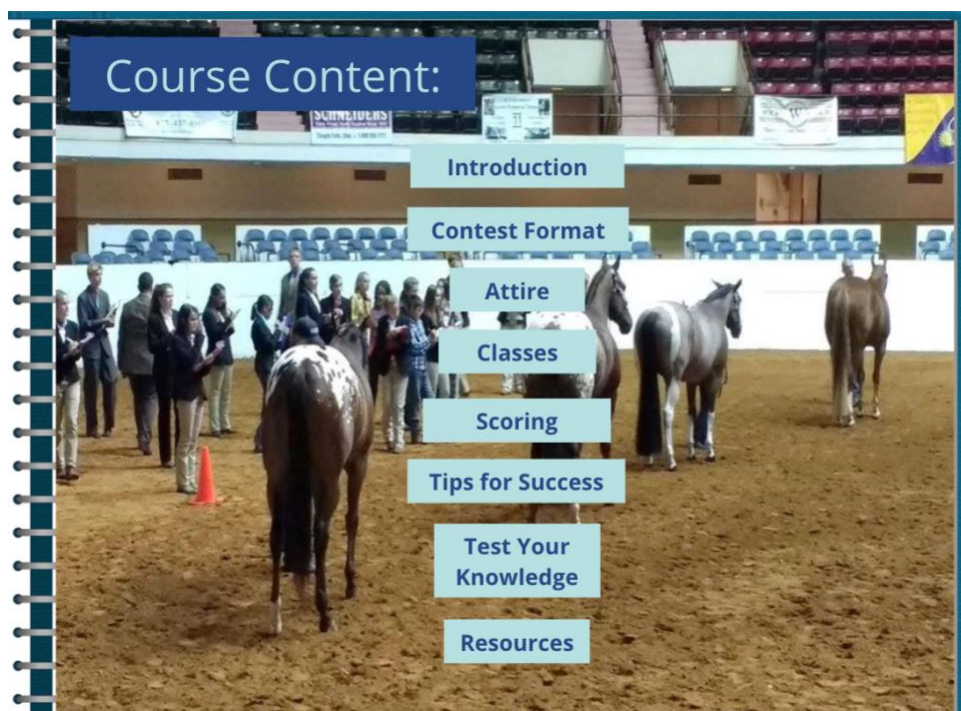
## 5. Chapter V: Module Development

The module development was completed through the Articulate 360™ program, Storyline 360™. *What is a Horse Judging Contest?* and *Getting Started with Oral Reasons: Competitive Horse Judging* were created by the PI. The Basics of Evaluating Conformation was developed by the Co-PI and an eXtension Horse Inc. collaborator. The eXtension Horse Inc. group was interested in utilizing this program as a delivery method.

The topics were chosen based off of feedback from the Learner Analysis survey and by recommendation of the eXtension Horses Inc. group. Motivation of Learning Theory in Relation to Online Learning (Keller, 2010) and various learning styles was kept in mind during the development process. For example, in each module the course content page allows users to choose which section they would like to complete and the order in which they would prefer to complete them. This allows for learn self-concept, or more self-directed learning, as discussed in Malcom Knowles' Andragogical Process

Model (Knowles, 2020). An example of a course content page from the *What is a Horse Judging Contest?* module is included in Figure 15.

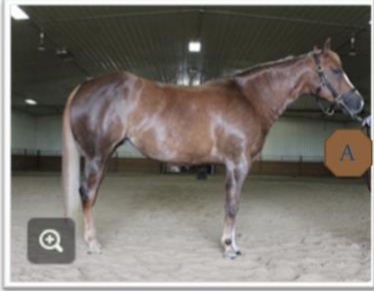
**Figure 15.** *Course Content Page for What is a Horse Judging Contest? Module*




Another feature included into all modules was interaction. There are several checkpoint quizzes throughout each module and a test your knowledge section at the end of every module. This allows users to check their retention of information throughout the module, as well as at the end. Interaction lines up with the ARCS model to help keep learners engaged (Keller, 2010). Figure 16 shows an example of a quiz question from *The Basics of Evaluating Conformation* module.

**Figure 16.** Quiz Question Example from *The Basics of Evaluating Conformation Module*

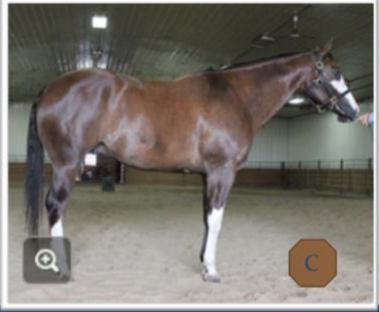
Rank these horses in order of which has the shortest back in relation to it's underline.



A



B





C

1.

2.

3.

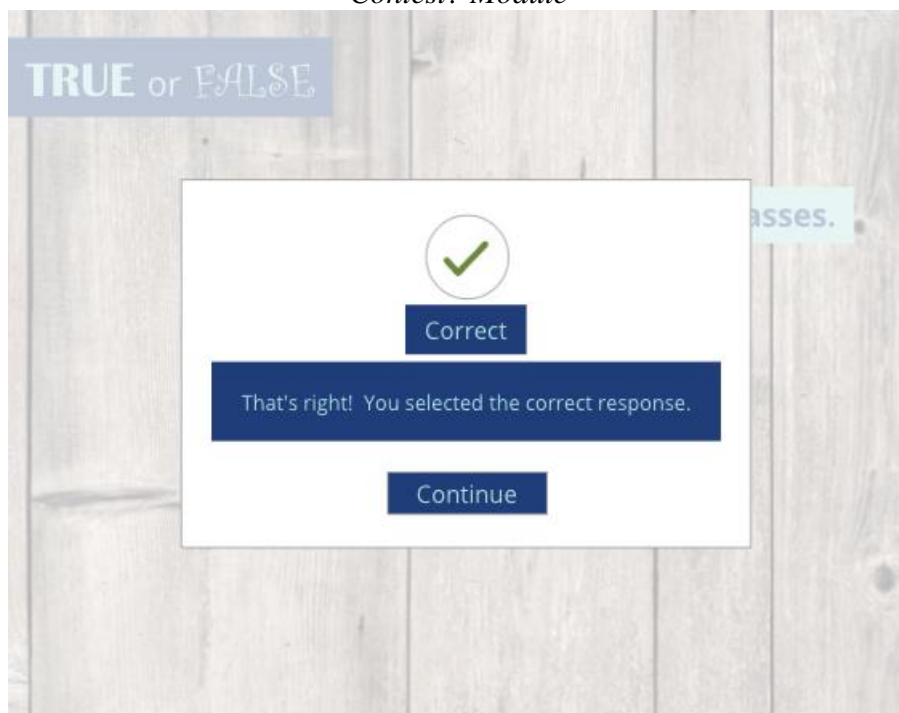
The Andragogical Process Model stresses the importance of making sure the learner knows their *need to know* for learning (Knowles, 2020). An example of how this was met in the *Getting Started with Oral Reasons: Competitive Horse Judging* module was to include various testimonies from individuals who have previously competed on a competitive horse judging team. These individuals explained how oral reasons has benefited them in their current profession. The professions included in the video were: APHA's Director of Shows, Judges and Education, a nursing student, an FFA advisor, a feed sales representative, and a cosmetologist. A still shot of the video is included in Figure 17.

**Figure 17.** *Screen Capture of Testimonial Video from Getting Started with Oral Reasons: Competitive Horse Judging*

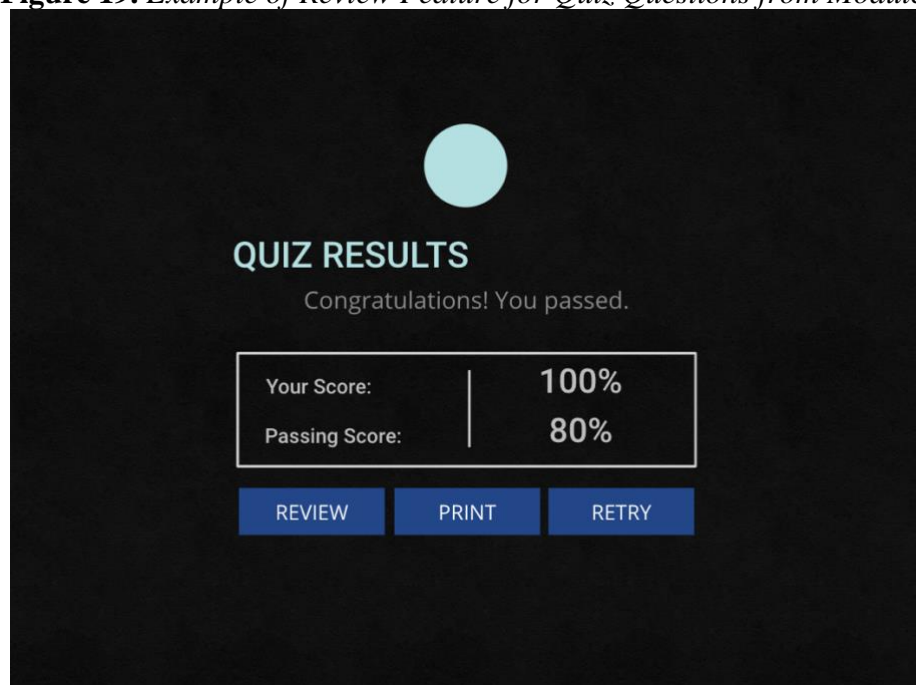


The ARCS model discusses the importance of feedback to learners (Keller, 2010). This was accomplished by including feedback directly after the users answer each question with either a “that is correct” message or a “try again” message. Figure 18 shows an example of direct question feedback. Additionally, a question review feature embedded into Storyline 360™ was inserted into the modules. This allows users to go through each question to see the correct answers and the percentage of questions they got correct. The review feature is shown in Figure 19.

**Figure 18.** *Example of Direct Question Feedback from the What is a Horse Judging Contest? Module*



**Figure 19.** *Example of Review Feature for Quiz Questions from Modules*

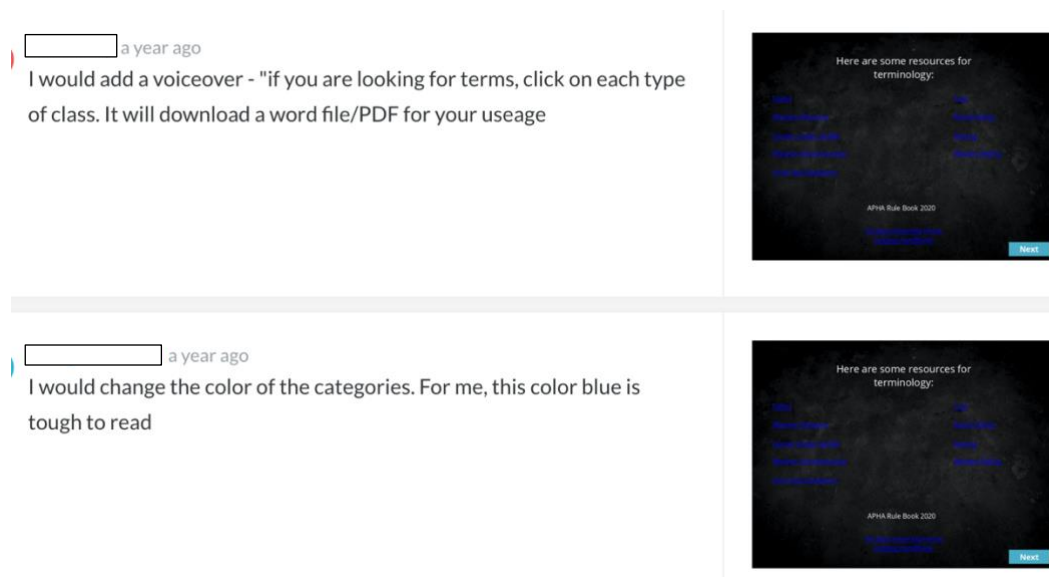


### 5.1. Expert Panel Review

The expert panel review was comprised of 3 eXtension Horse Inc. individuals. These individuals are all experts in horse judging, Storyline 360™, and development of online educational material.

The Storyline 360™ review feature was used. This feature allowed participants to make editorial comments directly on each slide. An example is included in Figure 20.

**Figure 20.** *Example of Expert Panel Review Comments*

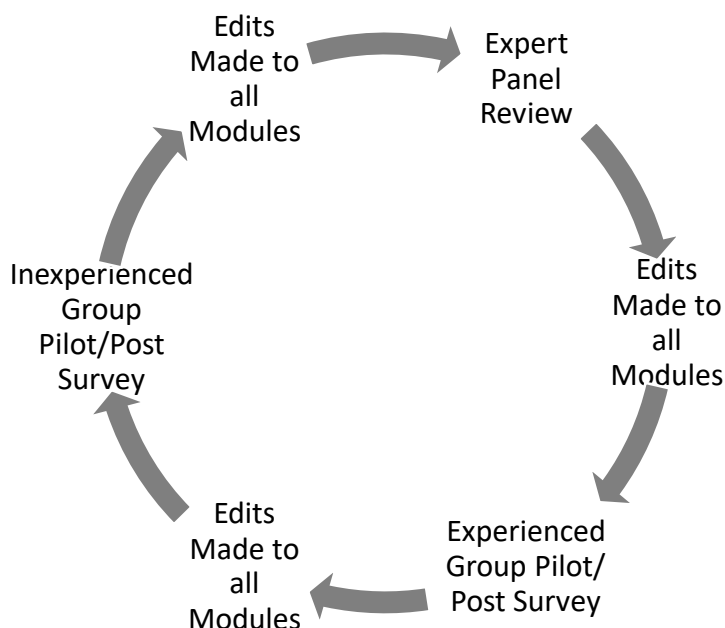


Following the completion of editorial comments made by the Expert Panel Review, changes were made by the PI to allow for overall improvement of the modules.

