PILOTULIGHT FOOD EDUCATION STANDARDS

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Pilot Light

A message from the Board of Directors

Pilot Light is a Chicago-based nonprofit organization that connects chefs with teachers to use food to support effective teaching and learning in the classroom across all disciplines that improves academic and health outcomes for students. Our mission is to provide all children with the knowledge, attitudes and skills they need to make healthier choices and improve student success.





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Co-founded in 2010 by four notable chefs — Paul Kahan, Matthias Merges, Justin Large and Jason Hammel — Pilot Light serves 17 schools, 81 classrooms and more than 2,300 students in underserved communities of Chicago, where the rates of childhood obesity are nearly twice the national estimate. Making healthy choices is a challenge for students without access to fresh, affordable and well prepared food.

Pilot Light developed a cohesive model for classroom education, incorporating food as a lens for traditional subjects such as Math, Reading, History and Science. These Food Education Standards (FES) have been developed by Pilot Light in collaboration with community and education stakeholders.



INTRODUCTION TO THE FOOD EDUCATION STANDARDS

A child's education is for the purpose of preparing them to become contributing members of society.

Our education system opens doors for students to excel in math, science, languages, fine arts, and many other subjects of interest but there is a serious gap when it comes to giving students the knowledge needed to make positive choices for their health and well-being. With 1/3 of America's children identified as obese or overweight and diet-related diseases on the rise, it is critical that food education becomes part of K-12 curriculum nationwide. Schools are an ideal setting for the integration for food education as teachers can play an important role in helping to shape children's understanding of food and how it impacts their overall health and well-being.

Young people today are less likely to be educated about the cultivation and preparation of food. They often do not understand how to connect to food's role in our culture, relationships, history and environment. A renewed emphasis on food education is key to helping young people develop the critical thinking skills necessary to inform healthy food choices. The FES are

a guide for all stakeholders to integrate this learning throughout the school day.

DEVELOPMENT OF THE STANDARDS

Beginning in 2014, a set of nine FES were drafted by Pilot Light staff through a process of analyzing existing health standards. Recognizing the need for diverse perspectives and expertise, Pilot Light committed to hosting its first Food Education Summit in 2017, which convened 25 experts, community members, and teachers to further develop these Standards. In preparation, participants completed surveys about priorities for food education which were refined through consensus-building activities into a list of Standards and accompanying, age-appropriate K-12 competencies. The resulting Standards and competencies encompassed 31 themes, the most commonly endorsed being food choice, health, food production, food access and culture. The FES were then reviewed and revised by a team of teachers through a series of three follow up meetings and online blog feedback, eventually being condensed from nine Standards to the final seven outlined in this document.

Through this thorough process, the Pilot Light FES provide evidenced-based standards that can be used across different school and community sociodemographics to further the reach of the Pilot Light educational model.

UTILIZING THE FOOD EDUCATION STANDARDS





The following FES were designed to provide detailed guidelines for curriculum development, instruction and assessment of food education in the classroom.

Each Standard is divided into measurable competencies by grade level band: K-2, 3-5, 6-8 and 9-12. Within each grade level band, samples of parallel cross-curricular learning standards have also been identified to assist teachers in lesson development. Additionally, each Standard provides examples of real world experiences and sample lesson plans for reference and inspiration.

THE FOOD EDUCATION STANDARDS



- 1 Food connects us to each other.
- 2 Foods have sources and origins.
- 3 Food and the environment are interconnected.
- 4 Food behaviors are influenced by external and internal factors.
- 5 Food impacts health.
- 6 We can make positive and informed food choices.
- 7 We can advocate for food choices and changes that impact ourselves, our communities and our world.

FOOD EDUCATION STANDARD 1



Food connects us to each other.

When writing these Standards, many of the authors shared stories of important events and holidays, from earliest childhood memories to recent celebrations and transitions. The one commonality of all the events was food - the food we brought, the food we made, the food we ate and the food we shared. We all had a favorite meal. All of us had at least one dish that helped define a time period or sense of identity. It is from this experience that we create the first Pilot Light Standard - Food connects us to each other. It is unlike any other aspect of personality - it welcomes, comforts and sustains us in a way that no other aspect of life does. It has the power to make you understand the world and yourself a little better with each bite.

—Chandra Garcia-Kitch, Pilot Light Mentor Teacher

EXPECTATIONS

Students who demonstrate understanding can articulate that people from all cultures and backgrounds are connected by their use of and shared experiences around food.

IL SEL

2A.1a. Recognize that others may experience situations differently from oneself.

2B.1a. Describe the ways that people are similar and different.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.K.2, RL.1.2, RL.2.2 CCSS.ELA-LITERACY.RI.K.3, RI.1.3, RI.2.3

CCSS.ELA-LITERACY.W.K.3, W.1.3, W.2.3

IL SS:

IL 33.

SS.IS.2.K-2 SS.IS.1.K-2

SCI (NGSS):

K.ESS3.1 K-2.ETS.1-2

MATH:

CC.MATH-PRACTICE.MP4
CC.MATH-PRACTICE.MP7

HEALTH/NUTRITIONAL IL State Goal: 24

NHES: 2, 5

GRADE-SPECIFIC COMPETENCIES

- 1. Participate in food sampling from different cultures and regions of the world, developing understanding of connections through the identification of common ingredients.
- 2. Share how the foods students eat reflect the area in which they live and/or their cultural backgrounds.
- 3. Explain the ways students' families use or produce food and how family meals and food traditions benefit them (e.g. physical, emotional, cultural and familial).

- 1. Guided field trip to grocery stores to learn about foods from different cultures.
- 2. Inviting community members to talk about cultural food dishes.

EXPECTATIONS

Students who demonstrate understanding can articulate that people from all cultures and backgrounds are connected by their use of and shared experiences around food.

IL SEL

2A.1a. Recognize that others may experience situations differently from oneself.

