

ANIMAL SYSTEMS CAREER PATHWAY

TEACHER RESOURCE GUIDE

RIGHT FROM THE START:
SAFETY AWARENESS FOR
LIVESTOCK PRODUCERS





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▶ INTRODUCTION

The SAY Project has developed a National Clearinghouse that assists youth educators with identifying agricultural safety and health curriculum and educational resources that align with to Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards.

The purpose of this resource guide is to highlight examples of specific curricula provided in the SAY Clearinghouse and suggestions for integrating the resource within your current classroom activities. This teacher resource guide focuses on the curriculum resource that aligns to the standard:

- ▶ AS.02. *Utilize best-practice protocols based on upon animal behaviors for animal husbandry and welfare.*

Within the teacher resource guide, you will find:

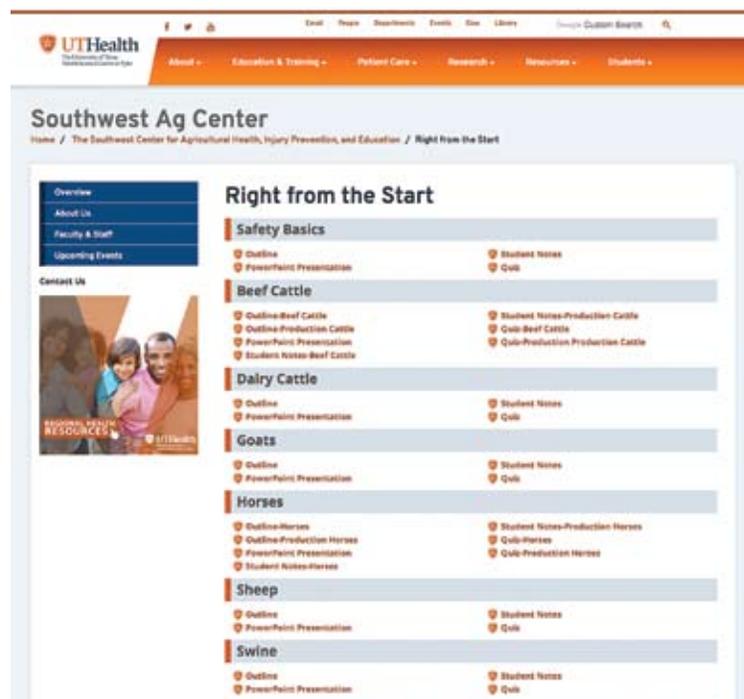
1. **Overview** • An overview of the sampled curriculum
Right from the Start: Safety Awareness for Livestock Handlers
2. **Standards Alignment** • How the curriculum aligns to the standards
3. **Sample Objectives** • Sample objectives you can use
4. **Activities** • Descriptions of activities provided in the curriculum
5. **Personalized Sample Activities** • Ideas of additional activities you can utilize
6. **Evaluation** • How students' learning can be evaluated

▶ OVERVIEW OF RIGHT FROM THE START: SAFETY AWARENESS FOR LIVESTOCK PRODUCERS

Right from the Start is a series of resources developed by the Southwest Center for Agricultural Health, Injury Prevention, and Education. The course offers a general outline of the safety procedures used when handling various types of livestock.

Right from the Start is a resource for teachers and extension agents who teach animal handling and safety in an agricultural education environment. The materials offer PowerPoint presentations, curriculum outlines, student notes, and quizzes. Included in the resources is a guide for teaching the material to students.

Figure 1. shows the landing page for *Right from the Start*. The course organizes material in nine modules. Each module focuses on a specific livestock.



1. **Safety Basics**
2. **Dairy Cattle**
3. **Beef Cattle**
4. **Goats**
5. **Horses**
6. **Sheep**
7. **Swine**
8. **Trailers**
9. **Comprehensive Exam**

Figure 1.
Landing Page for *Right from the Start*

▶ ALIGNMENT FOR MEASURABLE STUDENT ACTIVITIES

Academic standards outline the knowledge and skills students need for future success within a discipline. Specifically, the AFNR standards serve as a guide for the development of rigorous, well-planned curriculum and assessments for an agricultural career pathway. This livestock safety resource can be integrated within current formal (High School programs) and informal (4-H) agricultural education efforts.

This alignment integration provides sample measurements that students might carry out to indicated achievement of knowledge or skills related to a core standard. The levels of proficiency of each measurement are indicated by the last letter within the standard code.

A letter code “a” indicates a proficiency level of “awareness”. Letter code “b” indicate proficiency level of “intermediate” and letter code “c” indicate proficiency level of “advanced”. *Right from the Start* curriculum aligns to the following measurable activities:

- ▶ AS.02.01.01.a. (Proficiency level “Awareness”) *Explain the implications of animal welfare and animal rights for animal systems.*
- ▶ AS.02.01.02.a. (Proficiency level “Awareness”) *Research and summarize the challenges involved in working with animals and resources available to overcome them (e.g., tools, technology, equipment, facilities, animal behavior signals, etc.).*
- ▶ AS.02.01.02.b. (Proficiency level “Intermediate”) *Analyze and document animal welfare procedures used to ensure safety and maintain low stress when moving and restraining animals.*
- ▶ AS.02.01.02.c. (Proficiency level “Advanced”) *Devise, implement and evaluate safety procedures and plans for working with animals by species using information based on animal behavior and responses.*

▶ SAMPLE LESSON OBJECTIVES

Objectives help you plan your lessons or trainings to ensure that what your students are learning align to how they will be evaluated. Using the **ABCD** method, objectives should include an **A**udience, **B**ehavior, **C**onditions, and **D**egree of mastery needed. Bloom’s Taxonomy of cognitive learning is a hierarchical framework that instructors can use to promote higher order thinking and learning. Below are example objectives at various levels of Bloom’s Taxonomy that teachers can use in their lesson plans with *Right from the Start*.