## 6. Chapter VI: Pilot/Focus Groups

The pilot/focus groups were used as the main source of information to make improvements to the modules. As a reminder of the action research cycle, the pilot/focus group portion begins with the Experienced Group Pilot/Post Survey in Figure 21.

**Figure 21.** *Action Research Cycles 2-4*



Pilot/focus were utilized within Cycles three and four to identify areas in need of improvement. The third cycle consisted of 10 experienced horse judging coaches, or professors, and youth. The fourth cycle consisted of 10 inexperienced horse judging coaches, or professors, and youth. The individual focus group Zoom calls allowed the participants to provide more detailed information about their experiences with the modules. This, in turn, allowed for more improvements to be made to the modules.

### **6.1. Population**

The intended purpose of the modules was to target youth and uneducated coaches or educators. Due to this, youth horse judges were added to both the experienced (Cycle three) and inexperienced (Cycle four) cycles of the reviewing process.

Cycle three was comprised of 10 individuals. 2 individuals from the following groups: 4-H, FFA, College/University, Extension, and Youth. These individuals were recruited from a group that showed strong interest and involvement in horse judging, as well as by recommendation from various states extension personnel. This cycle was the experienced group (more than 5 years of experience). In this cycle, 8 participants were female, 2 were male, and all were of Caucasian ethnicity. 4 participants resided in Illinois, 2 in Texas, 1 in Nebraska, 1 in Kentucky, 1 in Michigan, and 1 in Oklahoma.

As previously described in Cycle three, Cycle four was comprised of 10 individuals with the same subgroups. These individuals were recruited from a group that showed strong interest and involvement in horse judging, as well as by recommendation from various states extension personnel. The difference being that this group was inexperienced with horse judging (less than 5 years of experience). In this cycle, all participants were female, and 9 were of Caucasian ethnicity with 1 being of Asian ethnicity. It is important to note that 4 participants had to be replaced due to a lack of response after initial commitment. 3 participants resided in Nebraska, 1 in Missouri, 1 in Arizona, 1 in Ohio, 1 in Maryland, 1 in Oklahoma, 1 in Kansas, and 1 in Virginia.

## **6.2. Qualitative Data analysis**

The modules included: *What is a Horse Judging Contest?*, *Getting Started with Oral Reasons: Competitive Horse Judging*, and *The Basics of Evaluating Conformation*. The same core questions were used for all interviews. These questions are included in Appendix B. The only variation in questioning would be to receive more clarification on a comment made by a participant. The questions were designed to be open ended to gain more understanding of what participants liked and which areas needed improvement.



Transcriptions were recorded from each focus group Zoom call and themes were identified. The themes for feedback were broken down into categories: navigation, activities/quizzes, content, format/design, effectiveness/value, and budget. If the participant felt as though that topic was sufficient, their comments were recorded under, “meets standards”. If the participant felt as though that topic still needed work, their comment was placed under, “needs improvements”. After the data was coded, it was used to help make improvements in the modules. As a part of the process, all typographical and grammatical errors mentioned by participants were corrected.

#### *6.2.1. Trustworthiness*

In action research, trustworthiness, or dependability, is extremely important since there is no true protocol to follow. Ary and colleagues (2014) define trustworthiness as, “consistency of behavior, or extent to which data and findings would be similar if the study were replicated” (p. 537).

It is important to note that the PI is a horse owner and has participated in competitive judging for the past nine years. The PI has also been involved with working and participating in horse shows. The PI also believes horse judging is a valuable activity that allows a participant to learn a variety of transferrable skills and establish industry connections. The PI and Co-PI are experts in the field of equine science and horse judging, allowing for more credibility.

Intercoder reliability was also be tested by utilizing a group of graduate students to assist in the coding process. This means once the coder, in this case the PI, has coded all the data, other peer coders were then be asked to individually code the transcripts.

These codes were compared back to the original codes for consistencies and discrepancies (Ary et al., 2014).

Triangulation is extremely important in action research, as well (Ary et al., 2014). This is the process of using multiple data sources to avoid reliance on a single source (Ary et al., 2014). Multiple different types of experts were utilized to avoid reliance on one person, or group's, opinions, or knowledge.

### **6.3. Results and Discussion**

#### *6.3.1. Themes from Experienced Focus/Pilot Group Interviews for What is a Horse Judging Contest?*

##### *Navigation*

Participants had many comments relating to the navigation of the *What is a Horse Judging Contest?* module. Starting with the “meets standards” comments, participants: 1, 3, 5, 7, 8 and 10 all felt the module was easy to navigate. Participants 1 and 6 also mentioned the module was easier to navigate than the *Getting Started with Oral Reasons* module. Participant 1 said, “It was obvious what you were supposed to do to move on, and you told them at the beginning that they would be brought back to the table of contents after each section.” Participant 2 said, “I loved that the first three slides were played automatically and I didn’t have to click through them.”

Needing improvement, participants 1, 6, and 9 noted several slides were missing the next button or it was unclear how to advance. Participant 2 has trouble figuring out how to restart the module. The links that took the user outside of the program made navigation confusing according to participants 2 and 9. Participant 10 mentioned it was unclear that the user needed to click the check mark after answering questions to move on. They recommended adding more instruction on navigating the questions.

*Activities and Quizzes*

Comments made on activities and quizzes throughout the module was identified as a theme. The “meets standards” comments are as follows. Participants 3, 4, 7, and 9 mentioned they thought the questions were a good way to check in to make sure the users are understanding and learning the information. Participant 8 said, “I loved the variability in the questions.” Participants 1, 2, 7, and 8 all claimed there were a good amount of questions and activities throughout.

In terms of “needing improvement”, participants 1, 2, 3, 4, 5, 8, and 9 all saw that a question that contain “all of the above” as an answer option was not placed at the bottom of the list. They stated the settings either needed to be changed for this question or the answer could be rephrased as, “all of these”. Participant 4 said they got a question wrong and the program would not let them move on until they got it right. It was recommended an amount of attempts be placed on each question. Participants 5, 6, and 9 thought there could be more checkpoint questions or more interaction included throughout the module.

*Content*

Module content was found as a theme. Participants 2, 3, 4, 6, and 9 all identified they appreciated that the scoring section was included that discussed cuts. They talked about how cuts are a difficult concept to describe and to understand and felt this was a good introduction. To elaborate, participant 6 said they were, “excited to use this section to teach my kids!”. Participant 8 said, “I really liked the contest format section and how much you broke that process down and explained it verbally and visually.” Participant 9 discussed liking the attire section and how attire differences were explained. Participant 8

felt the content was easy to understand, even for young age groups. Similarly, participants 1, 4, 5, and 10 thought the information flowed well and was easy to follow. Participant 9 said, “I even learned something too! I didn’t know cuts were only supposed to add up to 15.”

As far as “needing improvement”, although participants 1, 2, 5, 6 and 9 appreciated the scoring section, they felt it could be improved by including all of the math in the calculations as well as arrows or circles so that users could follow along more easily. Participants 1, 2, and 6 all mentioned there is a cuts calculator online that could be included in the module. Participant 2’s reasoning for including the app was to limit the amount of questions from module users given that calculating cuts is such a difficult concept to grasp. However, participants 3, 5, and 9 said the cuts calculator should not be included. Giving more detail, participant 9 said, “I would leave letting kids know about the cuts calculator up to their coach. You only need the calculator when you do really bad and we don’t want them to be expecting to do badly.” For the core classes section, participants 1, 2, 3, 5, 6, 7, and 8 felt more content needed to be added. For improvement, participant 2 suggested including some class overview videos from HorseIQ. Participant 10 had a few suggestions to add to the contest format section including: writing down colors of the horses as an identifier, paying attention to how horses are lined up in a halter classes so that the contestant doesn’t write the numbers down backwards, and that contestants are not allowed to have any pre-printed or written material other than the approved rulebook(s). Participant 6 said, “Typically, kids will do the questions division before reasons. You may add in more content in the questions division, like some sample questions.” Additionally, participants 1, 2, 6, and 8 all said they would be concerned

about linking directly to HorseIQ for content because several users may not have a HorseIQ membership and not be able to get the information.

### *Format and Design*

The format and design of the modules was identified as a theme. To begin with “meets standards” comments, participants 1, 2, and 5 all mentioned the pace of the narration was good and easy to follow.

There were many comments placed under the “needs improvement” section for format and design. Participants 2, 6, and 8 mentioned some links did not work. Participant 1 and 2 said there were a couple places where the narration did not match the text on the screen. Participants 1, 2, 5, 6, and 7 all talked about how in the scoring section, the words were hard to read because the text ran together. Going along with difficulty reading, participant 6 said there were some black backgrounds with blue links that were difficult to see. Participant 5 said, “The visuals at the beginning weren’t as eye catching or attractive.” Similarly, participants 1, 2, and 5 mentioned replacing the graphic on the “no prior experience needed” slide.

### *Budget*

Budgeting was seen as a concern to many of the Learner Analysis Survey participants. But, in the interviews for the pilot/focus group of *What is a Horse Judging Contest?* module, only participant 8 brought up this topic. Participant 8 said,

“Here we have limited funding and I know a lot of other state funding is non-existent or low. I would keep that in mind with this resource. I’m not sure if a grant program would be an option with this [module program]. But, it might be something to look into. If we can have this one source for all of our [horse

judging] needs that would be nice with budgeting so we don't have to divvy up funds between various resources".

### *Effectiveness or Value*

There were many value or effectiveness statements made by various individuals. Participants 1 and 7 discussed that they were impressed with the *What is a Horse Judging Contest?* module because there are so many things that go into a judging contest. They said they thought the bases were all covered and everything was laid out well in a good order. Participant 5 said this topic, "can be difficult to explain to 'non-judgers' and this does a great job!" Participant 8 said, "I'm excited to share with people that this is coming down the pipeline. [I'll tell them], this is something you want to invest your money in." Participants 3 and 4 both mentioned they were excited to use this with their new kids and thought it was a great overview. Participant 2 stated, "it will be nice when we can point people to this resource". Additionally, participant 4 thought this could be used in a classroom setting for scores or grades. Finally, participants 1, 5, and 6 thought that overall the module was good.

### *Changes made to What is a Horse Judging Contest? after the Experienced Pilot/Focus Feedback*

Based on the experienced participant feedback, *What is a Judging Contest?* was revised. Specific improvements are as follows. Based off of comments from participants 1, 6 and 9, to improve the navigation, more next buttons were added in to make it more clear how to move from slide to slide. Due to participant 4's comment on getting stuck on a question and not being able to move on, the settings were adjusted to have two attempts and then the user is moved on. Several participants mentioned an "all of the above" answer was not listed at the bottom. This choice was changed to read, "all of these".

Many participants mentioned the class overview section was shallow in content. In response and based off of participant 2's recommendation, HorseIQ class overview videos were added into the core classes section. Since many participants enjoyed the scoring section but wanted increased readability and thought changes could be made to make it easier to follow, a Doodly™ video was created. This video contained an animation of a person writing out the entire calculation of the cuts examples.

Additionally, broken links were fixed, more information was added on the questions division, and narration was updated to match the text on the screen. Visuals toward the beginning of the slide were updated to be more eye appealing. Finally, links that went directly to HorseIQ were replaced with embedded videos from HorseIQ.

#### *6.3.1. Themes from Experienced Focus/Pilot Group Interviews for Getting Started with Oral Reasons: Competitive Horse Judging*

##### *Navigation*

Beginning with Navigation “meets standards” comments from the Experienced pilot/focus group reviewers for the *Getting Started with Oral Reasons* module, participants 4, 5, and 6 thought it was easy to go through. Comments for improvement of the navigation include participants 1, 2, 3, 5, 8, 9, and 10 discussing the navigation was inconsistent and there was not always a next button. To elaborate, participant 2 said, “Consistency on how to flow through the module need some work.” On a similar note, participant 4 mentioned, “I accidentally skipped the video of example of entering and it wouldn't let me go back and watch them so then I got the quiz question wrong.”

*Activities and Quizzes*

Comments falling under “meets standards” for activities and quizzes includes the following. Participants 4 and 8 talked about liking the variety of the different types of questions. When asked about the amount of questions, participants 5, 8, and 10 said there were enough questions and not to add any more. Participants 4 and 7 thought the questions throughout makes the user pay attention, which they noted as a good thing. On that same subject, Participant 9 said, “I took notes so I wouldn’t miss the questions and I think kids that are achievers or competitive will do that same, which is a great way to learn the material.” Participants 1, 2, 3, 4, and 5 discussed enjoying the ‘judge a class’ questions. To give more detail, participant 5 said, “Where you had them judge a class, I thought that was great because it reinforces that idea of evaluation and decisions. The more you can incorporate more of that style of questioning throughout, the better.” Participant 5 also specifically pointed out enjoying the drag and drop questions.

The “needs improvement” comments for activities and quizzes includes participants 6 and 9 saying more questions in the final quiz might be beneficial to be able to use in a classroom setting for grades. Adding in a limited number of attempts per question with a review of the answers instead of just moving on without the correct answer is a comment that was made by participants 2 and 7. Participant 4 and 10 said it would be helpful to add in a voiceover prior to the videoed examples that have questions after, that mentions to pay attention because there will be questions following the videos. Participants 8 and 9 felt the entering and exiting video questions may be difficult for younger kids due to some examples being similar. Participant 8 also mentioned adding in a visual for the organization question to allow more understanding for younger or more



beginner individuals. In the terminology section questions, participant 1 said one of the questions does not match up with the content learned in this module. Finally, participant 2 said to change the language in an attire question to say ‘boots’ instead of ‘western style boots’.

