



GREAT PLAINS
Center for Agricultural Health

***FarmSafe* in the Classroom: Program Overview**

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FarmSafe in the Classroom

The **FarmSafe Podcast** is a place where ag workers and public health experts share first-hand stories and real-life tips for making safer and healthier decisions on the farm.

The **FarmSafe in the Classroom** project takes these recordings and makes classroom-ready activities to highlight key age-appropriate messages from the podcast episodes with students. We have used multiple core competency lists to map these assignments to, which should assist with integrating the classroom activities into curriculum.

Table 1 contains the relevant competency source, a code, and the brief description of the competency that an assignment maps to. Links to each standard is included to provide a more comprehensive list of **Core Competencies** that were used to generate this table; a brief description of full competencies (including ones not in Table 1) is [here](#).

In addition, we identified the relevant National Council for Ag Education’s Content Standards for Agriculture, Food, and Natural Resources (AFNR) using the 2024 definitions ([reference](#)) that the activities to be covered in activities would map to. **Table 2** provides a brief summary of the relevant **AFNR Competencies** that our specific activities might map to.

Table 1: Main Core Competencies we mapped to our **FarmSafe in the Classroom** activities. Activities will include codes from this list that map to the standards identified will indicate codes

Standard	Code	Description
CCTE Practices (link)	CTSE3	Attend to personal health and financial well-being
	CTSE4	Communicate clearly, effectively, and with reason
	CTSE5	Consider environmental, social, and economic impacts of decisions
	CTSE6	Demonstrate creativity and innovation
	CTSE8	Use critical thinking to make sense of problems and persevere in solving them
	CTSE11	Use technology to enhance productivity
	CTSE12	Work productively in teams while using cultural/global competence
	AG1	Analyze how issues, trends, technologies and public policies impact systems in this core
AG3	Examine and summarize the importance of health, safety and environmental management systems in AFNR businesses	
Common Core: Reading (link)	RSL1	Cite Evidence
	RSL6	Analyze the author’s purpose in providing an explanation, describing and issue, or identifying an unresolved issue
	RSL7	Integrate or translate technical information into visual or mathematical expression
	RSL8	Distinguish between data sources: evaluate whether data supports conclusions; challenge conclusions with other sources of information
	RSL9	Compare and contrast information from multiple sources, identifying contradictions and resolving conflicting information when possible
Common Core: Writing (link)	WSL1	Prepare written arguments evaluating evidence of claims
	WSL2	Prepare written informative/explanatory text using precise language
	WSL4	Produce clear and coherent writing targeting a specific audience
	WSL6	Use technology to generate/share written products
	WSL8	Gather new information, assess credibility and accuracy, and prepare text while avoiding plagiarism
	WSL9	Draw evidence from informational text to support analysis, reflection, research

Table 2: ANFR Competencies used in the FarmSafe in the Classroom activities

Program	Performance Indicator	Description
Career Ready Practices Standard (AFNR)	CRP.01.02	Explain the short-term and long-term impacts of personal and professional decisions on employers and community before taking action. (<i>Note: this includes health</i>) (a) Classify impacts; (b) Assess pro/con of impacts on self/others; (c) Evaluate personal decisions
	CRP.04.01	04.01.02: Demonstrate personal ability to speak with clarity, logic, purpose and professionalism
	CRP.04.02.02b	Produce clear, reasoned and coherent written and visual communication that is adapted to the audience's need (both formal and informal settings)
	CRP.05.01.02c	Recommend the information and resources needed to support decision-making in workplace and community situations.
	CRP.05.02.01 & 02	Make, defend, and evaluate decisions at work and in the community using information about the potential environmental, social and economic impacts; 05.02.01a List areas; 05.02.01c: evaluate decisions; 05.02.02: review information about E/S/E impacts; 05.02.02b Analyze past decisions and their effects on E/S/E; 05.02.02c: Recommend decisions for a given workplace and community situation based on positive impact in E/S/E.
	CRP.06.01	Synthesize information, knowledge and experience to generate original ideas and challenge assumptions in the workplace/community
	CRP.06.03	Create and execute a plan of action for new ideas and introduce innovations to workplace and community organizations (01.b=examine risks and benefits; 02.a List stakeholders to provide input; 02b: analyze input)
	CRP.07.02	Evaluate the validity of sources of data used when considering the adoption of new technologies, practices and ideas
Foundational Pathway Skill (AFNR)	FPS.03.01	Identify and explain the implications of required regulations to maintain and improve safety, health, and environmental management systems .01: ID regulations/ procedures, evaluate S/H/E promotion .02: Summarize importance, analyze regs; develop compliance methods
	FPS.03.02	Develop and implement a plan to maintain and improve health, safety, and environmental compliance and performance .01: ID components of required plans; analyze effectiveness at workplace, create plan .02: ID examples of plans; prepare plans to improve, develop strategy to educate employees on compliance/performance
	FPS.03.03	Apply H&S practices to AFNR workplaces .02: Emergency response (ID, Assess, create) .03: ID how to avoid H/S risks; Discuss 1 st aid; Evaluate workplace for 1st aid .04: Describe risk of contamination/injury; select responses to contamination/injury; Create plan to mitigate contamination/injury
	FPS.03.04	Use appropriate PPE and demonstrate safe and proper use of AFNR tools/equipment: .01: ID PPE for safe use of tools/equipment; Demonstrate PPE adherence; design plans to ensure use of PPE .02: ID /demonstrate / chooses standard tools, equipment, and safety procedures for ANFN tasks .03: Outline/demonstrate/design operating instructions for operation, storage & maintenance of tools and equipment-related AFNR tasks
	FPS.08.04	Assess the importance of health and safety in the AFNR workplace (a) define; (b) analyze, (c) design