By the end of this lesson, students will be able to:

- ▶ Identify hazards associated with animal handling such as danger points and flight zones.
- ▶ Demonstrate how to appropriately approach various species of livestock
- ▶ Operationalize pre-operation checks on a trailer according to the curriculum.
- ▶ Design a workshop on animal safety according to rubric.

▶ INTEGRATION ACTIVITIES

Right from the Start curriculum course is comprised of 8 lessons with corresponding notes and quizzes. The lessons consist of written information, diagrams, and pictures for students to read and analyze.

Figure 2. shows the **Beef Cattle** curriculum. For example, within this lesson, students will learn about the following subtopics:

- ▶ A. Characteristics
- ▶ B. Danger Points
- ▶ C. Flight Zone
- ▶ D. Point of Balance
- ▶ E. Equipment
- ▶ F. Safety
- ▶ G. Halter Breaking
- ▶ H. Acclimatization

▶ PERSONALIZED SAMPLE ACTIVITIES FOR STUDENT LEARNING

Modalities of learning are ways in which students use their senses throughout the learning process to acquire new skills. Using different modalities when teaching new material can help make sure that all students receive instruction in a way that best matches their personal learning style. Students retain information better when they have a chance to apply what they've learned and use their new skills in a hands-on way. Below are example activities teachers can use to enhance their students' learning.

- ▶ After completing the curriculum, students can demonstrate what they know by applying the skills learned in a real-life scenario. Students could travel to a local farm and demonstrate how to use equipment, how to properly halter and handle an animal, and show that they know what danger points to avoid.
- ▶ Teaching is the best way to learn! Students can apply what they've learned to design and facilitate an animal safety demonstration/workshop for other local 4-H students/FFA Members, local community members, etc.
- ▶ Given a variety of farm incident(s) scenarios, students can use what they learned in the course to develop a plan to prevent that incident from occurring. This will require students to use those critical thinking skills!

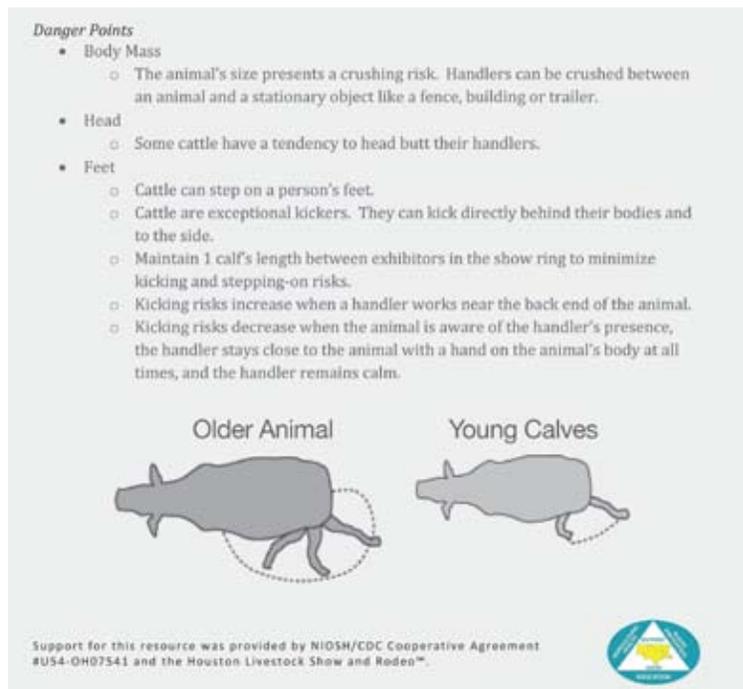
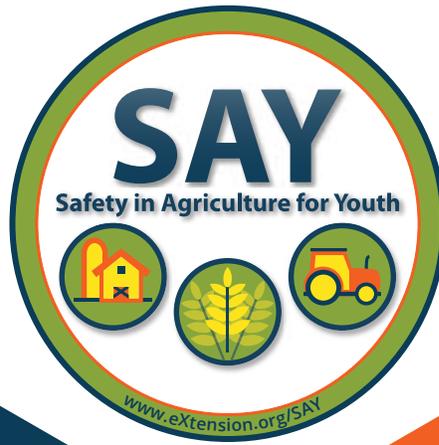


Figure 2. Beef Cattle Curriculum, *Right from the Start*

▶ EVALUATION OF STUDENTS

Evaluation is an essential part of safety training as it gives students a chance to show what they know, as well as an opportunity for teachers to document how well students have achieved the learning objectives. This feedback is important for improving curriculum as well as help teachers determine if they need to provide additional instruction or have students continue to the next lesson/unit.

To evaluate student learning for *Right from the Start* curriculum, there are paper-based quizzes for each lesson. Each quiz is anywhere from 3-8 questions. Because it is a teacher-led curriculum, answer keys are provided, and grading may be determined by the teacher. *Right from the Start* also provides a comprehensive exam that can be used by instructors once all lessons have been taught. Instructors may choose to develop performance-based evaluations to evaluate learned skills such as how to properly halter an animal or hook up a trailer. Quizzes, student notes, as well as PowerPoint slides are available at <https://www.uthct.edu/swagc-right-from-the-start> .



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