### *Content*

There were several comments from reviewers based on the content of the *Getting Started with Oral Reasons* module. The “meets standards” comments include participants 6 and 10 said the sample sets were great. Participants 1 and 4 both discussed liking the note taking section. To add to this, participant 1 said, “How to do note taking was really good from a beginner to advanced and it was logical the way you showed them how to progress through.” Participant 6 said they had never seen a reasons score sheet before and felt it would be very helpful when preparing a team. In reference to the testimonial videos, participants 2 and 4 said it was great to hear from Dave Dellin. Participants 2, 3, 4, 5, 8, and 9 all discussed appreciating the attire section. Specifically, participant 4 said, “I thought the attire section was good just to know what to wear and where to get things and all of that was straightforward.” On terminology, participant 4 said, “I loved the resources on terms.” Additionally, participant 2 talked about liking the content on organization of sets and participant 9 mentioned liking the memory section. Participant 8 said, “I really liked the coming in and out of the reasons room videos!” To wrap up, participant 9 said, “I loved your examples! I thought they were hilarious and good. Sometimes we get so serious with reasons so it’s good to have that in there to remind them to have fun.”

On the other hand, there were many comments made that fell under that “needs improvement” category for content. To start, participants 1 and 4 said it would be good add more individuals to the testimonial video. Participants 2 3, and 9 felt the technical definition for reasons could be expanded on. For the remembering section, participant 9 felt that maybe there could be more detail. On the topic of expanding information, participant 6 felt the terms could have more explanation. In relation to the attire videos, participants 1 and 8 noted there was no example for the male national attire. On the same subject, participant 1 said, “There was no guy example on the affordable clothing section. A lot of the clothing examples really focused on the female. There needs to be more male examples added.” Sticking with the attire section, participant 4 wondered, “how long the attire section will stay up to date.” Also on attire, “take out the words in the text, ‘male’ and ‘female’ to be more inclusive” (P2). Speaking to organization of sets, participant 10 said to consider adding more formats than just the good, grant, fault method. On note taking, participant 4 said note taking on a variety of classes could be included and maybe even a whole other module.

#### *Format and Design*

“Meets standards” comments for the format and design theme include the following. Participant 8 said, “I like the mixture of videos, types of interaction, and slides with text.” On the narration, participant 2 said the voiceovers sounded good. Participant 9 said, “I liked that you give examples because a lot of resources tell us things but don’t show examples.” Additionally, participant 8 said, “I liked the ability to be able to download terminology and the coach’s association resources.”

There were also some comments that were placed in the “needs improvement” section for format and design. Participants 1 and 2 said they felt some slides were just placeholders and needed to either be revised or made to automatically move on. The same participants 1 and 2 mentioned the voiceover ending and the slide not moving on for several more seconds so it was unclear whether more information was coming on that slide or not. Again, participants 1 and 2 noticed the downloadable content was in document form instead of pdf and needed to be changed to pdf form for more accessibility. Participants 1, 2, 5, and 6 discussed having trouble clicking on the ‘organization’ link. It was difficult for them to pinpoint where the link was. Participant 8 suggested including a progress bar of completion, if that is an option in the program. The same participant, 8, mentioned having the scoring categories appear on the screen as they are discussed. For the title menu, participants 1 and 5 noticed the first two sections did not shade over after being visited. Participant 5 said the picture of the steno should include the top and bottom of the steno. Participants 1 and 3 saw the colors blended into the background for the reasons reminders and suggested those be changed.

#### *Budget*

There were several comments related to budgeting in the Learner Analysis Survey. But, there was only one comment related to budget mentioned in this particular module’s review. Participant 2 said, “There was enough content that I feel it would be well worth my money on a limited budget.”

#### *Effectiveness or Value*

Some effectiveness or value statements were made by the reviewers. Participants 1, 3, 7 and 10 felt [the *Getting Started with Oral Reasons*] was very good, especially for a

beginner. They all felt this would give beginners a great place to start. Participant 7 also said, “I liked that it had the basics for the beginner but then also advanced examples.” Participants 4, 5, 6, and 8 all felt the module overall was good and very well put together. Giving more detail, participant 5 said, “a person that may not have come through the judging system would have a much better understanding after going through this.” Participant 9 said, “I’m really hoping these get put out because I’m going to tell everyone to use them!”

*Changes made to Getting Started with Oral Reasons: Competitive Horse Judging, after Experienced Pilot/Focus Group Feedback*

To improve navigation, a voiceover was added in the beginning of the module to explain how to navigate through the course. Additionally, settings were adjusted so the user could go back to the previous slide once quiz questions have started. More “next” buttons were added to the module, as well.

For the activities and quizzes theme, a few changes were made based off of reviewer comments. Due to suggestions by participants 6 and 9, additional questions were added to the final quiz to allow that quiz to have 10 questions. They mentioned this would be a sufficient amount to be able to use in a classroom setting as a grade for students. A voiceover was also added prior to the videos of entrances and exits to remind the user there will be questions following the videos (P4, P10). The words ‘western style boots’ on an attire question was changed to ‘boots’ based off of recommendation by participant 2.

In the content section, several changes were made. “Placeholder” slides were made to move through on their own so the user will not have to click through them, like

participants 1 and 2 suggested. In the attire section, an example of male national attire was added. More content was added to the terminology section by recommendation of participant 6. Transcription of the audio was added to allow for more accessibility as participant 8 said. Two additional testimonial videos from a feeds specialist and an FFA advisor were added.

Format and design changes were made in response to recommendations from participants. The settings were adjusted for the link on the title page for the organization section to be easier to click. On the scoring information slide, the categories were set to pop up as they were discussed, recommended by participant 8. Participant 1 pointed out one of the sections did not take the user back to the title menu, this trigger was fixed. Colors for the reasons reminders were adjusted for greater readability. The slide settings to advance were adjusted to move as soon as the narration ended so that there was no “dead time”.

#### 6.3.2. *Themes from Experienced Pilot/Focus Group Interviews for The Basics of Evaluating Conformation Navigation*

“Meets standards” comments for navigation from the experienced group for *The Basics of Evaluating Conformation* are as follows. Participants 2, 3, 5, 6, 7, and 10 all felt the module was easy to navigate. Participant 5 said, “this module was more user friendly than the others.” In regards to “needs improvement” participants 1 and 5 also indicated there were a few untitled slides in the side navigation menu. Another suggestion was it would be beneficial to let the users jump from the practice classes to the class description to the set of reasons in order to connect all the dots for the class (P5, P8).

*Activities and Quizzes*

There were many comments made about the activities and quizzes in the conformation module. Starting with “meets standards”, participant 1, 2, and 5 felt there were a good amount of questions. Participant 7 said the first practice class was easy to sort and good for beginners. Continuing on the practice class, participant 7 said, “I thought it was good in the practice sets that they weren’t exactly perfect. She had a couple little pauses and things but worked through them really well. I think that is a good thing for beginners to see.” Participant 8 said the test your knowledge sections and final quizzes were great to test retention of information. It was mentioned by participant 4 that it was the good practice classes had horses with large amount of white. They explained sometimes lots of white on a horse makes it difficult to accurately judge. Regarding difficulty level of questions, participants 2 and 7 felt there were challenging questions but thought that was a good thing.

Moving to “needs improvement” comments, several participants had trouble with dragging the lines and placing dots (P1, P2, P4, P5, P6, P8). A few participants the final quiz did not correctly calculate their scores (P1, P2, P4). Participants 5, 6, 8, and 9 suggested adding in an option for users to place the practice classes. They explained this could be used in practice or class for a score or grade. Participants 7 and 10 were concerned the performance mares practice class may be too challenging for beginners. Additionally, some of the questions throughout the module had such subtle differences that it would be difficult for a beginner to distinguish (P6, P9, P10). Participants 1, 5, 8, 9, and 10 said there needed to be an option to see correct answers after the checkpoint questions. To elaborate, “I think there needs to be a couple attempts and then give them

the correct answer. That is a missed learning opportunity if you do not do it” (P1).

Participant 8 caught a typo in the official of the first practice class.

### *Content*

Content was a theme for *The Basics of Evaluating Conformation*. “Meets standards” comments include participants 4, 8 and 10 discussing liking the balance and structure sections. They mentioned they thought there were several great examples. Participant 6 felt the material was “spot on” for a beginner. Participant 1 said the flow of information was really good. When talking about the tracking section, participant 8 said, “I really liked the tracking section, being able to watch the horse move and connect its conformation to how it moves was really good.” Participant 4 mentioned liking the pastern examples because they are hard to find. Regarding the picture examples, participant 9 thought they were a great use of visual demonstration.

There were some comments made placed under “needs improvement”. Participants 7 and 9 said they could see how the information may be daunting to someone who is new to judging. Participants 3, 5, 7, and 8 discussed the order of criteria on the title page was incorrect. To give more detail, “The order of how the topics were listed was not in priority order. We need to look at soundness, then balance, then structure, quality, and muscling last. By putting muscling second on the list, like it is now, it makes it seem like we should prioritize muscling” (P8). Participant 7 critiqued that there needs to be a better connection between content explanation and terminology used in sets of reasons.

### *Format and Design*

“Meets standards” comments related to the format and design of the conformation module included benefits of the “side menu” allowing for easier navigation (P7, P9).

“Needs improvement” comments include, participant 9 mentioning once the tracking videos are started, there is no way to click on anything else. Also, participants 3 and 8 saw that some of the colors of lines blended into the background. Participant 5 said some users may be thrown off by differences in design and speakers for this module since it is different than the other two.

### *Effectiveness or Value*

Effectiveness and value statements were made by some participants regarding the conformation module. Participant 8 said, “Let me know when these go public because I have a lot of teacher friends I can share this with!” Participants 1, 2, 3, 4, and 5 thought the module was user friendly, really detailed, and good for youth. Participant 9 said, “This one was a lot more intensive. There was a lot more interaction throughout.”

### *Changes made to The Basics of Evaluating Conformation, after Experienced Pilot/Focus Group Feedback*

Changes were made to the conformation module based off of participant feedback to improve the modules. The settings were adjusted on the practice classes to be able to navigate freely from the class to the description to the set of reasons. The untitled slides were corrected for the “side menu”.

For improvements on activities and quizzes, there was a placing option inserted for users to submit placings on the practice classes. The settings were adjusted on the



final quiz score calculation. The drag and drops were adjusted to allow for a larger area of acceptance.

Improvements on content were made such as: settings being adjusted to allow for clicking out of the tracking videos once they begin. The topics of the title side were rearranged to be in priority order. Finally, the change made to format and design was the colors of the drag and drop lines were changed to make them more easily seen.

### 6.3.3. *Themes from Inexperienced Focus/Pilot Group Interviews for What is a Horse Judging Contest?*

The inexperienced pilot/focus group analysis was conducted the same way as described for the experienced group, or cycle three. This group piloted the modules after changes were made to all modules based off of reviewer feedback from the experienced group. The themes were consistent with the themes found for cycle three.

#### *Navigation*

Navigation was a theme for the inexperienced focus/pilot groups for the *What is a Horse Judging Contest?* module. “Meets standards” comments include participants finding the module easy to navigate (P11, P12, P13, P14, P15, P18, P20).

Needing improvement, reviewers 13, 15, 18, and 20 all noticed some slides were missing a next button and indicated a next button should be on every slide. Participant 19 also mentioned the clickable links that take the user outside of the module caused confusion with getting back to the module.

### *Activities and Quizzes*

When participants were asked about the activities and quizzes throughout the module, several comments were made including: the questions were good and appropriate as far as difficulty level (P12, P13, P14, P15, P17). Participant 16 mentioned they felt there was an adequate number of questions, and participant 20 liked the variety of question delivery.

Regarding “needs improvement” of the activities and quizzes, participants 12, 13, 14, and 16 discussed the fill in the blank questions were frustrating without a word bank. They recommended either adding a word bank or changing the questions to multiple choice. In the scoring section, participants 12, 14, 16, 17 and 19 all recommended having an example the users could score on their own for more practice.

### *Content*

The content of the *What is a Judging Contest?* module was a major theme. Comments included: appreciation of the scoring section (P13, P14, P15, P16, P18, and P20). Participant 13 said, “I really enjoyed the scoring section. That’s the hardest thing for me to teach my kids and I like how you have it written out and explained in detail.” Similarly, participant 16 said, “I’ve never been able to understand cuts before and now I feel like I do.” Other comments included, participant 16 saying, “It was a step by step process and all really easy to understand.” Participant 11 also agreed the organization of the content was good and the content was easy to understand. Participant 14 said, “It was very thorough.” Participants 15 and 17 discussed they appreciated the core classes section. The videoed examples of core classes was content that participant 19 felt was helpful. Participant 17 also enjoyed the information on attire. Finally, participant 13

found the terminology in the *Getting Started with Oral Reasons* module easier to understand after going through the *What is a Horse Judging Contest?* module.

On the “needs improvement” side, participants 11, 13, and 18 said the terminology sheets were great to have but they questioned whether beginners would know what they mean. In the attire section, participants 13 and 18 thought a few more details about having the attire ready the night before and making sure they are looking at their particular contest rules on attire would be helpful. The questions division section, the narration was going but there were example questions on the screen that distracted from listening to the narration (P 13). Participant 20 thought it may be helpful to explain who decides cuts and who listens to reasons at contests. Participant 18 suggested it would be beneficial to have the classes score sheets included in the core classes section. The same participant mentioned some terms used in the module are used differently in other disciplines. Finally, participant 16 thought of some helpful reminders: bringing at least two pencils, drawing in the reasons boxes the night before the contest, and if it is cold, hand warmers would be a good idea.

#### *Format and Design*

The single “meets standards” comment in format and design was, “ I liked how the table of contents was set up” (P17). Participant 18 thought some colors of links blended into the background and did not change after being clicked on. The same participant also mentioned the ‘no prior experience’ slide seemed out of place.