2B.1a. Describe the ways that people are similar and different.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.3.2, RL.4.2, RL.5.2 CCSS.ELA-LITERACY.RI.3.3, RI.4.3, RI.5.3 CCSS.ELA-LITERACY.W.3.2,3, W.4.2,3., W.5.2,3

IL \$\$: \$\$.EC.1.3 \$\$.CV.3.4 \$\$.G.3.3 \$\$.G.2.4

SCI (NGSS): 5.ESS2.2

MATH:

CC.MATH-PRACTICE.MP4
CC.MATH-PRACTICE.MP7

HEALTH/NUTRITIONAL IL State Goal: 24

NHES: 2, 5

GRADE-SPECIFIC COMPETENCIES

- 1. Write about a specific food memory detailing the importance of food and sharing an understanding of how that food relates to students' identity.
- 2. Analyze the commonalities of ingredients across cultures, using migration patterns to map ingredients from different countries and regions.
- 3. Demonstrate the importance of food to all people and how food is used to keep us healthy, return us to health, and show connections (e.g. soup when you are ill, comfort food, food after major events).

- 1. Compare menus from different restaurants, noting common ingredients across cultures
- 2. Field trip to grocery stores to analyze available foods and make connections between cultures

EXPECTATIONS

Students who demonstrate understanding can articulate that people from all cultures and backgrounds are connected by their use of and shared experiences around food.

IL SEL

2A.3b. Analyze how one's behavior may affect others.

2B.3a. Explain how individual, social, and cultural differences may increase vulnerability to bullying and identify ways to address it.

CROSS-CURRICULAR

ELA: CCSS.ELA-LITERACY.RL.6.2, RL.7.2, RL.8.2

CCSS.ELA-LITERACY.RI.6.3,

RI.7.3, RI.8.3 CCSS.ELA-

LITERACY.W.6.2,3, W.7.2,3,

W.8.2,3

IL SS: SS.G.1.6-8.MdC

SS.G.2.6-8.MdC

SCI (NGSS): MS.LS1.7

MATH:

CC.MATH-PRACTICE.MP4
CC.MATH-PRACTICE.MP6

CC.MATH-PRACTICE.MP7

ARTS:

Anchor Standard 1, 10, 11

HEALTH/NUTRITIONAL

IL State Goal: 24

NHES: 2, 5

GRADE-SPECIFIC COMPETENCIES

- 1. Trace the ingredients of a given recipe back to the ingredients' country of origin.
- 2. Compare and contrast the symbolism of foods eaten in various religious and cultural groups.
- 3. Analyze how one food (e.g. staple ingredients such as rice, noodles and bread) is found and used in multiple cultures.

- 1. Chef visits
- 2. Community discussions about foods and cultures
- 3. Visit to cultural landmarks/ museums (e.g. Swedish American Museum, Instituto de Cervantes, National Museum of Mexican Art)

EXPECTATIONS

Students who demonstrate understanding can articulate that people from all cultures and backgrounds are connected by their use of and shared experiences around food.

IL SEL

2A.4a. Analyze similarities and differences between one's own and others' perspectives.

2A.4b. Use conversation skills to understand others' feelings and perspectives.

2A.5a. Demonstrate how to express understanding of those who hold different opinions.

2A.5b. Demonstrate ways to express empathy for others.

2B.4b. Demonstrate respect for individuals from different social and cultural groups.

3A.5b. Examine how the norms of different societies and cultures influence their members' decisions and behaviors.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.9-10.1, 9-10.2, 9-10.6, 9-10.1, 9-10.2, 9-10.7 CCSS.ELA-LITERACY.RL.11-12.1, 11-12.2, 11-12.6, 11-12.1, 11-12.2, 11-12.7

IL SS:

\$\$.G.1.9-12 \$\$.G.4.9-12 \$\$.G.9.9-12 \$\$.G.10.9-12 \$\$.G.11.9-12 **\$CI (NGSS)**: HS-LS1-7

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.2 CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.4 CC.MATH-PRACTICE.MP.5 CC.MATH-PRACTICE.MP.6

ARTS:

Anchor Standards 1, 10, 11

HEALTH/NUTRITIONAL IL State Goal: 24

NHES: 2, 5

GRADE-SPECIFIC COMPETENCIES

- 1. Map the movement of ingredients within a given recipe from its country of origin throughout the world.
- 2. Analyze foods used within various cultural realms in order to draw connections to their own lived experience.
- 3. Identify a food/recipe that has been passed down through generations of their family and narrate the history of this food/recipe and how it illustrates their family history.
- 4. Create, market and disseminate a recipe or meal to promote cultural diversity.



- 1. Host a community meal in which students cook a dish for family and friends and create infographics on the recipe, the culture from which the recipe derives, and the geographic and historical origins of each ingredient.
- 2. Dine at a restaurant whose cuisine students have little to no experience with.
- 3. Use StoryCorps to interview elders about family recipes.

FOOD EDUCATION STANDARD 2



Foods have sources and origins.

This Standard not only connects students to their personal food story, but introduces farming, the land and the farmers who grow food through the lens of history, science, math, art, and consumer science. This Standard takes students on a local to global journey of production, cultivation, and consumption. It not only gives teachers the tools that will connect students to the environment and social and economic issues but also gives teachers and students, through hands on immersion, the opportunity to impart why this knowledge is so important. It empowers students to use their voice and actions to make changes to the food system around them.

—Erin Meyer, Spence Farms Foundation

EXPECTATIONS

Students who demonstrate understanding can: identify, describe, and explain the way food is grown, harvested, and used around the world.

IL SEL

1B.1b. Identify family, peer, school, and community strengths.

2C.1b. Demonstrate appropriate social and classroom behavior.

