

# 21st Century Classroom Lesson Plan

IDAHO STATE DEPARTMENT OF EDUCATION  
DEVELOPED ACCORDING TO THE CHARLOTTE DANIELSON FRAMEWORK AND  
UNIVERSAL DESIGN FOR LEARNING (UDL)

**Charlotte Danielson Framework** - This lesson plan incorporates all of the components found in **Domain 1: Planning and Preparation** of the Danielson Framework for Teaching; **1a: Demonstrating Knowledge of Content and Pedagogy**; **1b: Demonstrating Knowledge of Students**; **1c: Setting Instructional Goals**; **1d: Demonstrating Knowledge of Resources**; **1e: Designing Coherent Instruction**, and; **1f: Assessing Student Learning**.

**UDL** – This lesson plan incorporates the primary components of Universal Design for Learning (UDL) which is an educational approach with three primary principles including;

1. **Multiple means of representation**, to give diverse learners options for acquiring information and knowledge,
2. **Multiple means of action and expression**, to provide learners options for demonstrating what they know,
3. **Multiple means of engagement**, to tap into learners’ interests, offer appropriate challenges, and increase motivation

Lesson plans created by educators for submission into Idaho’s Learning Management System (LMS) Schoolnet must include these components. For information on Universal Design for Learning including a tutorial and model lessons access the Center for Applied Special Technology (CAST) website at <http://www.cast.org/>

**Bloom’s Revised Taxonomy** – This lesson plan includes Bloom’s Revised Taxonomy as a component.

\*NOTE: Not all areas are required for every lesson. \* INDICATES OPTIONAL areas to be included only if applicable to the specific content/grade level lesson. This lesson plan template is based upon the CAST UDL Lesson Plan Builder but includes extra fields specific for submission into Idaho’s Schoolnet Learning Management System and must be completely filled in (unless labeled \* for optional) to facilitate entry into a searchable state-wide and national online database. Educators are not limited to the space provided as the table will expand to fit the entries.

Name: SDE-Child Nutrition Programs	Email: childnutrition@sde.idaho.gov
District Name:	School Name:
District Number:	School Address:
School Phone:	Administrator Name:

## Lesson Overview

<b>Unit:</b> Incredible Edible Idaho Farm to School Lesson Series	
<b>Lesson Title:</b> Idaho Dairy	
<b>Subject:</b> Health, ELA <b>*Subheading:</b> Nutrition	
<b>Duration:</b> 40 minutes	<b>Grade Level(s):</b> 3rd-5th
<b>Course:</b> –	
<b>Big Idea or Focused Investigation:</b> Idaho dairy is an important part of a healthy diet. Dairy is an important agricultural industry in Idaho.	
<b>Enduring Understandings:</b> Idaho dairy provides many nutrients that help our bodies learn, grow, and stay healthy. Dairy production is an important industry in Idaho.	
<b>Essential Question/s:</b> What are the steps in the journey between the dairy farm and the dinner table? According to My Idaho Plate, where does dairy fit into a balanced, healthy meal?	

## Description

**Lesson Description:** Describe the primary nature (e.g. hands-on, inquiry, project based etc.), whether interdisciplinary or single-subject and how it relates to a broader unit. Being clear, descriptive, and specific will help to develop the online keyword searches within Schoolnet. Make sure you provide enough information on this lesson plan that it can be replicated.

**Description:** This lesson plan is designed to provide students with information on Idaho dairy from both an agricultural and a nutritional perspective. Students will learn where Idaho's dairies are located and about the steps in the production and distribution of dairy products. Additionally, students will become aware of nutrition facts related to dairy, including how to add more dairy to their meals. They will be required to synthesize information from a video, the PowerPoint slides, and information provided verbally by the teacher to write a paragraph correctly explaining step by step the production chain from producer to consumer.