#### *Effectiveness or Value*

Participants made some comments relating to effectiveness and value of the *What is a Horse Judging Contest?* module. Participants 14 and 18 thought the module was

nicely done and very helpful, especially for those who have never been through a judging contest. Participant 19 said, “I like it because it’s something kids can do at their own pace and before they go to an actual contest. Participant 14 said, “I wish I would’ve had something like this to show my past judges before going to a contest.” Additionally, participants 15 and 20 said there could even be a continuation of these modules with a more advanced version.

*Changes made to What is a Horse Judging Contest?, after Inexperienced Pilot/Focus Group Feedback*

Based on feedback from the inexperienced pilot group, changes were made to the *What is a Horse Judging Contest?* module. A next button was added to every slide. Reviewers preferred this method of moving forward through the module. For the quizzes, a review feature was added in after each section of questions so that users could see the answers immediately after each section. Link colors were adjusted to allow for visibility and to change after being visited. In the contest format portion, narration was expanded on to include information on the officials and reasons takers. Score sheets were added to some core classes to allow for more understanding.

#### *6.3.4. Themes from Inexperienced Focus/Pilot Group Interviews for Getting Started with Oral Reasons: Competitive Horse Judging*

##### *Navigation*

In *Getting Started with Oral Reasons* “meets standards” navigation comments included, “It was easy to navigate through and moved me through very consistently” (P12). However, others indicated there were some areas that needed improvement. There was no information after clicking a slide about what materials are needed (P13).

Participant 14 mentioned having trouble reentering or restarting the module after taking a break. In regards to consistency of navigation participants said there needed to be more consistency on how to move through the module (P14, P15, P17, P18). Additionally, participants 14 and 19 mentioned a couple of sections did not return to the home screen when complete, like the other sections did.

### *Activities and Quizzes*

Moving on to comments made on activities and quizzes, there were many comments that were placed under “meets standards”. Participant 20 thought, “It was good you got two attempts on the questions and then got to move on so you weren’t held at the gate.” Participants 16, 17, 19 and 20 liked the interaction with all the questions and activities. Additionally, participants 17 and 19 felt there were an adequate amount of questions. The downloadable pdf’s were a helpful feature (P19). Participant 14 also mentioned appreciating the drag and drop style questions. Another comment was, “It was fun to have more interaction. When the people entered and exited in the room and you had to place them, that was really fun” (P16).

There were also several comments made that were placed under the “needs improvement” category for activities and quizzes. Participant 11, 12, and 20 mentioned there should be at least one question after every section, some sections had questions but not all. Similarly, participant 16 said there could be room to add more questions but could not pinpoint exactly where those should be. Participants 15, 16, and 18 felt some of the text on the questions were difficult to read. In a question about organization, it might be helpful to add a photo in of a steno to help with understanding (P13). The same participant said it might be beneficial to add in a review of the questions after each

section, rather than waiting until the end. A couple of the entrance and exits videos were similar and because of this the answers were difficult to decide (P19).

### *Content*

Content was another theme in the *Getting Started with Oral Reasons* module. Under “meets standards” participants 13 and 14 said they loved the terminology and the link to go to more. Participants 13, 14 and 17 appreciated the sample outlines for sets of reasons. On the sample sets, participants liked that there were examples of sets of reasons for difficult levels of individuals (P11, P12, P13, P15, P18). Participants 13 and 18 liked the testimonial videos. Participant 11 and 19 thought it was a nice feature to know how reasons were scored. There were good transition words and phrases within the sets of reasons (P14). Participant 11 mentioned liking the technical definition and regular definition for reasons, as well as the attire section. Also, participants 11, 12, and 20 discussed the content was straightforward and easy to understand with good flow.

There were comments made on the content section that fell under “needs improvement”. Participant 16 felt it is important to make clear there are no pre written materials allowed in the contests other than a rulebook. It would be helpful to remind individuals to write down the colors of the horses (P17). Participant 18 said it may be helpful to mention how to know when to start reasons. It may be helpful to discuss who the reasons takers may be (P20). Participant 13 had many comments including:

- “It was difficult to compare what the differences were in the different levels of sets sense they were on different classes.”
- “You should get some testimonial videos from some people that are not in the equine industry.”

- “Some of the examples were overly silly.”

This participant also felt some areas were lacking in depth of information.

#### *Format and Design*

There were only a few comments made on the format and design on the *Getting Started with Oral Reasons* module. Both fell under the “needs improvement” category. Participant 14 said, “I think the website the module were housed in was very challenging to navigate. It was very busy and confusing.” Participant 18 mentioned, “Some of the volume of some of the videos were not consistent. For a few, I had to turn my sound up because it was hard to hear.” Participant 12 thought some of the videos the camera was not focused well. Participant 11 also thought some of the language might be difficult for younger children to understand.

#### *Effectiveness or Value*

The effectiveness or value of the *Getting Started with Oral Reasons* module comments included: “I thought it was a really great program. It really highlighted the important things” (P16). Participant 13 said, “Overall it is a brilliant thing. I think this is going to be a great resource.” Participant 17 said, “I really liked it. I used to use a different format for setting up my reasons and after I went through this, I changed it because what you had made more sense.” Participant 15 said, “It was very educational.” Also, participant 12 mentioned, “I wish I had this when I was in 4-H!”

#### *Changes made to Getting Started with Oral Reasons: Competitive Horse Judging, after Inexperienced Pilot/Focus Group Feedback*

Changes were made to the *Getting Started with Oral Reasons* module following the feedback from the inexperienced group. The next button was added to every slide,

like reviewers recommended. Settings were adjusted to make sure each section takes the user back to the title menu when complete.

A picture of a steno was added to the question about organization to make it more clear what was being asked. A couple more questions were added to the beginning of the module. The text size in the questions was adjusted to be more easily read. Also, a review function was added to the end of each section, rather than at the end.

In the content, the technical definition was further updated to have more information. Then, in the format and design section, the sound was adjusted on all videos to be consistent.

#### 6.3.5. *Themes from Inexperienced Focus/Pilot Group Interviews for The Basics of Evaluating Conformation Navigation*

Regarding navigation of *The Basics of Evaluating Conformation* module, the inexperienced group made a few comments. Participants 15 and 16 thought the module was easy to navigate through. However, others would like to see a next button on every slide (P11, P12, P15, P20). Additionally, participant 16 mentioned the side menu being in the way of the content and it was difficult to figure out how to collapse it.

#### *Activities and Quizzes*

Activities and quizzes were another theme for *The Basics of Evaluating Conformation* module. There were several comments placed under the “meets standards” category. Participants 13, 14, 17, 18, and 20 loved the practice classes and the explanation with reasons after. Participant 18 said, “Once I listened to the explanation of the practice classes, it made sense why the classes were placed that way.” The checkpoint questions were good to have throughout the module (P14). Participants 11 and 19 thought



the questions and interaction were very good. Participant 19 also said, “I thought the activities and questions were pertinent.”

Comments placed under “needs improvement” for the activities and quizzes theme were as follows. Dragging lines and dots did not work well for some participants. (P13, P14, P15, P17). They explained the lines and dots would keep bouncing back after being placed. Participants 14 and 17 felt that some of the questions had examples that were too similar to distinguish which one was better or worse. The review of the quiz answers was not available until the end of the module. Instead, it was suggested the answers should be given after each section (P11, P12, P13, P16, P19). To add, participant 19 said after two attempts, giving a hint may be helpful. Participants 12 and 15 saw that some of the correct answers were either already in the correct order or the correct answer was already marked. Participant 18 critiqued the final quiz did not calculate the score correctly. Some of the pictures for the questions asked to look at a specific location on that horse but some of the pictures cut off that location, noticed participant 14. Participant 15 caught that the score for the first practice class calculated out of 100 instead of the correct 50. The same participant also saw that some of the A,B,C,D answers were out of order.

### *Content*

Content was a theme for the inexperienced group when reviewing the comments on *The Basics of Evaluating Conformation* module. Starting with the “meets standards” comments, participants 13 and 14 discussed enjoying the tracking portion with the slow motion videos. Participant 19 remarked, “I thought the videos and interaction helped break up the content.” Since there was more content in this module, participant 17 said

that it was nice the content was broken into chapter so that a break could be taken and the user didn't feel rushing was necessary. Participant 11 mentioned liking the topline examples. Similarly, participant 16 said the examples were great. To give more detail, talking about the faults was very helpful because, for that individual, correctness is easier to see (P16).

There were only a few comments that fell under the "needs improvement" section for content. Participant 18 said, "I don't think collection was super well defined.", and "I think the tracking of the bay horse definitely has some intermittent lameness." Participant 17 also felt the hock angles were not elaborated on much in the content and then there was a quiz question regarding hock angles. Participant 16 thought it might be a helpful reminder to let the users know that just because a horse is well presented, it does not always mean they will win. For difficulty level of content, it may be a little challenging for young kids but maybe if they sit with a leader or parent, it would be okay (P15).

#### *Format and Design*

There were no comments that fell under "meets standards" in the format and design section. But, there were a few comments made that were classified as "needs improvement." Participant 18 noticed several issues including:

- introducing the speakers to allow for credibility
- a stretched picture
- transitions of the words and pictures did not align at times
- consistency difference in some photos allowing for zooming in and having two sets of scroll bars, which was difficult to figure out

- adding in an average completion time at the beginning of the module
- adding in a voiceover in the beginning to encourage breaks

Participants 12 and 15 also mentioned to encourage breaks. Participant 19 suggested splitting the module into two parts since there is so much information. Participants 11 and 15 felt it would help to format this module like the other two. Participants 13 and 15 thought it was frustrating that the narration would replay each time the user returned to the title menu. This module was not as engaging and the user had to sit and listen more (P12).

#### *Effectiveness or Value*

There were comments made about the effectiveness or value of the module. Participant 20 said, “I think overall it did a really good job of keeping the beginner in mind and giving them a leg to stand on. I think I could have shown this to my husband, who knows nothing about horses, and he could’ve held his weight in a judging contest.” Participants 12, 13, 15, 16, 19 all made comments relating to the quality of information and felt this was a great overview. Participant 19 also discussed, “I think this module would be the most beneficial for me to use in the classroom. This one was the most helpful for me in terms of understanding what I need to understand.” Additionally, “Especially for youth coaches, this will be a great resource because it is really hard to find practice classes and resources on your own” (P15).

#### *Changes made to The Basics of Evaluating Conformation, after Inexperienced Pilot/Focus Group Feedback*

Changes were made to The Basics of Evaluating Conformation module based off of inexperienced, or cycle 4, feedback. Changes made were as follows. Practice class two

was fixed to be scored out of 50 instead of 100. In a judging contest, all classes are scored out of 50. Colors of lines were adjusted further for more visibility. The transitions of content was adjusted to match the narration of the information. The stretched picture was reformatted. The review function for questions was added after each section, rather than just at the end. Information was added to the module description to encourage taking breaks throughout the completion of the module.

## **7. Chapter VII: Focus Group Post Survey**

### **7.1. Introduction**

The post survey questions for all three modules are included in Appendix B. The p-values may be indicated as  $Pr > F$  or  $Pr > |t|$ . Significance was established at .05, and a trend towards significance was established at .10.

Tests that were ran on the focus group post surveys are Fisher's Exact Tests and the Linear Mixed Model was implemented using the glimmix procedure (PROC GLIMMIX) in SAS 9.4 (2017). These tests are described in Chapter III, Methodology. The results of the tests are below in section 7.3.

It is also important when viewing the tables in this section to know when "group (s)" are mentioned, it is referring to the experienced and inexperienced group. When "question" is referenced, it means the questions of clarity of information and value of information per section in each module and the effectiveness of each module as a whole. When "subquestion" is mentioned, this is referencing each section of that particular module being discussed.

### **7.2. Instrument Development**

The post survey questions for each module were created through Qualtrics and designed by the PI and a group of extension specialists. The participants of the third and fourth cycle completed these post surveys following their review of each of the three modules. A change form was submitted and approved by the IRB for the inclusion of the post survey questions.

### **7.3. Results and Discussion**

#### *7.3.1. What is a Horse Judging Contest?*

Difficulty in understanding is shown in Table 10 and addresses difficulty understanding in the *What is a Horse Judging Contest?* module between the experienced and inexperienced groups. As seen below, both groups were similar in ratings with only one respondent in the inexperienced group marking “yes” to difficulty understanding. Looking back at the focus/pilot group interview information from Table 10, possible reasoning for difficulty understanding could be navigation problems or difficulty with a particular fill in the blank answer in the quiz. Note that the Fisher’s exact test indicates there was no difference in the probability of having difficulty understanding between the experienced and inexperienced groups ( $P = 1.00$ ).

**Table 10.** *Comparison between Experienced vs Inexperienced in their Difficulty of Understanding for the What is a Horse Judging Contest? Module*

<b>Difficulty</b>	<b>Experienced</b>	<b>Inexperienced</b>	<b>Total</b>
<b>Understanding</b>	<b>%</b>	<b>%</b>	<b>(n)</b>
<b>No</b>	100 (n=8)	88.89 (n=8)	16
<b>Yes</b>	0 (n=0)	11.11 (n=1)	1
<b>Total (n)</b>	8	9	17
<b>Fisher's Exact Test</b>			
<b>Table Probability (P)</b> 0.5294			
<b>Two-sided Pr &lt;= P</b> 1.0000			

\*Note: The same 10 participants for both groups from the focus/pilot groups received this survey. However, only 8 participants responded from the experienced group, and 9 from the inexperienced group.