CROSS-CURRICULAR

ELA: CCSS.ELA-LITERACY.RI.2.9 CCSS.ELA-LITERACY.RI.1.9 CCSS.ELA-LITERACY.RI.K.9

IL SS:

SS.IS.1.K-2 SS.IS.2.K-2 SCI (NGSS): K-LS1-1

> 1-LS1-1 2-LS4-1

MATH:

CCSS.MATH.PRACTICE.MP3 CCSS.MATH.PRACTICE.MP4 ARTS: Anchor Standard 1,10 HEALTH/NUTRITIONAL

IL State Goal: 24 NHES: 2

GRADE-SPECIFIC COMPETENCIES

- 1. Identify where food is found, grown and made.
- 2. Describe how plants and animals are consumed.
- 3. Explain the origins of food using MyPlate.
- 4. Define food systems.

- 1. Visit the school garden, planting seeds of quick-harvest vegetables
- 2. Look at maps of food/farm distribution in USA or $\underline{\text{world}}$
- 3. Farmer visit check with Food services manager or Food service provider for contact

EXPECTATIONS

Students who demonstrate understanding can: identify, describe, and explain the way food is grown, harvested, and used around the world.

IL SEL

2B.2b. Demonstrate how to work effectively with those who are different from oneself.

3B.2a. Identify and apply the steps of systematic decision making.

3B.2b. Generate alternative solutions and evaluate their consequences for a range of academic and social situations.

CROSS-CURRICULAR

ELA: CCSS.ELA-LITERACY.RI.3.8 CCSS.ELA-LITERACY.RI.4.5 CCSS.ELA-LITERACY.RI.5.6

IL \$\$: \$\$.I\$.2.3-5 \$\$.I\$.5.3-5 \$CI (NG\$\$): 3-L\$1-1

4-LS1-1 5-LS2-1

MATH:

CCSS.MATH.PRACTICE.MP3 CCSS.MATH.PRACTICE.MP4 ARTS: Anchor Standard 1,10 HEALTH/NUTRITIONAL

IL State Goal: 24 NHES: 2

GRADE-SPECIFIC COMPETENCIES

- 1. Compare cultural dishes for ingredients and find the origins of the food in each recipe.
- 2. Understand how cultivation, trade routes, and regions affect food supply.
- 3. Describe agricultural history and its impact on food.
- 4. Describe the evolution of types of food production.
- 5. Describe ways to protect the food system.

- 1. Visit art museums and look for food in art from different regions
- 2. Analyze menus from different restaurants that have specific regional/ cultural focus
- 3. Visit a farm (physically or virtually) to see food production
- 4. Have a farmer, grocery store manager or food distribution company representative visit for a Q&A

EXPECTATIONS

Students who demonstrate understanding can: identify, describe, and explain the way food is grown, harvested, and used around the world.

IL SEL

1C.3a. Set a short term goal and make a plan for achieving it.

2A.3b. Analyze how one's behavior may affect others.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.6.9, 7.9

CCSS.ELA-LITERACY.RI.8.2

IL SS:

SS.IS.6.6-8.MdC SS.IS.8.6-8.MdC

SCI (NGSS):

MS-LS2-5 MS-ESS3-4

MATH:

CCSS.MATH.PRACTICE.MP3 CCSS.MATH.PRACTICE.MP4

ARTS: Anchor Standard 1,10

HEALTH/NUTRITIONAL IL State Goal: 24

NHES: 2

GRADE-SPECIFIC COMPETENCIES

- 1. Analyze food production and cultivation and their impact on today's society.
- 2. Promote ways to protect different food systems and the impact on society.
- 3. Compare and contrast how the sources and origins of foods can be influenced by a historical time period.

- 1. Visit a farm or Food distribution company
- 2. Support a local community garden or work to create a local community garden, encouraging sustainability methods

EXPECTATIONS

Students who demonstrate understanding can: identify, describe, and explain the way food is grown, harvested, and used around the world.

IL SEL

1A.4a. Analyze how thoughts and emotions affect decision making and responsible behavior.

1C.4a. Identify strategies to make use of resources and overcome obstacles to achieve goals.

1C.5b. Monitor progress toward achieving a goal, and evaluate one's performance against criteria.

2C.5b. Plan, implement, and evaluate participation in a group project.

3A.4a. Demonstrate personal responsibility in making ethical decisions.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.9-10.1
CCSS.ELA-LITERACY.RL.9-10.2
CCSS.ELA-LITERACY.RL.9-10.6
CCSS.ELA-LITERACY.RI.9-10.1
CCSS.ELA-LITERACY.RI.9-10.7
CCSS.ELA-LITERACY.RI.9-10.7
CCSS.ELA-LITERACY.RL.11-12.1
CCSS.ELA-LITERACY.RL.11-12.2
CCSS.ELA-LITERACY.RL.11-12.6
CCSS.ELA-LITERACY.RI.11-12.1
CCSS.ELA-LITERACY.RI.11-12.1

IL SS: SS.G.1.9-12 SS.G.3.9-12 SS.G.4.9-12 SS.G.6.9-12

> SS.G.9.9-12 SS.G.10.9-12

SS.G.11.9-12 SS.G.12.9-12

SS.EC.1.9-12

SS.EC.9.9-12

SS.H.1.9-12 SS.H.2.9-12

SS.H.3.9-12

SS.H.4.9-12 SS.H.8.9-12

SS.H.11.9-12

SS.H.12.9-12

SCI (NGSS): HS-LS1-7 HS-ESS2-2

MATH:

CCSS.MATH.PRACTICE.MP.1 CCSS.MATH.PRACTICE.MP.2 CCSS.MATH.PRACTICE.MP.3 CCSS.MATH.PRACTICE.MP.4 CCSS.MATH.PRACTICE.MP.5

CCSS.MATH.PRACTICE.MP.6

ARTS: Anchor Standards 1, 10

HEALTH/NUTRITIONAL IL State Goal: 24

NHES: 2



GRADE-SPECIFIC COMPETENCIES

- 1. Reflect and act upon the costs and benefits of food choices in the realms of the environment, economics, health, and taste.
- 2. Analyze how food reflects history.
- 3. Articulate the food industry's impact on food availability and access.
- 4. Research resilient and productive food systems (e.g. sustainable food in a desert) and present findings.