	FPS.08.05	Evaluate the nature and role that agriculture plays in society, the environment, and the economy: (a) ID or (b) research and analyze or (c) apply knowledge of - issues / trends / technologies and public policies that impact ARNR systems
Animal Systems	AS.07.02.02	Biosecurity: ID / analyze health risks of /Evaluate effectiveness of prevention of zoonotic diseases and
Education, Communication, Leadership	ECL.04.02	ID/apply and demonstrate communication skills .01: (a) ID; (b) use; (c) critique written communication messages about AFNR .02: (a) ID; (b) use; (c) critique visual communication messages .03: (a) ID; (b) use; (c) critique various verbal communication message
Plant System	PS.03.06.01	(a) Describe how safety is ensured at each stage of harvesting, hauling, and storing; (b) analyze practices to maintain a safe product through harvest, processing, storage and shipment; (c) demonstrate practices that govern safe plant production, distribution and use/consumption.
Power, Structural and Technical Systems	PST.01.02.02c	Design a process to implement the safe use of AFNR related tools, machinery and equipment
	PST.01.02.03a	ID types of safety hazards associated with different systems (SDS, pesticide labels, owner’s manual, color codes) For C: Develop safety plan for different AFNR related mechanical systems ensuring compliance with industry standards
	PST.02.01.01	C: design a plan to communicate processes and procedures (LOTO, PFAS) for preventative maintenance and service and schedule for equipment, machinery, and power units used in AFNR power, structural and technical systems.
	PST.02.02.01a	Summarize the safe use of equipment, machinery and power units
	PST.02.02.02a	ID safety hazards associated with equipment, machinery and power units used in ANFR power, structural and technical systems (e.g., caution, warning, danger, etc.)
	PST.05.03c	Analyze and interpret data from maps using geospatial technologies

Assignment Types

For any given **FarmSafe** episode we include in this program, we have developed multiple options of assignments that can be selected based on your educational objectives and needs. These assignments are targeted toward different age groups, from middle school through college: instructors will select a relevant assignment that is best for their classes.

For example, at some point there may be a need for a makeup activity, which may simply need a “listen to this podcast then take a quiz” type of assignment. For a given podcast, we have multiple levels of such quizzes from which an instructor can select. For more advanced assignments, we have tasks that focus on different types of work products that require different skill development, such as:

- Require group discussion, reaching consensus, and summarizing results,
- Researching information and preparing a written summary,
- Generating a tool (poster, brochure, handout) to share safety message regarding a hazard discussed.

Model Farm Project

We also have developed an assignment that can be used across multiple podcasts that fits into a larger project we call “**Model Farm**” that is intended to be used across multiple weeks in a term, which applies information in the podcast to the design of a “model farm”. To maximize the use of these set of assignments, we suggest that the class be given a “farm” (size, location, as much detail as the instructor wants to give) that a team of students is designing over the course of the semester. In this design, there should be a specific “land” determined (real or otherwise), this can be determined by the students or the instructor -- pick a plot of land using plat information or a real estate listing for a farm for sale. Then, the students will need to determine production, equipment, and placement of buildings, equipment, storage, and livestock, which will be based on concepts learned in class *and* across multiple **FarmSafe Podcasts**.

The “**Model Farm Project**” set of assignments helps instructors address the core competency in Common Core WSL10, which ask to write routinely over extended time frames that allows for time and reflection, resulting in a project that suggests and justifies multiple best practices to be integrated into the layout and design of a farm based on topics covered in **FarmSafe Podcasts** (and which could also include other aspects included in the regular curriculum).

The following episodes are useful to integrate into a **Model Farm Project**:

- Lighting and Marking (S1 E9): How to mark vehicles
- Falls on Ice (S1 E11)?
- Grain Bin Safety (S1 E13) and (S3 E6): How to prepare for grain bin entry to prevent the need for rescue
- Manure Gas Safety (S1 E21): Tips for preventing asphyxiation in manure handling operations
- March Mudness (S2 E8): Think through how to deal with vehicles trapped in mud
- Using Technology to Prepare for Rural Emergency (S2 E13): Mapping hazards on the farm to prepare for emergency
- Overhead Power Lines (S3E15): Design equipment storage and use with overhead lines in mind

FarmSafe in the Classroom Topics

Below are lists of topics for which we have a set of ***FarmSafe in the Classroom*** materials for ag educators. Each topic takes you to a page that contains information on podcast(s) that are relevant to the topic as well as package of instructional tools (in pdf) to use to generate your assignments.