Table 11 provides the estimated mean rating for each group, question, and subquestion combination. To interpret, for example: the estimated mean rating for the Clarity of Attire for a participant in the experienced group was 4.88 (SE= 1.12). There is 95% confidence the true mean rating for the Clarity of Attire for a participant in the experienced group was between 2.64 and 7.11. What is important to notice here is the difference of ratings of clarity per section between the experienced and inexperienced groups. The experienced group rated the information higher, meaning there was more confusion for the experienced group. Looking at the interview information, there were several comments made on navigation consistency problems and some confusion with certain quiz questions from the experienced group. This, perhaps, could be an explanation of the difference in scores since changes were made following the experienced group feedback.

**Table 11.** *Experienced and Inexperienced Groups with their Estimated Means Ratings on each Section for What is a Horse Judging Contest? Module*

Group <sup>1</sup>	Question <sup>2</sup>	Est. Means	SE	Confidence Interval Lower	Upper
<b><u>Introduction</u></b>					
Exp	Clarity	4.63	1.12	2.39	6.86
Exp	Value	9.00	1.12	6.77	11.23
Inexp	Clarity	2.44	1.06	0.34	4.55
Inexp	Value	8.67	1.06	6.56	10.77
<b><u>Core Classes</u></b>					
Exp	Clarity	4.38	1.12	2.14	6.61
Exp	Value	8.25	1.12	6.02	10.48
Inexp	Clarity	2.78	1.06	0.67	4.88
Inexp	Value	9.33	1.06	7.23	11.44
<b><u>Contest Format</u></b>					
Exp	Clarity	4.75	1.12	2.52	6.98
Exp	Value	9.13	1.12	6.89	11.36
Inexp	Clarity	3.11	1.06	1.00	5.22
Inexp	Value	8.89	1.06	6.78	10.99
<b><u>Attire</u></b>					
Exp	Clarity	4.88	1.12	2.64	7.11
Exp	Value	8.75	1.12	6.52	10.98
Inexp	Clarity	2.11	1.06	0.004	4.22
Inexp	Value	8.22	1.06	6.12	10.33
<b><u>Scoring</u></b>					
Exp	Clarity	4.75	1.12	2.52	6.98
Exp	Value	9.50	1.12	7.27	11.73
Inexp	Clarity	2.89	1.06	0.78	4.99
Inexp	Value	9.00	1.06	6.89	11.11
<b><u>What is a Judging...</u><sup>3</sup></b>					
Exp	Effectiveness	8.75	1.12	6.52	10.98
Inexp	Effectiveness	9.00	1.06	6.89	11.11

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

Table 12 provides comparisons between the experienced and inexperienced group for each question and subquestion. The estimated mean rating for Clarity Attire was 2.76 (s.e. 1.54) higher for the experienced group than the inexperienced group. There is slight (not significant) trend toward a higher rating of clarity in the experienced group when compared to the inexperienced ( $t = 1.79$ ;  $df = 72.13$ ;  $p = 0.077$ ). Notice, no values show a statistically significant effect. When referencing the interview comments from participants, there were comments made from the experienced group that male attire was lacking in comparison to female, as well as a few other comments. Due to the difference of suggestions that were placed in the “needs improvement” category for the experienced group on attire verses the inexperienced during the interviews, it aligns with Table 12’s information seeing the experienced group had higher ratings for clarity.



**Table 12.** Experienced vs Inexperienced Group Showing their Difference in Ratings, Looking for Significant Effects for the What is a Horse Judging Contest? Module<sup>1,2</sup>

Group <sup>1</sup>	Question <sup>2</sup>	Est. Means	SE	DF	t value	Pr> t
<b><u>Introduction</u></b>						
Exp vs Inexp	Clarity	2.18	1.54	72.13	1.42	0.16
Exp vs Inexp	Value	0.33	1.54	72.13	0.22	0.83
<b><u>Core Classes</u></b>						
Exp vs Inexp	Clarity	1.60	1.54	72.13	1.04	0.30
Exp vs Inexp	Value	-1.08	1.54	72.13	-0.70	0.48
<b><u>Contest Format</u></b>						
Exp vs Inexp	Clarity	1.64	1.54	72.13	1.06	0.29
Exp vs Inexp	Value	0.24	1.54	72.13	0.15	0.88
<b><u>Attire</u></b>						
Exp vs Inexp	Clarity	0.76	0.54	2.13	1.79	0.08
Exp vs Inexp	Value	0.53	1.54	72.13	0.34	0.73
<b><u>Scoring</u></b>						
Exp vs Inexp	Clarity	1.86	1.54	72.13	1.21	0.23
Exp vs Inexp	Value	0.50	1.54	72.13	0.32	0.75
<b><u>Tips for Success</u></b>						
Exp vs Inexp	Clarity	2.29	1.54	72.13	1.49	0.14
Exp vs Inexp	Value	1.14	1.54	72.13	0.74	0.46
<b><u>What is a Judging...</u><sup>3</sup></b>						
Exp vs Inexp	Effectiveness	-0.25	1.54	72.13	-0.16	0.87

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

While Tables 11 and 12 separated each subquestion, or section, Table 13 is simplifying the data since it appeared there was a trend across questions. The table below provides the averaged subquestions for each group by question combination. An example of the information below is the estimated mean rating for clarity for the experienced group was 4.67 (s.e. 0.78). Therefore, there is a 95% confidence the true mean rating for clarity for the experienced group was between 3.04 and 6.29. Again, notice the over 2 point difference in ratings from the experienced verses the inexperienced in overall clarity ratings meaning the inexperienced group found the information more clear.

**Table 13.** *Simplified Table for Experienced and Inexperienced Groups with Estimated Means for Overall Clarity, Effectiveness, and Value Ratings for What is a Horse Judging Contest?*

Group <sup>1</sup>	Question <sup>2</sup>	Estimate Means	Standard Error	Lower	Upper
<b>Experienced</b>	Clarity	4.67	0.78	3.04	6.29
	Effectiveness	8.75	1.12	6.52	10.98
	Value	8.98	0.78	7.35	10.60
<b>Inexperienced</b>	Clarity	2.61	0.73	1.08	4.14
	Effectiveness	9.00	1.06	6.89	11.10
	Value	8.70	0.73	7.17	10.24

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

Table 14 provides comparisons between the experienced and inexperienced groups for each question (Clarity, Effectiveness, and Value). Notice that the experienced

group rates clarity higher, meaning the experienced group had more issues with clarity than the inexperienced group, but for value and effectiveness, there was no difference in ratings. The p-value for clarity was the only trend with a  $p = 0.07$ .

**Table 14.** *Simplified Table for Experienced vs Inexperienced Difference in Overall Ratings for Clarity, Effectiveness, and Value for the What is a Horse Judging Contest? Module*

Simple Effect Level <sup>2</sup>	Groups <sup>1</sup>	Estimate Means	Standard Error	DF	t Value	Pr >  t
<b>Clarity</b>	Exp vs Inexp	2.06	1.07	19.18	1.92	0.07
<b>Effectiveness</b>	Exp vs Inexp	-0.25	1.54	72.13	-0.16	0.87
<b>Value</b>	Exp vs Inexp	0.28	1.07	19.18	0.26	0.799

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

### 7.3.2. *Getting Started with Oral Reasons: Competitive Horse Judging*

Table 15 addresses difficulty understanding. There was no difference between groups with difficulty understanding. Note that the Fisher's exact test of independence indicates there is no difference in the probability of having difficulty understanding between the experienced and inexperienced groups ( $P = 1.00$ ). It is important to point out there was more difficulty understanding overall when compared to the *What is a Horse Judging Contest?* module. This could be contributed to the increase in content and intensity level of information in the *Getting Started with Oral Reasons* module.

**Table 15.** *Comparison between Experienced vs Inexperienced in their Difficulty of Understanding for the Getting Started with Oral Reasons Module*

<b>Difficulty</b>	<b>Experienced</b>	<b>Inexperienced</b>	<b>Total</b>
<b>Understanding</b>	<b>%</b>	<b>%</b>	<b>(n)</b>
<b>No</b>	66.67 (n=4)	55.56 (n=5)	9
<b>Yes</b>	33.33 (n=2)	44.44 (n=4)	6
<b>Total (n)</b>	6	9	15
<b>Fisher's Exact Test</b>			
<b>Table Probability (P)</b>		0.3776	
<b>Two-sided Pr &lt;= P</b>		1.0000	

<sup>1</sup>The same 10 participants for both groups from the focus/pilot groups received this survey. However, only 6 participants responded from the experienced group, and 9 from the inexperienced group.

It is important to note, the terminology section has no data for clarity.

Unfortunately, during the survey development, this section was left off unintentionally.

So, the qualitative data for feedback on the terminology section is what was relied on.

Table 16 provides the estimated mean rating for each group, question, and subquestion combination. The estimated mean rating for the Clarity of Organization for a participant in the experienced group is 6.33 (s.e. 1.22). There is 95% confidence the true mean rating for the Clarity of Attire for a participant in the experienced group is between 3.91 and 8.76. This simply means each individual's ratings were between the values of 3.91 and 8.76. Here you can see the difference in clarity ratings for each section of the *Getting Started with Oral Reasons* module. This means the inexperienced group felt the information was easier to understand overall than the experienced group.

**Table 16.** Experienced and Inexperienced Groups with their Estimated Means Ratings on each Section for the Getting Started with Oral Reasons Module

Group <sup>1</sup>	Question <sup>2</sup>	Est. Means	SE	Confidence Interval	
				Lower	Upper
<b><u>Overview</u></b>					
Exp	Clarity	4.33	1.22	1.91	6.76
Exp	Value	8.83	1.22	6.41	11.26
Inexp	Clarity	2.44	0.99	0.46	4.42
Inexp	Value	8.22	0.99	6.24	10.20
<b><u>Organization</u></b>					
Exp	Clarity	6.33	1.22	3.91	8.76
Exp	Value	7.83	1.22	5.41	10.26
Inexp	Clarity	2.78	0.99	0.80	4.76
Inexp	Value	8.78	0.99	6.80	10.76
<b><u>Presentation</u></b>					
Exp	Clarity	4.67	1.22	2.24	7.09
Exp	Value	9.67	1.22	7.24	12.09
Inexp	Clarity	3.00	0.99	1.02	4.98
Inexp	Value	8.67	0.99	6.69	10.64
<b><u>Sample Sets</u></b>					
Exp	Clarity	5.17	1.22	2.74	7.59
Exp	Value	9.67	1.22	7.24	12.09
Inexp	Clarity	2.44	0.99	0.46	4.42
Inexp	Value	8.56	0.99	6.57	10.54
<b><u>Scoring</u></b>					
Exp	Clarity	6.17	1.22	3.74	8.59
Exp	Value	9.17	1.22	6.74	11.59
Inexp	Clarity	2.44	0.99	0.46	4.43
Inexp	Value	7.78	0.99	5.80	9.76
<b><u>Terminology</u></b>					
Exp	Value	9.17	1.22	6.74	11.59
Inexp	Value	7.78	0.99	5.80	9.76
<b><u>What is a Judging...</u><sup>3</sup></b>					
Exp	Effectiveness	8.50	1.22	6.07	10.93
Inexp	Effectiveness	7.78	0.99	5.80	9.76

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

Table 17 provides comparisons between the experienced and inexperienced group for each question and subquestion. To interpret, for example: The estimated mean rating for Clarity Organization is 3.56 (s.e. 1.58) higher for the experienced group than the inexperienced group. There is evidence to conclude the mean rating for Clarity Organization is higher for the experienced group than the inexperienced group ( $t = 2.26$ ;  $df = 89.87$ ;  $p = 0.0265$ ). Notice, Clarity Organization and Clarity Scoring show a statistically significant effect at  $p=0.03$  and  $p=0.02$ . When reviewing the interview information from these participants, there were far more comments in the “need improvement” category overall for the experienced group. There were some major changes made to the module following the experienced group’s review. This could be a reason why the inexperienced clarity scores are much lower.

**Table 17.** Experienced vs Inexperienced Group Showing their Difference in Ratings, Looking for Significant Effects for the Getting Started with Oral Reasons

<i>Module</i>						
Group <sup>1</sup>	Question <sup>2</sup>	Est. Means	SE	DF	t value	Pr> t
<u><b>Overview</b></u>						
Exp vs Inexp	Clarity	1.89	1.58	89.87	1.20	0.23
Exp vs Inexp	Value	0.61	1.58	89.87	0.39	0.70
<u><b>Organization</b></u>						
Exp vs Inexp	Clarity	3.56	1.58	89.87	2.26	0.027
Exp vs Inexp	Value	-0.94	1.58	89.87	-0.60	0.55
<u><b>Presentation</b></u>						
Exp vs Inexp	Clarity	1.67	1.58	89.87	1.06	0.29
Exp vs Inexp	Value	1.00	1.58	89.87	0.63	0.53
<u><b>Sample Sets</b></u>						
Exp vs Inexp	Clarity	2.72	1.58	89.87	1.73	0.09
Exp vs Inexp	Value	1.11	1.58	89.87	0.70	0.48
<u><b>Scoring</b></u>						
Exp vs Inexp	Clarity	3.72	1.58	89.87	2.36	0.02
Exp vs Inexp	Value	1.39	1.58	89.87	0.88	0.38
<u><b>Terminology</b></u>						
Exp vs Inexp	Value	1.39	1.58	89.87	0.88	0.38
<u><b>Getting Started with Oral Reasons...<sup>3</sup></b></u>						
Exp vs Inexp	Effectiveness	0.72	1.58	89.87	0.46	0.65

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

The comparisons between the experienced and inexperienced groups for each question (Clarity, Effectiveness, and Value) is shown in table 18. Notice that the experienced group rates clarity higher, meaning the experienced group had more issues with clarity than the inexperienced group, but for value and effectiveness, there is no difference in ratings. Difference in overall clarity ratings is significant with a p-value of 0.01. This is to be expected with the overall differences between groups in clarity ratings.