- 1. Record an oral history of food culture within a local ethnic enclave.
- 2. Visit a farm and interview farmers on how food industry practices have shifted the agricultural landscape.
- 3. Visit a food processing plant and interview managers about process, supply, and target markets.
- 4. Engage in community asset mapping to determine how best to cultivate local food systems.

FOOD EDUCATION STANDARD 3



Food and the environment are interconnected.

From the food growing in the ground to the food roaming wild in our oceans, the environment we live in and all we consume are interconnected. Life is a biological process where energy is created and transferred. The sun provides energy for the plants to grow in nutrient rich soil which feeds people directly and feeds the livestock we consume to produce the energy we need to get through our day. We have a responsibility to look after the environment that provides our food as well as the food that lives in our environment.

—Stacy Schultz, Director of Marketing & Sustainability Coordinator at Fortune Fish

EXPECTATIONS

Students who demonstrate understanding can define seasonality, explain its relation to food and distinguish how natural and built environments can affect the seasonality of foods.

IL SEL

2A.1b. Use listening skills to identify the feelings and perspectives of others.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.K.1 CCSS.ELA-LITERACY.RI.1.2 CCSS.ELA-LITERACY.RI.2.3

IL **SS**: SS.G.1.K.; SS.G.2.2.

SCI (NGSS): K.ESS2.2

K.ESS3.1 K.ESS3.3

2.LS2.1

2.LS2.2

2.LS.4.1

MATH:

CCSS.MATH.PRACTICE.MP4
CCSS.MATH.PRACTICE.MP6

ARTS: Anchor Standard 1,10

HEALTH/NUTRITIONAL IL State Goal: 22.C.1a

GRADE-SPECIFIC COMPETENCIES

- 1. Explain how seasonality affects the food of a particular culture.
- 2. Distinguish food options by climate and season.
- 3. Distinguish between the natural and built environments.

- 1. Germinate seeds under different conditions and analyze the success rate of the seeds.
- 2. Visit a grocery store throughout the year and note changes in produce (e.g. produce origins) and compare to anchor text about seasonality.
- 3. Visit a farm or have a farmer visit and discuss what is meant by "growing season."

EXPECTATIONS

Students who demonstrate understanding can define seasonality, explain its relation to food and distinguish how natural and built environments can affect the seasonality of foods.

IL SEL

1B.2b. Explain how family members, peers, school personnel, and community members can support school success and responsible behavior.

1C.2a. Describe the steps in setting and working toward goal achievement.

1C.2b. Monitor progress on achieving a short term personal goal.

CROSS-CURRICULAR

FIA.

CCSS.ELA-LITERACY.W.3.2 CCSS.ELA-LITERACY.W.4.2 CCSS.ELA-LITERACY.W.5.2

IL SS: SS.G.2.6-8.LC SCI (NGSS): 3.LS4.4 5.LS2.1

MATH:

CCSS.MATH.PRACTICE.MP6 CCSS.MATH.PRACTICE.MP4 ARTS: Anchor Standard 1,10 HEALTH/NUTRITIONAL IL State Goal: 22.C.2a

NHES: 1, 2

GRADE-SPECIFIC COMPETENCIES

- 1. Define and model a method of sustainability.
- 2. Evaluate the energy used in producing, preserving, and transporting food.
- 3. Evaluate the environmental impact of overproduction and resulting food waste.
- 4. Explain how climate-based food availability and patterns of consumption shape the food of a particular culture.
- 5. Develop a plan to eat seasonally.

- 1. Chef visit from a farm-to-table restaurant.
- 2. Analyze countries of origin for foods throughout the year, with trips to grocery stores, farmers markets or online retailers.
- 3. Monitor and analyze when change in origin occurs.
- 4. Use school garden to plant seasonal crops, creating meals from produce grown.

EXPECTATIONS

Students who demonstrate understanding can define seasonality, explain its relation to food and distinguish how natural and built environments can affect the seasonality of foods.

IL SEL

1B.3b. Analyze how making use of school and community supports and opportunities can contribute to school and life success.

2C.3b. Demonstrate cooperation and teamwork to promote group effectiveness.

3C.3b. Evaluate one's participation in efforts to address an identified need in one's local community.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.W.7.2.A CCSS.ELA-LITERACY.W.6.2.A CCSS.ELA-LITERACY.W.8.1.A

IL SS: SS.G.3.6-8.MC SS.EC.3.6-8.MC SCI (NGSS): MS.LS2.2

MATH.

CCSS.MATH.PRACTICE.MP4
CCSS.MATH.PRACTICE.MP6
CCSS.MATH.PRACTICE.MP7
ARTS: Anchor Standard 1,10

MS.LS2.5

HEALTH/NUTRITIONAL IL State Goal: 22.C.2a

NHES: 1, 2

GRADE-SPECIFIC COMPETENCIES

- 1. Explain the interdependence of food supply and demand.
- 2. Explain the impact of modern food practices on sustainability.
- 3. Analyze how climate affects availability of food and patterns of consumption.
- 4. Analyze how seasonality affects availability of food and patterns of consumption.

- 1. Chef visit from a farm-to-table restaurant.
- 2. Analyze countries of origin for foods throughout the year, with trips to grocery stores, farmers markets or online retailers.
- 3. Monitor and analyze when change in origin occurs.
- 4. Use school garden to plant seasonal crops, creating meals from produce grown.
- 5. Work with local officials to create or help maintain and increase awareness of farmers markets and community gardens.

EXPECTATIONS

Students who demonstrate understanding can: assess the interplay between food and their environment and evaluate their role within it.

IL SEL

1C.4a. Identify strategies to make use of resources and overcome obstacles to achieve goals.

1C.5b. Monitor progress toward achieving a goal, and evaluate one's performance against criteria.

2C.5b. Plan, implement, and evaluate participation in a group project.

3A.4a. Demonstrate personal responsibility in making ethical decisions.