## Goals and Objectives

(Framework Domain 1c: Setting Instructional Goals)

**Goals and Objectives:** The overall goal, as well as objective, outlining the concept, knowledge, skill, or application students can demonstrate upon lesson completion. This may be the same as or very similar to the content standard; however, it could be narrower or perhaps broader. Objectives may be stated in the form of critical questions students should be able to answer.

**Unit/Lesson Goal/s:** Students will gain a greater appreciation for dairy production in Idaho. Students will make connections between locally grown products and healthy eating.

**Lesson Objectives:** Students will be required to synthesize information from the video, PowerPoint slides, and information provided verbally by the teacher to write a paragraph correctly explaining step by step the production chain from producer to consumer. Students will revise their paragraph to include transition words.

## Standards

**Standards:** A lesson may address a single content standard, two or more content standards from the same subject area, or content standards from two or more subject areas and or grades. (Use the drop down menu provided for each if submitting online within Schoolnet or use the internet links provided to access, then copy and paste into the document)

**Idaho State Content Standards:**

3-5.H.1.1.1 Describe the relationship between healthy behaviors and personal health.

3-5.H.1.1.6 Describe the impact of health behaviors on body systems.

3-5.H.5.1.5 Choose a healthy option when making a decision.

3-5.H.5.1.6 Describe the outcomes of health related decisions.

**Idaho Core Standards (CCSS):**

RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

W.4.2.c Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).

W.4.2.d Use precise language and domain-specific vocabulary to inform about or explain the topic.

W.3-4.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

## Learning Outcomes – Begin with the end in mind

(Framework Domain 1e: Designing Coherent Instruction)

**Learning Outcomes:** How does this lesson support the unit goals / enduring understandings? How does this lesson build on the previous lesson in this instructional sequence? How does this lesson support the next lesson in this instructional sequence?

**Create, Present, Perform, Exhibit, Report, Respond/Reflect. Students will be able to:**

**Learning Outcome:** Students will be required to synthesize information from the video, PowerPoint slides, and information provided verbally by the teacher to write a paragraph correctly explaining step by step, the production chain from producer to consumer. Students will revise their paragraph to include transition words.

**Checking for Understanding Questions:** Why is dairy production important to Idaho's citizens? How many servings of dairy should you eat each day? How is Idaho dairy part of a healthy meal?

## Bloom's Revised Taxonomy

**Which levels of Bloom's Revised Taxonomy are targeted? Check one or more.**

(Use drop down online within Schoolnet or checkbox)

X	Remembering	X	Analyzing
X	Understanding	X	Evaluating
X	Applying	X	Creating

## Methods and Instructional Strategies

(Framework Domain 1a: Demonstrating Knowledge of Content and Pedagogy)

**Vocabulary:** List all key vocabulary words necessary for students to understand the concepts as well as meet the standards, goals and objectives of the lesson.

**bovine** – scientific word for any type of cattle  
**cow** – adult female cattle  
**calves** – young cattle (male or female)  
**bulls** – adult male cattle  
**cattle** – a collective term for cows, calves, and bulls  
**dairy cattle** – cattle raised to produce milk  
**beef cattle** – cattle raised to produce meat and other by-products  
**production** – to make or manufacture something, dairy production is the process of raising dairy cows and collecting the milk  
**product** – a thing that is created by work, milk is a product of the dairy industry  
**by-product** – something that is created from production, but isn't the main product (i.e. fertilizer from composted cow manure is a by-product of the dairy industry)  
**dairy** – milk and all the products made from it; a place where dairy cows are raised and milked  
**agriculture** – the science or occupation of producing food or other goods, from growing plants or raising animals  
**producer** – someone who makes or grows food  
**consumer** – someone who uses a product

**Teacher Preparation:**

**Before you begin the lesson, make sure you prepare materials. You will need to:**

- Read the PowerPoint presentation and print out all slides, including notes. The notes will not be visible when you are viewing the PowerPoint, so it is important to print them out beforehand. To print the slides WITH notes, select "Print," then under the print menu, select the dropdown menu labeled "Print What." Select "Notes Pages." When you print, it will print each slide, along with the notes at the bottom.
- Discussion information for each PowerPoint slide is contained below the slide within the presentation.
- Italicized instructor cues include questions for the class.
- Hang up "Incredible Edible Idaho: Dairy" poster in the front of the class to use as a visual aid.
- Make enough copies of the Idaho Dairy Take Home Handout and the Dairy Production Assignment worksheet (standard and/or adapted copies) for each student.