**Table 18.** *Simplified Table for Experienced vs Inexperienced Difference in Ratings if Clarity, Effectiveness and Value Overall for the Getting Started with Oral Reasons Module*

Simple Effect Level <sup>2</sup>	Groups <sup>1</sup>	Estimate Means	Standard Error	DF	t Value	Pr >  t
<b>Clarity</b>	Exp vs Inexp	2.71	1.01	20.83	2.70	0.01
<b>Effectiveness</b>	Exp vs Inexp	0.72	1.58	89.87	0.46	0.65
<b>Value</b>	Exp vs Inexp	0.76	0.97	18.43	0.78	0.45

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

### 7.3.3. Basics of Conformation Evaluation

Table 20 addresses difficulty understanding. There is no difference between the groups ratings of difficulty understanding. However, it is important to notice the difference of overall ratings when compared to the *What is a Horse Judging Contest?* module seeing there was certainly more difficulty understanding with this module. Similar to the *Getting Started with Oral Reasons* module, this could be due to the extra amount of information and length to complete, as well as the complexity of the information in general. Note that the Fisher's exact test of independence indicates there is



no difference in the probability of having difficulty understanding between the experienced and inexperienced groups ( $P = 1.00$ ).

**Table 20.** *Comparison between Experienced vs Inexperienced in their Difficulty of Understanding for The Basics of Evaluating Conformation Module<sup>1</sup>*

<b>Difficulty</b>	<b>Experienced</b>	<b>Inexperienced</b>	<b>Total</b>
<b>Understanding</b>	<b>%</b>	<b>%</b>	<b>(n)</b>
<b>No</b>	66.67 (n=6)	62.50 (n=5)	11
<b>Yes</b>	33.33 (n=3)	37.50 (n=3)	6
<b>Total (n)</b>	9	8	17

**Fisher's Exact Test**

**Table Probability (P)** 0.3801

**Two-sided Pr <= P** 1.0000

<sup>1</sup>The same 10 participants for both groups from the focus/pilot groups received this survey. However, only 8 participants responded from the experienced group, and 9 from the inexperienced group.

The linear mixed model was used to analyze the rating. Only the Conformation Evaluation module was considered in this section with 17 participants, 2 groups, 3 questions (clarity, effectiveness, value), and 9 subquestions (Note that the Effectiveness question goes with “The Basics of Evaluating Conformation Travel” subquestion while value and clarity go with the other 8 – balance, breed and sex characteristics, etc.).

Tables 21 and 22 below provides the estimated mean rating for each group, question, and subquestion combination. To interpret, for example: The estimated mean rating for the Clarity of Balance for a participant in the experienced group is 4.67 (s.e. 0.937). There is 95% confidence the true mean rating for the Clarity of Balance for a participant in the experienced group is between 2.81 and 6.52. Following the trend of the other two modules, there is a noticeable difference in clarity ratings for each section in the conformation module.



**Table 21.** *Experienced and Inexperienced Groups with their Estimated Means Ratings for Clarity and Value on each Section for The Basics of Evaluating Conformation*

Group <sup>1</sup>	Question <sup>2</sup>	Module			
		Est. Means	SE	Confidence Interval	
<u>Balance</u>					
Exp	Clarity	4.67	0.94	Lower 2.81	Upper 6.52
Exp	Value	8.78	0.94	6.92	10.63
Inexp	Clarity	1.50	0.99	-0.47	3.47
Inexp	Value	8.88	0.99	6.91	10.84
<u>Breed and Sex Characteristics</u>					
Exp	Clarity	4.67	0.94	2.81	6.52
Exp	Value	8.56	0.94	6.70	10.41
Inexp	Clarity	1.63	0.99	-0.34	3.59
Inexp	Value	8.13	0.99	6.16	10.09
<u>Quality and refinement</u>					
Exp	Clarity	4.78	0.94	2.92	6.63
Exp	Value	8.67	0.94	6.81	10.52
Inexp	Clarity	1.75	0.99	-0.22	3.72
Inexp	Value	8.00	0.99	6.03	9.97
<u>Structure</u>					
Exp	Clarity	4.67	0.94	2.81	6.52
Exp	Value	8.78	0.94	6.92	10.63
Inexp	Clarity	1.63	0.99	-0.34	3.59
Inexp	Value	8.75	0.99	6.78	10.72
<u>Muscle</u>					
Exp	Clarity	4.44	0.94	2.59	6.30
Exp	Value	8.56	0.94	6.70	10.41
Inexp	Clarity	1.75	0.99	-0.22	3.72
Inexp	Value	7.88	0.99	5.91	9.84
<u>Travel, way of going</u>					
Exp	Clarity	4.78	0.94	2.92	6.63
Exp	Value	8.67	0.94	6.81	10.52
Inexp	Clarity	1.50	0.99	-0.47	3.47
Inexp	Value	7.88	0.99	5.91	9.84

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

**Table 22.** *Experienced and Inexperienced Groups with their Estimated Means Ratings for Clarity and Value of the Practice Classes and the Overall Effectiveness for The Basics of Evaluating Conformation Module*

Easier by Evaluating Performance Results					
Group <sup>1</sup>	Question <sup>2</sup>	Est. Means	SE	Confidence Interval	
<u>What is a Judging...</u> <sup>3</sup>				Upper	Lower
Exp	Effectiveness	8.00	0.94	6.15	9.85
Inexp	Effectiveness	8.25	0.99	6.28	10.22
<u>Practice Class APHA Mares</u>					
Exp	Clarity	4.67	0.94	2.81	6.52
Exp	Value	8.78	0.94	6.92	10.63
Inexp	Clarity	1.38	0.99	-0.59	3.34
Inexp	Value	8.38	0.99	6.41	10.34
<u>Practice Class Performance Halter</u>					
Exp	Clarity	5.89	0.94	4.04	7.74
Exp	Value	8.67	0.94	6.81	10.52
Inexp	Clarity	1.38	0.99	-0.59	3.34
Inexp	Value	8.25	0.99	6.28	10.22

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

Table 23 provides comparisons between the experienced and inexperienced group for each question and subquestion. To interpret, for example: the estimated mean rating for Clarity Balance is 3.17 (s.e. 1.37) higher for the experienced group than the inexperienced group. There is evidence to conclude the mean rating for Clarity Balance is higher for the experienced group than the inexperienced group ( $t = 2.3$ ;  $df = 145.8$ ;  $p =$

0.022). Notice that all of the Clarity subquestions indicate significant differences between groups. The difference with this particular module is that all sections had a significant difference in rating between groups. There are a few possible reasons for this. One could be due to the changes made between the experienced and inexperienced groups. Another reason could be the difference in mindset between the experienced and inexperienced groups. Studies done on teachers and their reactions to different occurrences in the classroom vary depending on experience level (Makcey et al, 2001 & Rice, 2010).

**Table 23.** *Experienced vs Inexperienced Group Showing their Difference in Ratings, Looking for Significant Effects for The Basics of Evaluating Conformation Module*

Group <sup>1</sup>	Question <sup>2</sup>	Est. Means	SE	DF	t value	Pr> t
<b><u>Balance</u></b>						
Exp vs Inexp	Clarity	3.17	1.37	134.8	2.32	0.02
Exp vs Inexp	Value	-0.09	1.37	134.8	-0.07	0.94
<b><u>Breed and Sex Characteristics</u></b>						
Exp vs Inexp	Clarity	3.04	1.37	134.8	2.23	0.03
Exp vs Inexp	Value	0.43	1.37	134.8	0.32	0.75
<b><u>Quality and Refinement</u></b>						
Exp vs Inexp	Clarity	3.03	1.37	134.8	2.22	0.03
Exp vs Inexp	Value	0.67	1.37	134.8	0.49	0.63
<b><u>Structure</u></b>						
Exp vs Inexp	Clarity	3.04	1.37	134.8	2.23	0.03
Exp vs Inexp	Value	0.03	1.37	134.8	0.02	0.98
<b><u>Muscling</u></b>						
Exp vs Inexp	Clarity	2.69	1.37	134.8	1.97	0.05
Exp vs Inexp	Value	0.68	1.37	134.8	0.50	0.62
<b><u>Travel, way of going</u></b>						
Exp vs Inexp	Clarity	3.28	1.37	134.8	2.40	0.018
Exp vs Inexp	Value	0.79	1.37	134.8	0.58	0.56
<b><u>Practice Class- APHA</u></b>						
<b><u>Mares</u></b>						
Exp vs Inexp	Clarity	3.29	1.37	134.8	2.41	0.02
Exp vs Inexp	Value	0.40	1.37	134.8	0.29	0.77
<b><u>Practice Class- Performance Halter</u></b>						
Exp vs Inexp	Clarity	-0.25	1.37	134.8	-0.18	0.86
Exp vs Inexp	Value	0.42	1.37	134.8	0.30	0.76
<b><u>The Basics of Evaluating...</u><sup>3</sup></b>						
Exp vs Inexp	Effectiveness	-0.25	1.37	134.8	-0.18	0.86

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

While Table 23 separated each subquestion, this next section is simplifying the data since it appeared there was a trend across questions. Table 24 provides the averaged over subquestions for each group by question combination. To interpret, for example: the estimated mean rating for clarity for the experienced group is 4.82 (s.e. 0.54). There is 95% confidence the true mean rating for clarity for the experienced group is between 3.7 and 5.94. These trends follow the other two modules

**Table 24.** *Simplified Table for Experienced and Inexperienced Groups for their Overall Estimated Means for Clarity, Effectiveness, and Value Overall for The Basics of Evaluating Conformation Module*

Group <sup>1</sup>	Question <sup>2</sup>	Estimate	Standard Error	Lower	Upper
<b>Experienced</b>	Clarity	4.82	0.54	3.70	5.94
	Effectiveness	8.00	0.94	6.15	9.85
	Value	8.68	0.54	7.56	9.80
<b>Inexperienced</b>	Clarity	1.56	0.57	0.37	2.75
	Effectiveness	8.25	0.99	6.28	10.22
	Value	8.27	0.57	7.07	9.46

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

Table 25 provides comparisons between the experienced and inexperienced groups for each question (Clarity, Effectiveness, and Value). Notice that, like the other modules, the experienced group rates clarity higher than the inexperienced group, but for value and effectiveness, there is no difference in ratings. These trends follow the other two modules.

**Table 25.** *Simplified Table for Experienced vs Inexperienced Difference in Ratings if Clarity, Effectiveness and Value Overall for The Basics of Evaluating Conformation Module*

Simple Effect Level <sup>2</sup>	Groups <sup>1</sup>	Estimate Means	Standard Error	DF	t Value	Pr >  t
<b>Clarity</b>	Exp vs Inexp	3.26	0.79	20.84	4.14	0.0005
<b>Effectiveness</b>	Exp vs Inexp	-0.25	1.37	134.8	-0.18	0.85
<b>Value</b>	Exp vs Inexp	0.41	0.79	20.84	0.53	0.60

<sup>1</sup>Groups: Exp = Experienced, Inexp = Inexperienced

<sup>2</sup>Participants were asked about the clarity and value of each section throughout the module. Clarity and Value were ranked on a 0 – 10 scale. Clarity was denoted with 0 = Not confusing and 10 = Extremely confusing; Value was denoted with 0 = Not valuable and 10 = Extremely valuable. Participants were asked on a scale of 0-10 about the effectiveness of the module as a whole, with 10 = Extremely effective.

## 8. Chapter VIII: Conclusions & Implications

### 8.1. Research Question 1 & 2

Research question , ‘*What resources do horse judging educators need?*’, was answered through the Learner Analysis Survey. Respondents felt an online judging contest would be a useful resource with the largest percentage (40%, n=43) of respondents indicating this would be extremely useful. It was also seen that respondents felt the online contest should have reasons (81%, n=87) with official panel feedback (99%, n=106), and a questions division (89%, n=96). Another resource largely needed by coaches as indicated by the learner analysis survey was sample classes with extremely useful marked by 74% (n=77) of respondents. Participants 4, 6, 13, and 15 also discussed the difficulty of finding practice classes in their interviews or wanting more. In addition, from personal coaching experience, there is no better way to ensure students are truly grasping concepts until they are asked to apply their knowledge by placing a class.



Research question 2, '*What topics do horse judging educators feel their students need to learn*', was also answered by the learner analysis survey. The topics of scoring of classes, rules and standards of classes, and basic horse knowledge were all highly rated topics from the respondents. In the review of the modules, the high ratings of value of information for all modules also indicates those topics were valuable for their students to learn.

Based on our data, there is strong evidence to support the development of online interactive resources. These interactive materials should include sample classes, scoring of classes, rules and standards of classes, penalties and faults of classes, and basic horse knowledge; in addition to online judging contests with reasons, questions, and feedback. This is supported by previous studies due to education moving more toward an online format (Li et al., 2008 & Bauman, 2010, Garcia-Morales et al., 2021) as well as the benefits of the interactive piece of online education (Castaño-Muñoz et al., 2014).

An implication of the learner analysis survey was the resources that will be created could either be used for instructors to gain more knowledge themselves to then in turn, increase their comfortability, or they could simply assign the materials to their students, knowing that it will be reliable, expert and peer reviewed, information.

### **8.2. Research Question 3**

Research question 3, '*Do the modules included in this study provide valuable and effective content to teach or coach horse judging online*', was answered through the pilot/focus groups and their post surveys. Upon analysis of the learner analysis survey, the modules, *What is a Horse Judging Contest?*, *Getting Started with Oral Reasons*, and *The Basics of Evaluating Conformation* were developed. As supported by previous work,

(Bauman, 2010), action research was used to review the modules. Action research allows for participant feedback during the development process (Herr & Anderson, 2005). This study was designed to have a focus/pilot group of both adult and youth participants with experienced and inexperienced backgrounds from various states in the U.S. This allowed the researchers to gain more insight from diverse backgrounds. The modules are intended to serve all ages so it was important to the researchers to include both youth and adult participants.

