

Food Systems Videos: Manitoba Curriculum Report

Presented by Agriculture in the Classroom Canada



OVERVIEW OF CURRICULUM CONNECTIONS						
	Video 1	Video 2	Video 3	Video 4	Video 5	Video 6
Grade 7						
PAA	x		x	x	x	x
Social Studies	x			x		x
Science	x					
Grade 8						
PAA	x		x	x	x	x
Social Studies	x					
Science						
Grade 9						
PAA	x		x	x	x	x
Social Studies						x
Science					x	
Grade 10						
PAA	x		x	x	x	x
Social Studies	x	x			x	x
Science	x					
Grade 11						
PAA	x		x	x	x	x
Social Studies						
Science						
Grade 12						
PAA	x		x	x	x	x
Social Studies	x	x		x		
Science	x				x	

Video 1: Sustainable Farming Practices

Grade 7

Practical Applied Arts

7.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Science

GLO B5 Identify and demonstrate actions that promote a sustainable environment, society, and economy, both locally and globally.

7-1-05 Identify and describe positive and negative examples of human interventions that have an impact on ecological succession or the makeup of ecosystems. Examples: positive — protecting habitats, reintroducing species; negative — preventing natural fires, introducing non-indigenous species, draining wetlands for agriculture or housing...

7-1-06 Identify environmental, social, and economic factors that should be considered in the management and preservation of ecosystems. Examples: habitat preservation, recreation, employment, industrial growth, resource development...

7-4-09 Recognize that soil is a natural resource and explain how the characteristics of soil determine its use.

7-4-10 Describe methods used to control soil erosion and recognize the importance of soil conservation. Examples: economically important to the agri-food industry, important for controlling the flow of water, necessary for plant growth.

7-4-11 Identify environmental, social, and economic factors that should be considered in making informed decisions about land use.

Social Studies

7-S-103 Make decisions that reflect principles of environmental stewardship and sustainability.

7-KE-050 Identify major economic activities in a society of Europe or the Americas.

7-KE-052 Identify issues related to food production and distribution in a society of Europe or the Americas.

7-KL-029 Give examples of the impact of human activity on the natural environment in a society of Europe or the Americas. Examples: endangered plant and animal species, reforestation, restoration of wetlands.

7-KE-053 Describe sustainable development issues in a society of Europe or the Americas.

Grade 8

Practical Applied Arts

8.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Social Studies

8-S-103 Make decisions that reflect principles of environmental stewardship and sustainability.

8-VL-008 Appreciate the importance of sustaining the natural environment for future societies.

Grade 9

Practical Applied Arts

9.3.2.1 Discuss personal practices that reduce the environmental impact of food production and consumption.

9.3.1.4 Describe current and future trends in food and nutrition (e.g., agricultural practices for ethics in food production, relationship between food choices and social justice, etc.).

9.3.2.3 Investigate food production in Manitoba.

Grade 9 Social Studies

9-KL-028 Evaluate Canadian concerns and commitments regarding environmental stewardship and sustainability.

9-S-103 Promote actions that reflect principles of environmental stewardship and sustainability.

Grade 10

Practical Applied Arts

10.3.2.1 Examine personal practices that reduce the environmental impact of food production and consumption.

10.3.1.4 Describe current and future trends in food and nutrition (e.g., agricultural practices for ethics in food production, relationship between food choices and social justice, etc.).

Science

GLO B5 Identify and demonstrate actions that promote a sustainable environment, society, and economy, both locally and globally.

S2-1-09 Explain how the biodiversity of an ecosystem contributes to its sustainability.

S2-1-10 Investigate how human activities affect an ecosystem and use the decision-making process to propose a course of action to enhance its sustainability. Include: impact on biogeochemical cycling, population dynamics, and biodiversity.

S2-2-12 Investigate technologies that are used to reduce emissions of potential air pollutants.

Social Studies

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

S2-KC-002 Describe sustainability issues related to natural resource extraction and consumption.

S2-KH-034 Give examples of ways in which food production has changed over time. Examples: soil conservation strategies, technological change...