The teacher should pre-read the scripted PowerPoint presentation in order to become familiar with the information presented. Watch the video on slide 9 to determine how to scaffold and support your learners through the information gathering process. Teachers should also decide ahead of time if students will be completing the sequencing activity individually, with buddy groups, small groups, or as a class with teacher facilitation. An adaptation is also included for students who need more support in gathering information from the PowerPoint or writing the paragraph.

Discussion information for each PowerPoint slide is contained below the slide within the presentation. Italicized teacher cues include questions for the class and additional information for teacher. Print these notes for easy access during the presentation.

**Introduction/Anticipatory Set:**

Direct students' attention to the "Incredible Idaho: Dairy" poster. <http://www.sde.idaho.gov/site/cnp/farmToSchool/docs/DairyPoster.pdf>

Display the first slide in the PowerPoint and introduce the lesson: Idaho's Dairy Products. Ask the following focus questions: "How many of you had a dairy product for breakfast this morning? Where do dairy products fit into a balanced, healthy meal? Why is dairy production important to Idaho citizens?"

**Instructional Strategies:** Gradual release of responsibility, turn and talk

**Build, Apply Knowledge:**

Next, present slides 2-6 and discuss historical information about cattle. Tell students that they are going to carefully listen and watch the presentation, and then summarize what they learned about cattle.

Turn and Talk: After presenting the information, have students turn to a neighbor and restate one or two historical facts about cattle. The teacher should listen in to students correctly identifying historical facts about cattle, adding clarification and modeling thinking through this process as necessary.

Before slides 7-8, ask students, "Why are dairy products important to the State of Idaho?" Tell them to watch and listen carefully to the next two slides to gather evidence for their answer. Allow time for students to share their answers and evidence from slides 7-8 with a partner.

**\*Higher Order Thinking Questions:** Why is dairy production important to Idaho citizens? According to My Idaho Plate, where do dairy products fit into a balanced, healthy meal?

**\*Provide Guided Practice:**

The next slide, slide 9, is a link to an 8:32 minute video entitled, “The Journey of Milk” from the Western Dairy Association. The video includes a step-by-step description of the production of dairy products. (There is also an alternative link to the video through YouTube in the notes section.)

Before students watch the video, explain that they will be watching and listening carefully while gathering notes to determine the most important steps in the production of dairy products. After the video, they will write a paragraph summarizing milk’s journey from producer to consumer. Allow students to take notes on notebook paper during the video. Pause the video periodically so that students have time to write down notes. Depending on your learners, you may choose to model how to take notes, explaining how you determine the most important information. You may instead highlight your students’ thinking by stopping the video periodically and allowing students to share their notes in groups or whole class.

Use Slides 11-12 to give extra details that students can choose to add to their notes if they determine the facts are important for their paragraph about the journey of milk.

Before slide 13-14, ask students, “According to My Idaho Plate, where do dairy products fit into a balanced, healthy meal? How can dairy products help our bodies grow, learn, and play? How many servings of dairy should you eat every day? What foods could you choose to get your three servings today?” Tell them to watch and listen carefully to the next two slides to gather evidence for their answer. Allow time for students to share their answers and evidence from the slides 13-14 with a partner. The teacher should listen in to students, adding clarification and modeling thinking through this process as necessary.