Check back over time, as we will include new topics and podcasts from our archives and then incorporate new episodes for Season 4 in 2024-2025.

Tractor Safety (S3E3)

Grain Bin Safety (S3E5; S3E7)

Electrical Safety: Overhead Powerlines (S3E15)

Supporting Competencies - Common Core – Full Tables

The Common Career and Technical Core Standards

These materials map to many of the CTSE standards established by the NASDCTEc/NCTEF. Below we have identified the career-ready practices that all students receiving technical education should develop as well as those in the Ag cluster. Items bolded are mapped to many of the classroom exercises developed for the FarmSafe in the Classroom program.

[CCTE Practices](#) from the National Association of State Directors of Career and Technical Education/National Career Technical Education Foundation (NASDCTEc/NCTEF)

Career Ready Practices

1. Act as a responsible and contributing citizen and employee.
2. Apply appropriate academic and technical skills
- 3. Attend to personal health and financial well-being**
- 4. Communicate clearly, effectively and with reason**
- 5. Consider the environmental, social and economic impacts of decisions**
- 6. Demonstrate creativity and innovation**
7. Employ valid and reliable research strategies
- 8. Use critical thinking to make sense of problems and persevere in solving them**
9. Model integrity, ethical leadership and effective management
10. Plan education and career path aligned to personal goals
- 11. Use technology to enhance productivity**
- 12. Work productively in teams while using cultural / global competence**

Agriculture, Food & Natural Resources Career Cluster™ (AG)

- 1. Analyze how issues, trends, technologies, and public policies impact systems in this core**
2. Evaluate the nature and scope of this core and the roles of agriculture, food and natural resources (AFNR) in society and the economy
- 3. Examine and summarize the importance of health, safety and environmental management systems in AFNR businesses**
4. Demonstrate stewardship of natural resources in AFNR activities
5. Describe career opportunities and means to achieve those opportunities in AFNR career pathways
6. Analyze the interaction among AFNR systems in the production, processing, and management of food, fiber and fuel and the sustainable use of natural resources

The Common Core: English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects

Content in the Common Core for language focused on the standards for literacy in science and technical subjects for grades 6-12 in [here](#). While we acknowledge the “reading” criteria, this program focuses mainly on audible understanding. In written assignments, we will map to relevant College and Career Readiness Anchor Standards for Writing.

Reading Standard for Literacy in Science and Technical Subjects 6-12

Key ideas and details

1. Cite evidence to support analysis
2. Determine the central ideas from a primary or secondary source and provide accurate summary (how it changed prior knowledge or opinion; clearly explains the relationships among the key details and ideas)
3. Follow a multistep procedure when performing technical tasks

Craft and Structure

4. Determine meaning of symbols, key terms, and other scientific/technical context relevant to grade texts and topics
5. Analyze the structure of relationships among a text, including how key scientific terms relate to one another; analyze how text structures information or ideas into categories or hierarchies
6. Analyze the author’s purpose in providing an explanation, describing an issue when seeking to address a question or identifying an unresolved issue.

Integration of Knowledge and Ideas

7. Integrate or translate quantitative or technical information into visual or mathematical expression
8. Distinguish among facts, reasoned judgement, and speculation; evaluate whether data supports conclusions; challenges conclusions with other sources of information
9. Compare and contrast information from multimedia sources to that gained from reading a text on the same topic, noting where findings support or contradict explanations or accounts; Synthesize information from a range of sources into a coherent understanding of a process, resolving conflicting information when possible.

Writing Standards for Literacy in Science and Technical Subjects 6-12

We will identify assignments that map to the following categories of the writing standards outlined in the Common Core, using age relevant detailed anchors, when generating assignments that require writing.

Text Types and Purposes

1. Written arguments focused on agricultural topics to provide evidence of claims
2. Written informative / explanatory texts using precise language and relevant facts to support the topic
3. N/A

Production and Distribution of Writing – Our assignments will provide opportunities to

4. Produce clear and coherent writing to be appropriate for a given audience
5. N/A

6. Use technology to produce, publish or update written products and to present information (as learned in the podcast)

Research to Build and Present Knowledge – Some of our assignments will ask students to

7. Conduct short and longer projects to answer a question or solve a problem using multiple sources
8. Gather relevant information, assess credibility and accuracy of sources, and integrate information into new text while avoiding plagiarism.
9. Draw evidence from informational texts to support analysis, reflection, and research

Range of Writing – Our example activities will include one-time (short) and multiple topics relevant projects to help meet this objective

10. Write routinely over longer time frames and shorter times for different tasks, purposes, and audiences.