

Dairy Curriculum

Introduction

Teachers,

It is with great pleasure that we introduce to you a unique partnership that has resulted in this fantastic Western Dairy Association (WDA) – Dairy Value Chain Curriculum!

THE PARTNERSHIP

Three different agencies worked together to accomplish this curriculum: Western Dairy Association (WDA), the Colorado FFA Foundation and Colorado State University Agricultural Education Program. Additionally, we acknowledge the countless teachers who wrote, piloted, rewrote, edited and taught these lessons throughout the development process. The outcome of this project is a set of curriculum lessons that will enable you to teach and provide a fundamental understanding of Dairy and how dairy products get to the table. Each partner was instrumental in this process, and each partner provided consistent and industry perspective while also representing current practices for effective instruction and learning of students. Truly, this project represents a commitment to training future producers, employees, consumers and educators regarding the Dairy industry.

THE VALUE CHAIN CONCEPT

In the summer of 2012, a group of agricultural educators in Colorado came together and brainstormed this curriculum project. Working off the significant work of the dairy industry, the agriculture teachers were presented a graphic of the Dairy Value Chain. In a fundamental move, the agriculture teachers directed the project to be aligned along this value chain, integrating many pathways instead of aligning with just one disciplinary direction (i.e. the animal systems pathway). This set of lessons and labs will provide training in Agribusiness Systems, Food Products and Processing Systems, Power, Animal Systems outcomes, and additional subsidiary content in Power Structure and Technical Systems, Natural Resources/Environmental Systems, Plant Systems and Agriculture, Food and Natural Resources Cluster Standards. All of the standards of this project meet Colorado AFNR standards, though they can easily be aligned to both national and other state standards for agriculture. The value chain represents a fundamental and critical shift to educate in an integrated fashion; beyond the confines of a pathway structure.

THE FORMAT OF THE LESSONS

Each of the lessons provided in this curriculum have multiple pages. The first page represents instructions to the teacher and subsequent pages of the lesson plan represent that which could be printed off and educated within the classroom – the learning plan. The curriculum is intended to be Inquiry in its design, following the 5E model of lesson development and delivery (Engage, Explore, Explain, Elaborate, Evaluate), with the idea that these lessons are student driven, and teacher facilitated. We have attempted, when possible, to eliminate the teacher lecture in lieu of student activities that will engage and drive student learning. Notably, however, it is still critical that the teacher know the content provided. The references listed on each lesson will direct the instructor to background information that will be critical to the successful delivery of the curriculum. You will note that “essential questions” have been added at the conclusion of the lesson. These represent fundamental questions that should aid the teacher in knowing if the students have accomplished the student outcomes. Utilize these as summary activities to quiz students and a daily progress check.

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THE EXTENDED LEARNING OPPORTUNITIES

Each lesson in this curriculum will contain additional “Extended Learning” opportunities. This provides resources for students to explore additional careers and issues in the Dairy industry. While not a fundamental part of the body of the lesson, these activities can be utilized to understand greater depth of the Dairy industry.

THE UNIT ASSESSMENTS

The WDA Dairy Value Chain Curriculum provides both a traditional unit assessment and opportunities to link to the informal assessments. The unit exam provided may be given in both a pre and post-test scenario in order to provide data for student growth. The laboratory activities also provide evidence based grading in order to provide value to these activities. Additionally, each lesson contains formative and daily assessments in order to aid the teacher in understanding daily progress.

THE CONNECTION TO CAREER DEVELOPMENT EVENTS

The uniqueness of agricultural education provides opportunities to provide obvious additional leadership development through the FFA. This curriculum was designed to help motivate students to participate in many Career Development Events in FFA including Milk Products, Dairy Evaluation, Agricultural Issues, and additional opportunities in Prepared Public Speaking. We hope that the educators utilizing this curriculum will look for opportunities to reinforce the connections to these leadership development Events!

With sincere appreciation to the funding and guidance of this project, we would like to acknowledge the Western Dairy Association. They have dedicated time and energy to the professional development and training of both students and teachers. We are grateful for their commitment to Agricultural Education and agriculture instruction. We hope that this curriculum will lead all of you to become dairy aware and dairy advocates!

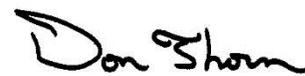
Sincerely,



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