After reading the two slides, the teacher should handout the Idaho Dairy Products Student Take Home Sheet. Discuss and encourage students to take the sheet home to share with their families.

**\*Provide Independent Practice:**

Slide 15 presents the paragraph writing assignment for students. Hand out the assignment and go over the instructions with the students.

**\*Please note that there are two options for the writing assignment.** A sequencing adaptation is included for students who need more support in gathering information from the PowerPoint or writing the paragraph.

Depending on where you are with the instruction of writing, you may need to discuss or **brainstorm a list of transition words with students**. Teachers should also decide ahead of time if students will be completing the sequencing activity or the paragraph.

The teacher may also choose to have students write individually, in pairs, small groups, or as a class with teacher facilitation.

After students have time to write their paragraphs, ask students to highlight all transition words. Read the paragraph to a partner, focusing revision on transition words that lead students from one production step to the next. Use successful student examples as models, highlighting the author’s craft especially in regards to transition words.

**Wrap Up/Synthesis/Closure:**

Allow time to share with classmates or an audience outside the classroom.

Students may also draw a picture representing specific steps or vocabulary terms to enhance and add visual details to their paragraph.

# Materials

(Framework Domain 1d: Demonstrating Knowledge of Resources)

\*Digital eLearning Materials: URL (Web Site Link/s) to online digital text or materials, games, activities, programs, tools or video – List as many as necessary.

**Title:** Idaho's Dairy Products PowerPoint Presentation

**URL:** <http://www.sde.idaho.gov/site/cnp/farmToSchool/lessonPlans>

**Annotation:** This PowerPoint provides students with background information about the history of domesticating cattle, dairy production in Idaho, and dairy products' role in a healthy meal.

**Title:** Dairy Production Assignment

**URL:** <http://www.sde.idaho.gov/site/cnp/farmToSchool/lessonPlans>

**Annotation:** This worksheet provides students a place to write their paragraph summarizing the production journey of dairy products. The paragraph will be a description of the step by step journey dairy products take from producer to consumer.

**Title:** Idaho Dairy Products Student Take Home Handout

**URL:** <http://www.sde.idaho.gov/site/cnp/farmToSchool/lessonPlans>

**Annotation:** This handout provides students an informational resource about Idaho Dairy to bring home to share with family. It also includes a healthy recipe featuring Idaho Dairy that a family can make and enjoy together.

**Title:** "Incredible Edible Idaho: Dairy" poster

**URL:** <http://www.sde.idaho.gov/site/cnp/farmToSchool/lessonPlans>

**Annotation:** This link provides the poster referred to in the introduction of the lesson. The State Department of Education, Child Nutrition Programs and the Idaho Department of Agriculture support Farm to School activities in the State of Idaho. Several Idaho schools have introduced Farm to School activities in their classrooms and cafeterias.

**Title:** The Journey of Milk Video

**URL:** [http://www.youtube.com/watch?feature=player\\_embedded&v=cvZ4AphcJs4](http://www.youtube.com/watch?feature=player_embedded&v=cvZ4AphcJs4)

**Annotation:** This video is a required material for the assignment included at the end of this lesson. The video shows the dairy industry from raising cows to dairy products in the stores. Although this video was produced in Colorado, the same process is used in Idaho.

\***Technology Tools and Equipment (Including UDL-Assistive Technology Software and Hardware):** Examples of technology tools might include hardware as well as software; e.g. document camera, digital camera, tablet, iPad, iPod, Interactive Board, calculator, geotracking, etc. Examples of UDL -assistive technology; e.g. text to speech, speech to text, switch or adapted keyboard, screen reader or word prediction etc. (List as many as necessary)

1. Computer with PowerPoint and Internet Connection
2. LCD Projector

\***Other Materials:** Those required by teacher and/or students, include preparation or other special instructions; e.g. paper based materials such as text books, science equipment or supplies, art materials or equipment. (List technology items in the previous field.) (List as many as necessary)