3A.5a. Apply ethical reasoning to evaluate societal practices.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.9-10.1
CCSS.ELA-LITERACY.RL.9-10.2
CCSS.ELA-LITERACY.RL.9-10.6
CCSS.ELA-LITERACY.RI.9-10.1
CCSS.ELA-LITERACY.RI.9-10.7
CCSS.ELA-LITERACY.RI.9-10.7
CCSS.ELA-LITERACY.RL.11-12.1
CCSS.ELA-LITERACY.RL.11-12.2
CCSS.ELA-LITERACY.RL.11-12.6
CCSS.ELA-LITERACY.RI.11-12.1
CCSS.ELA-LITERACY.RI.11-12.1
CCSS.ELA-LITERACY.RI.11-12.2
CCSS.ELA-LITERACY.RI.11-12.7

IL **SS**: SS.G.1.9-12 SS.G.3.9-12

> SS.G.4.9-12 SS.G.8.9-12 SS.G.11.9-12

SS.G.12.9-12

SS.EC.1.9-12 SS.H.3.9-12

SS.H.4.9-12

SS.H.12.9-12

SCI (NGSS): HS-ESS2-2

HS-ESS2-6

HS-ESS3-1

HS-ESS3-2

HS-ESS3-5

HS-ESS3-6

HS-ETS1-1

HS-ETS1-3

HS-LS1-7 HS-LS4-6

MATH: CC.K-12.MP.1

CC.K-12.MP.2

CC.K-12.MP.3

CC.K-12.MP.4

CC.K-12.MP.5

CC.K-12.MP.6

ARTS: Anchor Standard 1, 10

HEALTH/NUTRITIONAL IL State Goal: 22, 23, 24

NHES: 2, 3, 5



GRADE-SPECIFIC COMPETENCIES

- 1. Evaluate agency within the food chain.
- 2. Assess the environmental impact of the global demand for food regardless of climate and season.
- 3. Assess the impact of climate change on food availability.
- 4. Assess the environmental impact of agricultural practices (e.g. crop rotation, factory farms, over-fishing, farmed fishing, hybridization, GMOs, pesticides and other chemicals).
- 5. Evaluate how the food supply responds to shifting demands.
- 6. Analyze how the built environment can be adapted to promote food access and availability (e.g. food deserts).

- 1. Interview scientists, especially but not exclusively environmental scientists, about food-related findings within their particular domain.
- 2. Breed plants for a school or community garden.
- 3. Visit a farm and interview farmers about the process and environmental impacts of crop rotation and other farming practices.
- 4. Visit a food conglomerate (e.g. Kraft) and interview executives about how the company responds to shifting demands.
- 5. Work with community members to analyze how the community can increase food access and availability.

FOOD EDUCATION STANDARD 4



Food behaviors are influenced by external and internal factors.

This Standard is important because it will teach children to identify the multitude of external and internal factors that can influence their choices around food and eating. Such information will enable children to think critically about their own food behaviors taking into account environmental, social, and emotional factors that may make them vulnerable to eating when they are not hungry or to selecting non-nutrient-dense foods. Children also will come to appreciate that there are individual differences in the factors that affect people's food choices, and develop knowledge to advocate for changes in the food environment. Ultimately, this Standard will provide children with the skills to make healthy food choices based on a complete understanding of factors that influence urges to eat.

—Jennifer E. Wildes, PhD; Associate Professor of Psychiatry & Behavioral Neuroscience; Director, Eating Disorders Program, University of Chicago

EXPECTATIONS

Students who demonstrate understanding can define seasonality, explain its relation to food and distinguish how natural and built environments can affect the seasonality of foods.

IL SEL

2A.1a. Recognize that others may experience situations differently from oneself.

1B.1a. Identify one's likes and dislikes, needs and wants, strengths and challenges.

CROSS-CURRICULAR

FIA:

CCSS.ELA-LITERACY.RL5,

RL6, R18, R19

CCSS.ELA-LITERACY.W1

IL SS: SS.IS.3.K-2

SCI (NGSS): K.LS1.1

K.ESS2.2

1.LS1.1

1.LS1.2

1.LS3.1 2.LS4.1

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.3

ARTS: Anchor Standard 1,10

HEALTH/NUTRITIONAL

IL State Goal: 22.B.1a

22.D.1a

23.B.1a

NHES: 2

GRADE-SPECIFIC COMPETENCIES

- 1. Create a poster for one nutrient-dense food, inviting people to try it.
- 2. Analyze an advertisement for a processed food and identify the language and images that encourage people to eat or buy it. Note: This could be completed as a class or individually.
- 3. Create a story about why you eat what you eat for one meal.

- 1. Field trip to grocery store to learn about product placement or guest speaker.
- 2. Watch PSA's from the 1980's (e.g. <u>Schoolhouse Rock</u>, PSA's about food circa 1980) and create videos about eating nutrient-dense foods.

EXPECTATIONS

Students who demonstrate understanding can Identify both external and internal factors and determine which factors are most influential in the food behaviors they make.

IL SEL

2A.2b. Describe the expressed feelings and perspectives of others.

1B.2b. Explain how family members, peers, school personnel, and community members can support school success and responsible behavior.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL6, RL7

CCSS.ELA-LITERACY.RI.4.8,

RI.5.8

IL SS: SS.IS.3.3-5

SCI (NGSS): 3.LS4.1 3.LS3.2

4.LS1.1

MATH:

CC.MATH-PRACTICE.MP.1

CC.MATH-PRACTICE.MP.3 ARTS: Anchor Standard 1,10

HEALTH/NUTRITIONAL

IL State Goal: 22.B.2a

22.D.2a 23.B.2a

NHES: 2

GRADE-SPECIFIC COMPETENCIES

- 1. Describe how personal beliefs, values, and emotions influence food behaviors.
- 2. Explain how both physical and "perceived" hunger, both short-term and chronic, influence food behaviors.
- 3. Analyze one advertisement for messages about food, health and self-image.

- 1. Class visit from Advertising agency.
- 2. Field trip to grocery store to discuss product placement.
- 3. Watch PSA's from the 1980's (e.g. <u>Schoolhouse Rock</u>, PSA's about food circa 1980) and create videos about how the body works and how it uses foods

EXPECTATIONS

Students who demonstrate understanding can Identify both external and internal factors and determine which factors are most influential in the food behaviors they make.