The data shows clarity of each of the three modules improved from the experienced group, group 1, to the inexperienced group, group 2. There could be a couple interpretations of this information. This change in rating could be due to the changes made after participant feedback from group 1 allowing for more clarity for group 2. Other action research shows similar improvements of ratings as each cycle was improved on (Bauman, 2010). This is a goal of action research (Ary et al, 2014). There could be a difference in mindset between experienced horse judges and inexperienced horse judges. There are studies to support the difference in reaction from experienced to inexperienced teachers in the classroom (Mackey et al, 2004 & Rice, 2010). Perhaps that could be an explanation for the difference in scores from group to group, as well. This could be thought of in a couple different ways. Experienced individuals might look at the information with a more critical eye because they are more familiar with the topic, while inexperienced individuals do not because, in simple terms, they do not know what they do not know. On the other hand, the experienced individuals could be more forgiving with their reviews because if they feel they can fill in the gaps of information missed, they might feel the information was sufficient.

Additionally, the data shows high overall ratings for each module in terms of effectiveness and value from both groups. All ratings for value of each section in each module were ranked no lower than 8.3 out of 10. Effectiveness of each module was ranked no lower than an 7.8 out of 10 by both groups. For every module, there was positive verbal feedback such as, “I wish I had this when I was in 4H!”(Participant 12), “I thought it was very informative. Easy to use. Easy to follow. This is going to be an excellent resource” (Participant 19), “I told my teaching partner that this is going to be a really great resource”(Participant 13). “I’m excited to use this with my new kids.” (Participant 4).

All in all, interactive online horse judging modules were seen as a need through the learner analysis survey and then refined through the use of participant feedback during the development stages. It was noted an implication from the learner analysis survey was teachers or coaches could use this as a resource to use on their own or assign to their students, and through. These modules could be used as beginner resources and more advanced modules could be made on these same topics, as well. Additionally, these concepts could be applied to other competitive judging programs, such as livestock or meats judging.

## References

- Al-Jarrah, T. M., Mansor, N., Talafhah, R. H., & Al-Jarrah, J. M. (2019). The application of metacognition, cognitivism, and constructivism in teaching writing skills. *European Journal of Foreign Language Teaching*.
- American Paint Horse Association. (2021). [www.apha.com](http://www.apha.com).
- American Quarter Horse Association (2021). [www.aqha.com](http://www.aqha.com).
- Anderson, Craig W. (2020). FFA programs survive despite disruption. *San Joaquin Farm Bureau Federation*, Retrieved Nov 26, 2021.
- Ary, D., Jacobs, L. C., Sorenson, C., & Walker, D. A. (2014). *Introduction to Research in Education* (9th ed.). Wadsworth CENGAGE Learning.
- Bauman, J. (2010). *Developing an online horseless horse learning lesson: an action research study*. (Master's thesis). University of Nebraska-Lincoln, Lincoln, NE.
- Brakke. (2014). Brakke Equine Marketing MegaStudy.
- Burkholder, G. J., & Burbank, P. M. (2019). Philosophical foundations and the role of theory in research. *Research Design and Methods: An Applied Guide for the Scholar-Practitioner*, 13.
- C. Brady, personal communication, November 26, 2021.
- Cavinder, C., Byrd, B., Franke, J., & Holub, G. (2011). Texas A&M University Student Life Skill Development and Professional Achievement from Participation on a Collegiate Judging Team. *NACTA Journal*, 55(1), 60-62. Retrieved March 9, 2020, from [www.jstor.org/stable/nactajournal.55.1.60](http://www.jstor.org/stable/nactajournal.55.1.60).

- Cook, D.A. and Artino, A.R., Jr. (2016). Motivation to learn: an overview of contemporary theories. *Med Educ*, 50: 997-1014. <https://doi.org/10.1111/medu.13074>.
- Creswell, J. W. (2010). Mapping the developing landscape of mixed methods research. *SAGE handbook of mixed methods in social & behavioral research*, 2, 45-68.
- Davenport, Casey E. (2018). Evolution in Student Perceptions of a Flipped Classroom in a Computer Programming Course. *Journal of College Science Teaching*, 47(4), 30-35. Retrieved Nov 26, 2021, from <https://www.proquest.com/openview/ec383a534128f3e09116791ec0db596f/1.pdf/advanced>.
- Derry, M. E. (2016). *Horses in Society: A Story of Animal Breeding and Marketing Culture, 1800-1920*. University of Toronto Press.
- Feng, SL., Tuan, HL. (2005). Using ARCS Model to Promote 11th Graders' Motivation and Achievement in Learning about Acids and Bases. *Int J Sci Math Educ* 3, 463–484. <https://doi.org/10.1007/s10763-004-6828-7>.
- Ferrance, E. (2000). *Themes in education: Action research*. Providence, RI: Brown University.
- García-Morales V. J., Garrido-Moreno, A. & Martín-Rojas R. (2021). The Transformation of Higher Education After the COVID Disruption: Emerging Challenges in an Online Learning Scenario. *Frontiers in Psychology*, 12. <https://doi.10.3389/fpsyg.2021.616059>.

- Goldie, J. G. S. (2016). Connectivism: A knowledge learning theory for the digital age?. *Medical teacher*, 38(10), 1064-1069.
- Gornish, E. S., & Roche, L. M. (2018). The value of cooperative extension for involving society in restoration and conservation. *Restoration Ecology*, 26(6), 1051-1054.
- Haugeland, J. (1978). The nature and plausibility of cognitivism. *Behavioral and Brain Sciences*, 1(2), 215-226.
- Hein, Jessica. (2016). Be the judge with APHA's Horse IQ video learning platform. *APHA News*. [www.apha.com](http://www.apha.com).
- Herr, K., & Anderson, G. L. (2005). The action research dissertation: A guide for students and faculty. Thousand Oaks, CA: Sage.
- Hewitt, S., Green, M., & Hudson, C. (2018). Evaluation of key performance indicators to monitor performance in beef herds. *Livestock*, 23(2), 72-78.
- Janes, W. C., Silvey, D., & Dubrowski, A. (2016). Are educators actually coaches? The implication of teaching and learning via simulation in education in healthcare professions. *Cureus*, 8(8).
- Janicki, Kristen. (2006). Hiring a Horse Show Judge. *University of Kentucky-College of Agriculture, Cooperative Extension Service*, 1-4.
- Keller, J.M. (2010). Motivational Design for Learning and Performance: The ARCS Model Approach. *Springer Science and Business Media*.
- Kempster, A. J., Cuthbertson, A., & Harrington, G. (1982). *Carcass evaluation in livestock breeding, production and marketing*. Granada Publishing Limited.
- Kennedy, W. J. (1903). *Selecting and Judging Horses for Market and Breeding Purposes*. US Agriculture, Department of.

- Kibler, M. L et al. (2018). “An Estimation of US Horse-owner/caregiver Willingness-to-pay for Daily Use and Infectious Upper Respiratory Disease Treatment Options.” *Equine veterinary journal*, 50,(4), 498–503.
- Knowles, M. (1980). From pedagogy to andragogy. *Religious Education*.
- Lavoie, Haylee. (2019). *Undergraduate Success in Animal Science Courses Based on Demographics, Motivation, and Online Courses*. (Master’s thesis). University of Nebraska-Lincoln, Lincoln, NE.
- Li, C. S., & Irby, B. (2008). An overview of online education: Attractiveness, benefits, challenges, concerns and recommendations. *College Student Journal*, 42(2).
- Li, K., Moore, D.R. (2018). Motivating Students in Massive Open Online Courses (MOOCs) Using the Attention, Relevance, Confidence, Satisfaction (ARCS) Model. *J Form Des Learn* 2, 102–113. <https://doi.org/10.1007/s41686-018-0021-9>.
- Mackey, A., Polio, C., & McDonough, K. (2004). The relationship between experience, education and teachers’ use of incidental focus-on-form techniques. *Language Teaching Research*, 8(3), 301-327.
- Martin, Chad & Rusk, Clint. (2021). Youth livestock programs provide intangible benefits through life skill development, *Animal Frontiers*, 11(2), 64–71, <https://doi.org/10.1093/af/vfab007>
- Milman, N. & Wessmiller, J. (2020). Motivating the Online Learner Using Keller’s ARCS Model. *Developing and Teaching Online Courses During Uncertain Times*, 17(4), 33. IAP.
- National 4-H Council. (2018). 4-H History. Retrieved March 26, 2018, from

<https://4-h.org/about/history/>

National Reining Horse Association. (2021). [www.nrha.com](http://www.nrha.com).

Reed, J. (2018). *COMMUNICATION APPREHENSION, SELF EFFICACY, AND PROFESSIONAL JUDGE'S CERTIFICATIONS RELATED TO HORSE JUDGING* (Masters thesis). West Texas A&M University, Canyon, TX.

Rice, J. K. (2010). The Impact of Teacher Experience: Examining the Evidence and Policy Implications. Brief No. 11. *National center for analysis of longitudinal data in education research*.

Romano, T. (2018). *A Case Study Investigating Skill Development Through 4-H Livestock Projects*. (Master's thesis). Virginia Polytechnic Institute and State University, Blacksburg, VA.

Siemens, G. (2017). Connectivism. *Foundations of Learning and Instructional Design Technology*.

Steede, G. M., Fischer, L., Meyer, D. C., & Meyers, C. (2018). A Content Analysis of Extension's Presence on 1890 Land-Grant University Websites. *Journal of Applied Communications*, 102(1), 2.

Stringer, E. (2008). *Action research in education* (2nd ed.). Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Tough, A. (1979). The Adult's Learning Projects. A Fresh Approach to Theory and Practice in Adult Learning.

White, L. M., Layfield, K. D., Birrenkott, G., Skewes, P., & Beck, M. M. (2012). Appraisal of critical thinking skills in animal science undergraduates who



participated on a nationally competitive collegiate judging team. *NACTA Journal*, 56(1), 43-47.

World Conformation Horse Association. (2021). [www.conformationhorse.com](http://www.conformationhorse.com).

## Appendix A: Learner Analysis Survey Related Instruments

### Appendix 1.1 Learner Analysis Survey

#### Competitive Horse Judging Course Survey

**WELCOME!** eXtension Horses (found at <https://www.extensionhorses.org/> ) is an on-line resource for horse producers brought to you by extension specialists from all across the United States. We would like to learn how we can best help you by providing you information you need pertaining to competitive horse judging. The purpose of this survey is to obtain more specific feedback on how useful certain segments and information on specified components of competitive horse judging would be to you. There are no known risks to you to take this survey. You must be at least 18 or older (19 or older in Nebraska and Alabama or 21 or older in Mississippi) to participate. Your answers to the questions are anonymous. Any reports prepared will be released only as summaries in which no individual's answers can be identified. This survey is voluntary. You are free to decide not to participate and can withdraw at anytime without harming your relationship with the researchers or institutions involved. This survey is approved by the University of Nebraska Institutional Review Board #(20200320092EX).

---

#### Consent Form:

**IRB Number # 20200320092EX Study Title: *Utilizing Online Resources to Enhance Distribution of Competitive Animal Evaluation*** Dear participant, My name is Brooke Parrish. I am conducting a study on developing and researching an online program for beginner level horse judging. If you are 18 years or older (or 19 years of age if a resident of Nebraska or Alabama, or 21 years of age if a resident of Mississippi) and involved in coaching or teaching horse judging such as: having the role of horse judging coach, extension agent, 4-H leader, FFA advisor, or horse owner you may participate in this research. **What is the reason for doing this research study?** The purpose of this project is, first, to create the website of beginner level interactive horse judging information. Survey will be sent out to various horse judging coaches, extension/4-H personnel, agriculture teachers and horse owners. Upon evaluation of the completed surveys, the website will be created and launched. A randomized sample from the population of individuals listed above will be asked to pilot the website in order to address any errors or concerns. Following the pilot and revising stages, the website will then be launched to the public for use. Users will then be sent a survey following the use of the website to determine the usefulness of the online program. The significance of this project is to provide beginner level horse judging information in an interactive, nationally available format. The project will also build on previous research and determine the benefits of combining online education tools and competitive animal

evaluation. This is a research project that focuses on building Storyline 360 programs for beginner level learning of competitive horse judging. In order to participate, you must be involved in coaching or teaching horse judging having the role of horse judging coach, extension agents, horse owners, etc. **What will be done during this research study?**

This research study will be used to create Storyline 360 programs for learning basic level horse judging. The modules will include subjects of: oral reasons, halter, western pleasure and more. Participation in this study will require approximately 10 minutes. You will be asked to fill out the learner analysis to the best of your ability.

Participation will take place on your technology device. **What are the possible risks of being in this research study?**

There are no known risks or discomforts associated with this research.

**What are the possible benefits to you?** The results of this study will be used to design a program for beginner level interactive learning of the basics of competitive horse judging. In the future, you could use this program to learn yourself, or teach students. **How will information about you be protected?** Your responses to this survey will be kept anonymous and confidential. Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. Your responses from the survey will be withheld without your name associated and analyzed in a secure environment at the University of Nebraska-Lincoln (UNL). No identifying information will be made available to the public and results of this study will only be reported in the aggregate. The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person, agency, or sponsor as required by law. The information from this study may be published in scientific journals or presented at scientific meetings but the data will be reported as group or summarized data. Your identity will be kept strictly confidential. **What are your rights as a research subject?**

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. For study related questions, please contact the investigator(s): *Brooke Parrish*

*Bparrish2@huskers.unl.edu*  
6302

*Dr. Kathleen Anderson*

*kanderson1@unl.edu (309)-231-*

*402) 472-6414* For questions concerning your rights

or complaints about the research contact the Institutional Review Board

(IRB): Phone: 1(402)472-6965 Email: [irb@unl.edu](mailto:irb@unl.edu)

**What will happen if you decide not to be in this research study or decide to stop participating once you start?** You can decide not to be in this research study, or you can stop being in this research study (“withdraw”) at any time before, during, or after the research begins for any reason. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator or with the University of Nebraska-Lincoln. You will not lose any benefits to which you are entitled.