1. "Dairy Product Assignment" - 1 per student
2. "Adapted Dairy Product Assignment" -for students who need additional support
2. Print the teaching notes included in the PowerPoint slides
3. "Incredible Edible Idaho: Dairy" poster - projected digitally
4. "Idaho Dairy Products Student Take Home Sheet" - 1 per student

**\*Safety Considerations** (e.g. for Science and Professional Technical Education Plans)

## UDL - Differentiation According to Student Needs

(Framework Domain 1b: Demonstrating Knowledge of Students)

### **Differentiation of curriculum, instruction and assessment using (UDL) Universal Design for Learning**

**Principles** to address diverse student needs including students with an IEP or 504, cultural linguistic needs e.g., (ELL, SIOP) as well as providing opportunities for extension and remediation if indicated.

#### **UDL: Multiple means of;**

- **Action and Expression:** Students will have an opportunity to share information with others in a variety of ways: turn and talk pairs, small group, and whole group discussion.
- **Engagement:** Students are asked to draw on and link their background knowledge to their learning as part of this lesson.
- **Representation:** Students are required to read and listen to a PowerPoint presentation and a video while determining the most important steps in the dairy production process.

**ELL, SIOP: (Modifications to Instruction)** An adaptation is also included for students who need more support in gathering information from the PowerPoint or writing the paragraph.

Providing the video at computer stations around the room in which they can pause and replay specific videos may provide extra support for students.

**\*Other Means of Differentiation:** Focus on difficult vocabulary to help ELL students. You may create a vocabulary word wall. Make sure ELL students have strong English speaking students in their group to help them.

**Extension:** Modifications for students who already know or can do the primary learning objective, e.g. activities that apply the concept to new content or extend opportunities for further research and exploration.

**\*1. Extension:** Students may also draw a picture or create a digital infographic representing specific steps or vocabulary terms to enhance and add visual details to their paragraph.

**Remediation:** Explain what may be done for students who need extra preparation or assistance before, during, or after the lesson.

**\*1. Remediation:** You may choose to support students through careful grouping. You may show the video in smaller chunks while modeling your own note taking. You may choose to have students complete the adapted assignment which provides the steps and asks students to put them in the correct sequence. You may choose to complete the writing in small groups rather than independently. You may provide students a model paragraph as an example. You may brainstorm a list of transition words with students. You may create a vocabulary word wall.

# Assessment

(Framework Domain 1f: Assessing Student Learning)

**Assessment: (Optional)** May indicate the type of assessment most appropriate, or it may provide sample questions, entire tests, portfolio guidelines or rubrics if available submitted along with the lesson plan as attachments.

**\*Formative/Ongoing Assessment:** Teacher observation will be the primary means of determining how much to release responsibility to small groups, partners or independent work. Cold calling will allow teachers the opportunity to check for understanding from those students who don't always raise their hand to be chosen to share. Monitoring the students' understanding during discussion and pair share will help teachers modify the strategy chosen to deliver content. Careful monitoring during the drafting of the paragraph will help teachers determine students' content understanding and current writing ability.

**\*Summative/End Of Lesson Assessment:** If students have adequate instruction in determining main idea, sequencing, note taking, synthesizing information from a variety of media, and ample practice in expository paragraph writing, the final draft of the paragraph could be used as a summative assessment.

## Educator Self-Reflection

Please use this area to self-reflect on the successes and areas of improvement for your own planning purposes. (You may use this area then delete for submission online as the contents of the self-reflection section is not intended to be shared.)

### **\*Self-Reflection – Successes and Areas of Improvement**

*The State Department of Education- Child Nutrition Programs thanks Jill Diamond of the Lewiston School District #1, Leah Clark from the Idaho Department of Agriculture, and Tracy Son for their efforts to create this lesson.*

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*This project has been funded at least in part with Federal funds from the U.S. Department of Agriculture. The contents of this publication do not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.*