IL SEL

2A.3a. Predict others' feelings and perspectives in a variety of situations.

2A.3b. Analyze how one's behavior may affect others.
1B.3a. Analyze how personal qualities influence choices and successes.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL6 CCSS.ELA-LITERACY.RI8, RI9 CCSS.ELA-LITERACY.W1

IL SS: SS.IS.8.6-8.LC. SCI (NGSS): MS.PS1.3

MS.PS.2.1-5 MS.LS2,2, 5 MS.LS.1.1-3,8

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.3

ARTS:

Anchor Standard 1,10, 11

HEALTH/NUTRITIONAL

State Goal 22.B.3a 22.D.3a 23.B.3a

NHES 2

GRADE-SPECIFIC COMPETENCIES

- 1. Analyze how global markets influence food behaviors.
- 2. Analyze how marketing to specific demographics influence food behaviors.
- 3. Evaluate how socio-economics, geographic location, and media shape food behaviors.
- 4. Evaluate how the food industry influences food behaviors through media, packaging, and portion sizes.
- 5. Analyze how peer relationships influence food behaviors.
- 6. Analyze how nutritional needs (e.g. greater-than-average caloric count), biology (e.g. allergies, sleep quantity and quality) and agency (e.g. acting upon taste preferences) influence relationships with food.

REAL WORLD AND COMMUNITY EXPERIENCES

1. Field trip to Advertising Agency to learn about how food ads are developed and time placements on television.

EXPECTATIONS

Students who demonstrate understanding can evaluate the roles of government, media, and other influences on food behaviors.

IL SEL

1C.4a. Identify strategies to make use of resources and overcome obstacles to achieve goals.

1C.5b. Monitor progress toward achieving a goal, and evaluate one's performance against criteria.

2C.5b. Plan, implement, and evaluate participation in a group project.

3A.4a. Demonstrate personal responsibility in making ethical decisions.

3A.5a. Apply ethical reasoning to evaluate societal practices.

3C.4b. Plan, implement, and evaluate one's participation in a group effort to contribute to one's local community.

3C.5b. Work cooperatively with others to plan, implement, and evaluate a project that addresses an identified need in the broader community.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.9-10.1, RL.9-10.2, RL.9-10.6, .9-10.7 CCSS.ELA-LITERACY.RL.11-12.111-12.2, 11-12.6 CCSS.ELA-LITERACY.RI.11-12.1, 11-12.2, RI.11-12.7

IL **SS**: SS.IS.4.9-12

SS.IS.5.9-12

SS.G.1.9-12

SS.IS.6.9-12

SS.G.3.9-12

SS.IS.7.9-12

SS.IS.8.9-12 SS.IS.9.9-12

SS.CV.5.9-12

SS.CV.6.9-12

SS.CV.8.9-12

SS.CV.9.9-12

SS.G.2.9-12

SS.G.4.9-12

SS.G.11.9-12

SS.G.12.9-12

SS.EC.1.9-12

SS.EC.7.9-12

SCI (NGS): HS-LS2-7

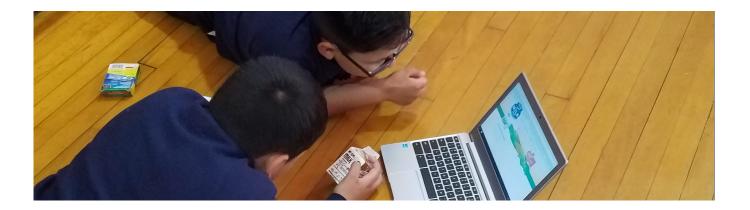
HS-LS2-7

HS-LS4-6

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.2 CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.4 CC.MATH-PRACTICE.MP.5 CC.MATH-PRACTICE.MP.6 ARTS: Anchor Standards 1, 10 HEALTH/NUTRITIONAL

IL State Goal: 24 NHES: 1, 2, 3, 4, 5, 8



GRADE-SPECIFIC COMPETENCIES

- 1. Evaluate the role of government policies (e.g. farm subsidies, trade agreements, MyPlate and other nutritional recommendations) on food behaviors.
- 2. Evaluate or advocate for one government policy that affects food behaviors.
- 3. Produce a detailed analysis of the way in which a media message attempts to influence food behaviors.
- 4. Evaluate how environmental and human disruptions impact food behaviors.

- 1. Interview local, state, or national policymakers about their role in shaping food behaviors.
- 2. Start a single-issue local campaign to shift a government policy in order to improve food behaviors.
- 3. Visit an advertising agency and interview executives about how they shape public opinion.
- 4. After analyzing media messages, design an ad campaign to improve food behaviors.

FOOD EDUCATION STANDARD 5



Food impacts health.

This Standard gives students a baseline knowledge of how food interacts with both the body's ability to sustain itself and keep it operating properly. Within this Standard, students are educated as to how to make healthy choices and empowers them to use information available to differentiate between foods that are nutrient dense for the intake of calories and those that are nutrient deficient and calorie dense. These types of skills will enable students to make better food choices throughout their lives, impacting health outcomes and longevity.

-Kathryn Wilson, PhD SNS

An old adage "we are what we eat" holds much, much truth. To be and remain healthy, therefore, the food we eat must provide the right amounts of protein, fats, carbohydrates, vitamins, minerals, fiber and total calories; if not, we become malnourished and susceptible to both contagious and chronic diseases. When we take in too many calories, we become overweight or, even obese, conditions that also cause chronic conditions such as diabetes, heart disease, cancer and fatty liver plus skeletal and joint damage. Students learn to truly appreciate and value their bodies, along with the critical connection between eating and health, through health science lessons about human body systems and organs, combined with lessons about healthy foods and making healthy food choices.

—David Lohrmann, Professor and Chair of Applied Health Sciences, University of Indiana at Bloomington

Food impacts health.