**Documentation of Informed Consent** You are voluntarily making a decision whether or not to participate in this research study.

By clicking on the I Agree button at the beginning of the survey, your consent to participate is implied. You should print a copy of this page for your records.

- ☐ I agree (1)
- ☐ I do not agree (2)

*Skip To: Q26 If Consent Form: IRB Number # 20200320092EX Study Title: Utilizing Online Resources to Enhance D... = I do not agree*

*Skip To: Q1 If Consent Form: IRB Number # 20200320092EX Study Title: Utilizing Online Resources to Enhance D... = I agree*

---

Q1 What is your involvement level with the following?

	No involvement (1)	Minimal involvement (2)	Moderate involvement (3)	Very involved (4)	Extremely Involved (5)
Horse Judging (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Horse Showing on a local level (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Horse Showing on a Breed Level (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rodeo (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jumping (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eventing (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Timed Events (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trail Riding (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Q2 What is your goal with learning more information about horse judging? (Can select more than one)

- ☐ Gain more knowledge (1)
- ☐ To be able to coach or educate others (2)
- ☐ To be competitive on a local level (3)
- ☐ To be competitive on a state level (4)
- ☐ To be competitive on a national level (5)
- ☐ Other (6) \_\_\_\_\_

Q3 Which organization(s) are you involved with? Indicate yes or no

	Involvement	
	Yes (1)	No (2)

FFA (1)	<input type="radio"/>	<input type="radio"/>
4-H (2)	<input type="radio"/>	<input type="radio"/>
AQHYA (3)	<input type="radio"/>	<input type="radio"/>
APHYA (4)	<input type="radio"/>	<input type="radio"/>
AQHA (5)	<input type="radio"/>	<input type="radio"/>
APHA (6)	<input type="radio"/>	<input type="radio"/>
Collegiate (7)	<input type="radio"/>	<input type="radio"/>
Other (8)	<input type="radio"/>	<input type="radio"/>



Q4 What is your experience level coaching horse judging?

- ☐ 0 (0)
  - ☐ 1 (1)
  - ☐ 2 (2)
  - ☐ 3 (3)
  - ☐ 4 (4)
  - ☐ 5 (5)
  - ☐ 6 (6)
  - ☐ 7 (7)
  - ☐ 8 (8)
  - ☐ 9 (9)
  - ☐ 10 (10)
- 

Q5 How many students do you teach/coach a year?

- ☐ Five and under (1)
  - ☐ Five to ten (2)
  - ☐ Ten to twenty (3)
  - ☐ Over twenty (4)
-



Q6 Rank your level of comfortability in teaching the following classes.

	Not at all comfortable (1)	Slightly comfortable (2)	Moderately comfortable (3)	Very comfortable (4)	Extremely comfortable (5)
Rail classes (Western Pleasure/ Hunter Under Saddle) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Horsemanship (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equitation (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunter Hack (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ranch Riding (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reining (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Western Riding (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oral Reasons (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Halter (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 How useful would the following types of resources be?

	Not at all use ful (1)	Sligh tly usefu l (2)	Moderat ely useful (3)	Ver y use ful (4)	Extrem ely useful (5)
Rules and standar ds of classes (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scoring of classes (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sample classes (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic horse knowle dge (parts of horse, parts of saddle, etc.) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Penaltie s and faults of classes (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Q8 How useful would the following information pertaining to oral reasons be?

	N ot at all us ef ul (1 )	Slig htly usef ul (2)	Moder ately useful (3)	V er y us ef ul (4 )	Extre mely useful (5)
Terminology (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presentation/D elivery (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organization (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Memorization (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scoring (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Q9 How useful would individual feedback for oral reasons be?

- ☐ 0 (0)
  - ☐ 1 (1)
  - ☐ 2 (2)
  - ☐ 3 (3)
  - ☐ 4 (4)
  - ☐ 5 (5)
  - ☐ 6 (6)
  - ☐ 7 (7)
  - ☐ 8 (8)
  - ☐ 9 (9)
  - ☐ 10 (10)
-

Q12 How useful would an online Horse Judging contest be?

- ☐ 0 (0)
  - ☐ 1 (1)
  - ☐ 2 (2)
  - ☐ 3 (3)
  - ☐ 4 (4)
  - ☐ 5 (5)
  - ☐ 6 (6)
  - ☐ 7 (7)
  - ☐ 8 (8)
  - ☐ 9 (9)
  - ☐ 10 (10)
-

Q13 In an online judging contest, how many different classes should be offered?

- ☐ 5 (1)
  - ☐ 6 (2)
  - ☐ 7 (3)
  - ☐ 8 (4)
  - ☐ 9 (5)
  - ☐ 10 (6)
  - ☐ 11 (7)
  - ☐ 12 (8)
-

Q14 Rank the level of importance on the inclusion of the following classes to be included in an online contest:

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Halter (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Western Riding (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Western Pleasure (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunter Under Saddle (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunter Hack (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Western Horsemanship (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunt Seat Equitation (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ranch Riding (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reining (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 Should oral reasons be a component of an online judging contest?

- ☐ Yes, written sets (1)
  - ☐ Yes, oral videoed sets (2)
  - ☐ No (3)
- 

Q16 Should questions related to the viewed classes be a component of an online judging contest?

- ☐ Yes (1)
  - ☐ No (2)
- 

Q17 Should there be an official panel's feedback on classes for an online judging contest?

- ☐ Yes, written feedback (1)
  - ☐ Yes, voiceover feedback (2)
  - ☐ Yes, written and voiceover feedback (3)
  - ☐ No (4)
-



Q18 How much would you be willing to pay for access to unlimited access to educational content and be able to practice classes on contestant horse judging?

- ☐ \$10 a month (1)
  - ☐ \$15 a month (2)
  - ☐ \$20 a month (3)
  - ☐ \$25 a month (4)
  - ☐ \$30 a month (5)
  - ☐ Nothing (6)
  - ☐ Other (7) \_\_\_\_\_
- 

Q19 What type of subscription to unlimited access on educational content and being able to practice classes on contestant horse judging would you be most interested in?

- ☐ Monthly (1)
  - ☐ Bi-monthly (2)
  - ☐ 6 month (3)
  - ☐ Annual (4)
  - ☐ No subscription (5)
  - ☐ Other (6) \_\_\_\_\_
- 

Q20 What state are you from?

\_\_\_\_\_

---

Q22 Are you

- ☐ Male (1)
  - ☐ Female (2)
  - ☐ Other (3)
  - ☐ Prefer not to respond (4)
- 

Q23 What is your age range?

- ☐ 18-29 (1)
  - ☐ 30-39 (2)
  - ☐ 40-49 (3)
  - ☐ 50-59 (4)
  - ☐ 60-69 (5)
  - ☐ Other (6)
  - ☐ Prefer not to respond (7)
-

Q24 Which of the following best represents your racial or ethnic heritage? Choose all that apply

- ☐ American Indian or Alaska Native (1)
  - ☐ Black or African American (2)
  - ☐ Native Hawaiian or Pacific Islander (3)
  - ☐ White (4)
  - ☐ Other (5)
- 

Q26

Thank you for your time and participation!

## **Appendix B: Pilot/Focus Group Interview Questions**

### **Appendix 2.1 Pilot/Focus Group Interview Questions for What is a Horse Judging Contest?**

1. What are your overall thoughts on the What is a Horse Judging Contest module?
2. Were any of the sections difficult to understand?
  - a. How can it be changed to make it easier to understand?
  - b. What section (s) were easy to understand? Why/How?
3. Do you feel the information connected together well?
4. What are your thoughts on the questions and interactive activities associated with the different sections?
  - a. Were those activities appropriate?
  - b. Do we need more?
5. What, if anything, do you find frustrating or unappealing about the What is a Horse Judging Contest module?
6. Do you have any suggestions on how we could improve the What is a Horse Judging Contest module?

### **Appendix 2.2 Pilot/Focus Group Interview Questions for Getting Started with Oral Reasons: Competitive Horse Judging**

1. What are your overall thoughts on the Oral Reasons module?
2. Were any of the sections difficult to understand?
  - a. How can it be changed to make it easier to understand?
  - b. What section (s) were easy to understand? Why/How?
3. Do you feel the information connected together well?
4. What are your thoughts on the questions and interactive activities associated with the different sections?
  - a. Were those activities appropriate?
  - b. Do we need more?
5. What, if anything, do you find frustrating or unappealing about the Oral Reasons module?
6. Do you have any suggestions on how we could improve the Oral Reasons module?

### **Appendix 2.3 Pilot/Focus Group Interview Questions for The Basics of Conformation Evaluation**

1. What are your overall thoughts on the Conformation module?
2. Were any of the sections difficult to understand?
  - a. How can it be changed to make it easier to understand?
  - b. What section (s) were easy to understand? Why/How?
3. Do you feel the information connected together well?
4. What are your thoughts on the questions and interactive activities associated with the different sections?
  - a. Were those activities appropriate?
  - b. Do we need more?
5. What, if anything, do you find frustrating or unappealing about the Conformation module?
6. Do you have any suggestions on how we could improve the Conformation module?

### **Appendix C: Post Survey Related Instruments**

#### **Appendix 3.1 What is a Judging Contest Post Survey**

Q1 What device did you use to pilot this module?

- ☐ Phone (1)
- ☐ Laptop (2)
- ☐ Desktop Computer (3)
- ☐ Tablet or I-pad (4)
- ☐ Other (5) \_\_\_\_\_
-

Q2 How effective was the "What is a Horse Judging Contest" module in teaching the basics of a horse judging contest?

- ☐ 0 (0)
- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 (7)
- ☐ 8 (8)
- ☐ 9 (9)
- ☐ 10 (10)



Q5 When completing the activities (multiple choice questions, drag and drops, etc.), did you have difficulty understanding any of them?

☐ Yes (1)

☐ No (2)

End of Block: Default Question Block

---

### **Appendix 3.2 Getting Started With Oral Reasons... Post Survey**

Q1 What device did you use to pilot this module?



- ☐ Phone (1)
- ☐ Laptop (2)
- ☐ Desktop Computer (3)
- ☐ Tablet or I-pad (4)
- ☐ Other (5) \_\_\_\_\_

Q2 How effective was the "Getting Started with Oral Reasons: Competitive Horse Judging" module in teaching oral reasons?

- ☐ 0 (0)
- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 (7)
- ☐ 8 (8)
- ☐ 9 (9)
- ☐ 10 (10)

-----



Q4 In terms of clarity of information, how would you rate each section?

	Not confusing at all-0 (11)	1 (12)	2 (13)	4 (15)	7 (18)
Overview (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organization (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presentation (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scoring (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sample Sets (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 When completing the activities (multiple choice questions, drag and drops, etc.), did you have difficulty understanding any of them?

- ☐ Yes (1)
- ☐ No (2)

End of Block: Default Question Block

Appendix 3.3 The Basics of Evaluating Conformation Post Survey

Q1 What device did you use to pilot this module?

- ☐ Phone (1)
  - ☐ Laptop (2)
  - ☐ Desktop Computer (3)
  - ☐ Tablet or I-pad (4)
  - ☐ Other (5) \_\_\_\_\_
- 

Q2 How effective was the "The Basics of Evaluating Conformation" module in teaching conformation evaluation?

- ☐ 0 (0)
  - ☐ 1 (1)
  - ☐ 2 (2)
  - ☐ 3 (3)
  - ☐ 4 (4)
  - ☐ 5 (5)
  - ☐ 6 (6)
  - ☐ 7 (7)
  - ☐ 8 (8)
  - ☐ 9 (9)
  - ☐ 10 (10)
-

Q3 Rate each section on its value.

[illegible]



Q5 When completing the activities (multiple choice questions, drag and drops, etc.), did you have difficulty understanding any of them?

☐ Yes (1)

☐ No (2)

End of Block: Default Question Block

## Appendix IRB Approval Letter



### Official Approval Letter for IRB project # 20092 - New Project Form

March 11, 2020

Brooke Parrish  
Department of Animal Science  
ANSC C204 (Anderson) UNL NE 685830908

Kathleen Anderson  
Department of Animal Science  
ANSC C204 UNL NE 685830908

IRB Number: 20200320092EX

Project ID: 20092

Project Title: Utilizing Online Resources to Enhance Distribution of Competitive Animal Evaluation Knowledge and Benefit

Dear Brooke:

This letter is to officially notify you of the certification of exemption of your project for the Protection of Human Subjects. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects at 45 CFR 46 2018 Requirements and has been classified as exempt. Exempt categories are listed within HPP Policy #4.001: Exempt Research available at: <http://research.unl.edu/researchcompliance/policies-procedures/>.

o Date of Final Exemption: 3/11/2020

o Certification of Exemption Valid Until: 3/11/2025

o Review conducted using exempt category 2a at 45 CFR 46.104

o Funding (Grant congruency, OSP Project/Form ID and Funding Sponsor Award Number, if applicable): N/A

1. Per the protocol, the pre and post surveys will be developed after other activities are completed. Please submit these as a change request once they have been developed.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- \* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) in which the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- \* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- \* Any protocol violation or protocol deviation
- \* An incarceration of a research participant in a protocol that was not approved to include prisoners
- \* Any knowledge of adverse audits or enforcement actions required by Sponsors
- \* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- \* Any breach in confidentiality or compromise in data privacy related to the subject or others'; or
- \* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

*Becky R. Freeman*

Becky R. Freeman, CIP  
for the IRB



University of Nebraska-Lincoln Office of Research and Economic Development  
[nugrant.unl.edu](http://nugrant.unl.edu)

NUGrant