S2-KL-023 Describe the impact of various agricultural practices on the physical environment. Examples: soil erosion, water quality, soil fertility...

S2-KL-022 Explain ways in which natural- and human-caused phenomena affect food production.

S2-S-103 Promote actions that reflect principles of environmental stewardship and sustainability.

S2-VL-005 Respect the Earth as a complex environment in which humans have important responsibilities

Grade 11

Practical Applied Arts

11.3.2.1 Research Canadian practices that reduce the environmental impact of food production and consumption.

11.3.1.5 Evaluate current and future trends in food and nutrition in terms of their real or perceived benefits to Canadian consumers.

11.3.2.3 Analyze the impact of food production practices and technologies on the environment and human health.

Grade 12

Practical Applied Arts

12.3.2.1 Research Canadian practices that reduce the environmental impact of food production and consumption.

12.3.2.3 Analyze the impact of food production practices and technologies on the environment and human health.

Science

GLO B5: Identify and demonstrate actions that promote a sustainable environment, society, and economy, both locally and globally.

B12-5-01: Discuss a variety of reasons for maintaining biodiversity. Include: maintaining a diverse gene pool, economic value, and sustainability of an ecosystem

Social Studies

Global Issues 12: Areas of Inquiry – Environment - Sustainable Agriculture

Global Issues 12: Act responsibly towards self, others, and the environment

Global Issues 12: Develop ecological literacy through an understanding of the interdependence of society, the environment, and the economy.

Global Issues 12: Enduring Understanding: Individuals, groups, governments, and corporations have the power to effect change and the responsibility to contribute to a sustainable future

Video 2: Animal Care

Grade 10

Social Studies

S2-KH-034 Give examples of ways in which food production has changed over time.

S2-KL-022 Explain ways in which natural- and human-caused phenomena affect food production.

Grade 12

Social Studies

Global Issues 12: Area of Inquiry – Sustainable Agriculture

Global Issues 12: Seek knowledge from diverse sources and perspectives.

Global Issues 12: Plan informed courses of action.

Global Issues 12: Enduring Understanding - Our decisions and actions matter; they have social, environmental, economic, and political consequences.

Global Issues 12: Enduring Understanding - The media do not provide neutral reflections of reality; they affect our decisions and actions.

Global Issues 12: - Take Action - Assess the relative value and sustainability of economic and technological developments in order to make informed decisions.

Video 3: Food Safety

Grade 7

Practical Applied Arts

7.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals in a kitchen environment.

7.1.3.1 Identify and demonstrate safe food handling practices.

Grade 8

Practical Applied Arts

8.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals in a kitchen environment.

8.1.3.1 Identify and demonstrate safe food handling practices.

Grade 9

Practical Applied Arts

9.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals in a kitchen environment.

9.1.3.1 Identify and demonstrate safe food handling practices.

9.1.3.3 Apply principles of food safety (e.g., clean, cook, chill, separate).

9.1.6.2 Demonstrate safe and hygienic food and cooking preparation techniques using current and advanced technologies to produce a quality product.

Grade 10

Practical Applied Arts

10.1.3.2 Examine the types of food-borne illness, their causes and prevention in the home, as well as the responsibilities of retailers and manufacturers.

10.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals in a kitchen environment.

10.1.3.1 Identify and demonstrate safe food handling practices.

10.1.3.3 Apply principles of food safety (e.g., clean, cook, chill, separate).

10.1.6.2 Demonstrate safe and hygienic food and cooking preparation techniques using current and advanced technologies to produce a quality product.

Grade 11

Practical Applied Arts

11.1.3.4 Describe how to keep food safe through proper food purchasing, preparation, and storage practices.

11.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals in a kitchen environment.

11.1.3.1 Identify and demonstrate safe food handling practices.

11.1.3.3 Apply principles of food safety (e.g., clean, cook, chill, separate).

11.1.6.2 Demonstrate safe and hygienic food and cooking preparation techniques using current and advanced technologies to produce a quality product.

Grade 12

Practical Applied Arts

12.1.3.4 Explain how to keep food safe through proper food purchasing, preparation, and storage practices

12.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals in a kitchen environment.