EXPECTATIONS

Students who demonstrate understanding can use food labels to communicate the relationship between nutrition and health.

IL SEL

1C.1a. Set a short-term goal and make a plan for achieving it.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI3

IL SS: SS.IS.3.K-2. SCI (NGSS): K.LS1.1

> 1.LS1.1 2.LS2.1

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.5 CC.MATH-PRACTICE.MP.7

ARTS: Anchor Standard 1,10

HEALTH/NUTRITIONAL

IL State Goal: 23.B.1a NHES: 1, 3, 4, 5, 6, 7

GRADE-SPECIFIC COMPETENCIES

- 1. Identify and interpret food labels.
- 2. Identify whole vs. processed foods, seasonality of foods and ways people eat.
- 3. Divide a plate into portion sizes.
- 4. Articulate that calories equal energy.

- 1. Visit from medical personnel to discuss food related illnesses.
- 2. Nutritionist speaks to students about types of food, portion sizes

Food impacts health.

EXPECTATIONS

Students who demonstrate understanding can use food labels to communicate the relationship between nutrition and health.

IL SEL

1C.2a. Set a short term goal and make a plan for achieving it.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI3

IL SS: SS.IS.6.3-5.

SCI (NGSS): 3.LS.4.3 5.PS3.1

5.LS1.1

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.5

CC.MATH-PRACTICE.MP.7

ARTS:

Anchor Standard 1, 10, 11

HEALTH/NUTRITIONAL

IL State Goal: 23.B.2a NHES: 1, 3, 4, 5, 6, 7

GRADE-SPECIFIC COMPETENCIES

- 1. Demonstrate how to use nutrition facts label or food label to choose a nutrient-dense food.
- 2. Understand portion control and how it affects the nutrition facts labels.
- 3. Evaluate food choices and their relationship to short and long-term health.

- 1. Visit from a Nutritionist or PCP to share information about food and health.
- 2. Ask a local professional athlete to visit and share ways they stay healthy using foods.

Food impacts health.

EXPECTATIONS

Students who demonstrate understanding can use food labels to communicate the relationship between nutrition and health.

IL SEL

1C.3a. Set a short term goal and make a plan for achieving it.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI3
IL SS: SS.IS.6.6-8.LC.
SCI (NGSS): MS.LS1.6,7

MS.ESS3.3, 4

MATH:

CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.5 CC.MATH-PRACTICE.MP.7 ARTS: Anchor Standard 1, 10 HEALTH/NUTRITIONAL IL State Goal: 23.B.3a

NHES: 1, 3, 4, 5, 6, 7

GRADE-SPECIFIC COMPETENCIES

- 1. Distinguish the impact of different food groups both physically and emotionally.
- 2. Identify the importance of consuming a variety of foods and the impact missing major nutrients have on overall health.
- 3. Create a nutrient-dense meal that impacts your physical or emotional health.

REAL WORLD AND COMMUNITY EXPERIENCES

1. Field trip to Advertising Agency to learn about how food ads are developed and time placements on television.

Food impacts health.

EXPECTATIONS

Students who demonstrate understanding can use food labels to communicate the relationship between nutrition and health.

IL SEL

1A.4a. Analyze how thoughts and emotions affect decision making and responsible behavior.

1A.5a. Evaluate how expressing one's emotions in different situations affects others.

1A.4b. Generate ways to develop more positive attitudes.

1A.5b. Evaluate how expressing more positive attitudes influences others.

1C.4a. Identify strategies to make use of resources and overcome obstacles to achieve goals.

2A.4a. Analyze similarities and differences between one's own and others' perspectives.

3B.4a. Evaluate personal abilities to gather information, generate alternatives, and anticipate the consequences of decisions.

3B.4b. Apply decisionmaking skills to establish responsible social and work relationships.

3B.5b. Evaluate how responsible decision making affects interpersonal and group relationships.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RL.9-10.1; RL.9-10.2; RL.9-10.6 CCSS.ELA-LITERACY.RI.9-10.1, RI.9-10.2, RI.9-10.7 CCSS.ELA-LITERACY.RL.11-12.1, RL.11-12.2, RL.11-12.6 CCSS.ELA-LITERACY.RI.11-12.1, RI.11-12.2, RI.11-12.7

IL \$\$: \$\$.1\$.2.9-12 \$\$.1\$.4.9-12 \$\$.1\$.5.9-12 \$\$.1\$.6.9-12 \$\$CI (NG\$\$): HS-L\$1-7

HS-ESS3-2

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.2 CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.4 CC.MATH-PRACTICE.MP.5 CC.MATH-PRACTICE.MP.6 ARTS: Anchor Standard 1, 10 HEALTH/NUTRITIONAL IL State Goal: 22, 23, 24 NHES: 1, 2, 3, 4, 5, 6, 7

Food impacts health.



GRADE-SPECIFIC COMPETENCIES

- 1. Analyze food labels and understand how to evaluate the healthfulness of packaged foods.
- 2. Evaluate different kinds of and appropriate amounts of calories and nutrients.
- 3. Analyze different diets and their effects on physical and emotional health.
- 4. Consider the costs and benefits of processed foods.
- 5. Analyze how society impacts what we eat and how our health is affected by what we eat.

- 1. Travel to a food laboratory to learn how calories and nutrients are measured.
- 2. Try vegetarianism or another food lifestyle choice for a week and keep a food journal, recording daily choices and how those choices impact their physical and emotional health.
- 3. Meet with representatives of the food service company that provides school lunch and interview them about why they set the menus as they do.

FOOD EDUCATION STANDARD 6



We can make positive and informed food choices.

Childhood presents a unique opportunity to influence food acceptance and preferences that have the potential to influence health over their lifespan. Introducing a variety of foods in positive, engaging activities increases the likelihood that children will taste and eat a wider variety of health promoting foods.