12.1.3.1 Identify and demonstrate safe food handling practices.

12.1.3.3 Apply principles of food safety (e.g., clean, cook, chill, separate).

12.1.6.2 Demonstrate safe and hygienic food and cooking preparation techniques using current and advanced technologies to produce a quality product.

Video 4: Antibiotics and Growth Hormones in Food

Grade 7

Practical Applied Arts

7.2.3.3 Describe health claims of food and nutrition products and the effect they have on food choices and eating patterns.

7.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Social Studies

7-KE-052 Identify issues related to food production and distribution in a society of Europe or the Americas.

Grade 8

Practical Applied Arts

8.2.3.3 Assess whether health claims of food and nutrition products are fact or fiction (e.g., super or miracle foods, foods that “fix” body/health).

8.2.3.4 Identify current and future technological trends in food and nutrition, and discuss the real or perceived benefits to Canadian consumers.

8.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Grade 9

Practical Applied Arts

9.3.1.4 Describe current and future trends in food and nutrition (e.g., agricultural practices for ethics in food production, relationship between food choices and social justice, etc.).

9.3.2.3 Investigate food production in Manitoba.

9.4.1.1 Identify factors that influence personal food choices (e.g., nutritional, cultural, emotional, environmental, religious, social, ethical, and economic).

Grade 10

Practical Applied Arts

10.3.1.4 Describe current and future trends in food and nutrition (e.g., agricultural practices for ethics in food production, relationship between food choices and social justice, etc.).

10.4.1.1 Investigate media and marketing factors that influence personal food choices. Social Studies

S2-KL-023 Describe the impact of various agricultural practices on the physical environment.

S2-KI-005 Identify human factors affecting the production and use of various types of food.

S2-KL-022 Explain ways in which natural- and human-caused phenomena affect food production.

Grade 11

Practical Applied Arts

11.3.1.5 Evaluate current and future trends in food and nutrition in terms of their real or perceived benefits to Canadian consumers.

11.3.2.1 Research Canadian practices that reduce the environmental impact of food production and consumption.

11.3.2.3 Analyze the impact of food production practices and technologies on the environment and human health.

11.4.1.1 Investigate media and marketing factors that influence personal food choices.

Grade 12

Practical Applied Arts

12.3.1.5 Evaluate current and future trends in food and nutrition in terms of their real or perceived benefits to global populations.

12.3.2.1 Research Canadian practices that reduce the environmental impact of food production and consumption.

12.3.2.3 Analyze the impact of food production practices and technologies on the environment and human health.

12.4.1.1 Investigate media and marketing factors that influence personal food choices.

Social Studies

Global Issues 12: Areas of Inquiry - Sustainable Agriculture

Global Issues 12: Enduring Understandings - Our decisions and actions matter; they have social, environmental, economic, and political consequences.

Global Issues 12: Enduring Understandings -The media do not provide neutral reflections of reality; they affect our decisions and actions.

Global Issues 12: Take Action - Evaluate the purposes of media, critically question information sources and our responses to media, and make decisions accordingly.

Global Issues 12: Take Action- Make consumption decisions that follow ecological and ethical principles, and be respectful of nature, self, and society in your actions. Global Issues 12: Take Action- Assess the relative value and sustainability of economic and technological developments in order to make informed decisions.

Video 5: Biotechnology

Grade 7

Practical Applied Arts

7.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Grade 8

Practical Applied Arts

8.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Grade 9

Practical Applied arts

9.3.1.4 Describe current and future trends in food and nutrition (e.g., agricultural practices for ethics in food production, relationship between food choices and social justice, etc.).

9.3.2.3 Investigate food production in Manitoba.

Science

S1-1-16 Investigate Canadian and international contributions to research and technological development in the field of genetics and reproduction. Examples: Human Genome Project

S1-1-17 Discuss current and potential applications and implications of biotechnologies including their effects upon personal and public decision making. Include: genetic engineering, genetic screening, cloning, DNA fingerprinting.

Grade 10

Practical Applied Arts

10.3.1.4 Describe current and future trends in food and nutrition (e.g., agricultural practices for ethics in food production, relationship between food choices and social justice, etc.).

10.4.1.1 Investigate media and marketing factors that influence personal food choices.

Social Studies

S2-KE-045 Identify issues related to genetic modification of plants and animals.

Grade 11

Practical Applied Arts

11.3.1.5 Evaluate current and future trends in food and nutrition in terms of their real or perceived benefits to Canadian consumers.

11.3.2.1 Research Canadian practices that reduce the environmental impact of food production and consumption.

11.3.2.3 Analyze the impact of food production practices and technologies on the environment and human health.

11.4.1.1 Investigate media and marketing factors that influence personal food choices.

Grade 12

Practical Applied Arts

12.3.1.5 Evaluate current and future trends in food and nutrition in terms of their real or perceived benefits to global populations.

12.3.2.1 Research Canadian practices that reduce the environmental impact of food production and consumption.

12.3.2.3 Analyze the impact of food production practices and technologies on the environment and human health.

12.4.1.1 Investigate media and marketing factors that influence personal food choices.

Science

B12-2-09: Investigate an issue related to the application of gene technology in bioresources. Include: understanding the technology/processes involved, economic implications, a variety of perspectives, and personal/societal/global implications

B12-3-07: Distinguish between natural selection and artificial selection.

Video 6: Wasted Food and Food Recovery

Grade 7

Practical Applied Arts

7.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Social Studies

7-S-103 Make decisions that reflect principles of environmental stewardship and sustainability.

7-KE-053 Describe sustainable development issues in a society of Europe or the Americas.

7-VL-009 Be willing to take actions to help sustain the natural environment in Canada and the world.

7-KL-026 Identify human activities that contribute to climate change.

7-KE-052 Identify issues related to food production and distribution in a society of Europe or the Americas.

7-KE-054 Give examples of the environmental and social impact of consumerism in the local community and in a society of Europe or the Americas.

7-VE-017 Be willing to consider the consequences of their consumer choices.

Grade 8

Practical Applied Arts

8.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*

Grade 9

Practical Applied Arts

9.3.2.1 Discuss personal practices that reduce the environmental impact of food production and consumption.

9.3.2.2 Recognize individual food consumption patterns and their impact on food waste and packaging.

Social Studies

VL-007 Be willing to make personal choices to sustain the environment.

9-KL-028 Evaluate Canadian concerns and commitments regarding environmental stewardship and sustainability.

Grade 10

Practical Applied Arts

10.3.2.1 Examine personal practices that reduce the environmental impact of food production and consumption.

10.3.2.2 Recognize individual food consumption patterns and their impact on food waste and packaging.

Social Studies

S2-S-103 Promote actions that reflect principles of environmental stewardship and sustainability.

S2-KE-044 Identify the stages involved in food production and distribution.

S2-VL-006 Be willing to consider the environmental consequences of their food choices.

S2-KG-038 Identify issues relating to scarcity and distribution of food.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities

Grade 11

Practical Applied Arts

11.3.1.4 Explain the various factors that threaten food security in Canada (e.g., poverty, distance, nutrition awareness, access to safe drinking water, food deserts, inability to prepare food, access to fresh produce).

11.3.2.2 Examine community food consumption patterns and their impact on food waste and packaging.

Grade 12

Practical Applied Arts

12.3.1.4 Explain the various factors that threaten global food security (e.g., poverty, distance, nutrition awareness, access to safe drinking water, poor growing conditions, inability to prepare food, access to fresh produce).

12.3.2.2 Investigate the global scope and impact of food waste and packaging.

Social Studies

Global Issues 12: Areas of Inquiry - Sustainable Agriculture

Global Issues 12: Act responsibly towards self, others, and the environment

Global Issues 12: Enduring Understandings - Our decisions and actions matter; they have social, environmental, economic,

and political consequences.

Global Issues 12: Be willing to let go and give back, and to make changes so as to live sustainably.

Global Issues 12: Take Action - Q Minimize your ecological footprint, and live more responsibly (e.g., use fewer nonrenewable resources; reduce waste; limit dependence on petrochemicals; seek sustainable and ethical food choices...).