—Alan Shannon, Public Affairs Director-Midwest Region, United States Department of Agriculture

Every child, regardless of socioeconomic status, deserves access to knowledge that allows them to make positive and informed food choices. This Standard harnesses the necessary framework to ensure this right for children of all ages on a daily basis. The actual food choice is powerful, but even more powerful is the experience of autonomy over one's body that access to nutritious and vibrant food allows. To empower youth with this Standard is to not only guarantee them access to nutritious foods, but to shape the minds of the future leaders who will continue to ensure the right of this access.

-Justin Behlke, Culinary Director, Pilot Light

EXPECTATIONS

Students who demonstrate understanding can prepare a nutrient-dense meal or recipe and explain their choices for each ingredient.

IL SEL

1A.1a. Recognize and accurately label emotions and how they are linked to behavior.

3B.1a. Identify a range of decisions that students make at school.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.K.10 CCSS.ELA-LITERACY.RI.1.5, RI.1.6

CCSS.ELA-LITERACY.RI.2.5,

RI.2.6

IL SS: SS.IS.1.K-2

SS.IS.2.K-2

SCI (NGSS): K-2.ETS1.1-3 MATH: CCSS.MATH.CONTENT.

K.CC.C.6

CCSS.MATH.CONTENT.

1.MD.C.4

CCSS.MATH.CONTENT.

2.MD.D.10

ARTS: Anchor Standard 1, 10

HEALTH/NUTRITIONAL IL State Goal: 22,23,24

NHES: 2, 3, 4, 5, 6, 7

GRADE-SPECIFIC COMPETENCIES

- 1. Understand, create and share a balanced plate using MyPlate through the USDA website and using the "Eat the Rainbow" concept."
- 2. Create and maintain a food journal of students' own daily eating habits, identifying trends (e.g. lots of fruits, veggies and whole foods) and patterns (e.g. fast food breakfast on Mondays or big dinners on Sunday).
- 3. Explain how different foods make them feel (e.g. sugar = quick energy; too much junk food = upset stomach) and apply this information to what they have learned from their food journals, identifying when and why they can make changes.

REAL WORLD AND COMMUNITY EXPERIENCES

1. Trip to a Farmer's Market.

EXPECTATIONS

Students who demonstrate understanding can prepare a nutrient-dense meal or recipe and explain their choices for each ingredient.

IL SEL

3B.2a. Identify and apply the steps of systematic decision making.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.3.5 CCSS.ELA-LITERACY.RI.4.7 CCSS.ELA-LITERACY.RI.5.7 CCSS.ELA-LITERACY.RI.5.8

IL **SS**: SS.IS.1.3-5 SS.IS.2. 3-5

SCI (NGSS): 3-5.ETS1.1--3

MATH:

CCSS.MATH.PRACTICE.MP3 CCSS.MATH.PRACTICE.MP5 CCSS.MATH.PRACTICE.MP6 ARTS:Anchor Standard 1, 10,11 HEALTH/NUTRITIONAL IL State Goal: 22,23,24

NHES: 2, 3, 4, 5, 6, 7

GRADE-SPECIFIC COMPETENCIES

- 1. Explain the difference between whole, processed foods and the nutritional difference between them, using nutritional labels (sugars, salt and fats focused).
- 2. Create a balanced meal for students' own families using the MyPlate framework and knowledge of nutritional labels.
- 3. Analyze advertisements and ingredients, using the information to create or identify alternatives to the processed foods, where possible.

- 1. Field trip to a market to analyze food labels and make a list of kid-approved nutrient-dense swaps for common snacks
- 2. Create advertisements for nutrient-dense foods to advertise to peers.

EXPECTATIONS

Students who demonstrate understanding can prepare a nutrient-dense meal or recipe and explain their choices for each ingredient.

IL SEL

1A.3a. Analyze factors that create stress or motivate successful performance.

3B.3a. Analyze how decision-making skills improve study habits and academic performance.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.6.7, RI.6.8

CCSS.ELA-LITERACY.RI.7.7,

RI.7.9

CCSS.ELA-LITERACY.RI.8.7,

RI.8.9

IL **SS**: SS.IS.1.6-8

SS.IS.2.6-8

SS.IS.3.6-8

SS.IS.8.6-8.MdC

SCI (NGSS): MS.ETS1.1-4

MATH:

CCSS.MATH.PRACTICE.MP3

CCSS.MATH.PRACTICE.MP5

CCSS.MATH.PRACTICE.MP6

ARTS: Anchor Standard 1, 10,11

HEALTH/NUTRITIONAL

IL State Goal: 22,23,24 NHES: 2, 3, 4, 5, 6, 7

GRADE-SPECIFIC COMPETENCIES

- 1. Evaluate nutritional food labels and informational texts to make informed choices.
- 2. Compare and contrast nutritional and economic values of prepared, packaged, and homemade meals of the same content.
- 3. Develop an advocacy project that informs others about how to choose nutrient-dense food options when dining out.

- 1. Using a pre-packaged meal, analyze the nutritional and economic impact of the meal when compared to the same meal being made from fresh ingredients at home.
- 2. Analyze a restaurant menu in order to identify nutrient-dense swaps.

EXPECTATIONS

Students who demonstrate understanding can prepare a nutrient-dense meal or recipe and explain their choices for each ingredient.

IL SEL

1A.4a. Analyze how thoughts and emotions affect decision making and responsible behavior.

3B.5b. Evaluate how responsible decision making affects interpersonal and group relationships.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RST.9-

10.9

CCSS.ELA-LITERACY.RST.11-

12.9

IL SS: SS.IS.8.9-12

SS.IS.9.9-12

SCI (NGSS): HS.ETS1.1-4

MATH:

CC.MATH-PRACTICE.MP.1

CC.MATH-PRACTICE.MP.2

CC.MATH-PRACTICE.MP.3

CC.MATH-PRACTICE.MP.4

CC.MATH-PRACTICE.MP.5

CC.MATH-PRACTICE.MP.6

ARTS:

Anchor Standard 1, 10, 11

HEALTH/NUTRITIONAL

IL State Goal: 22,23,24

NHES: 2, 3, 4, 5, 6, 7

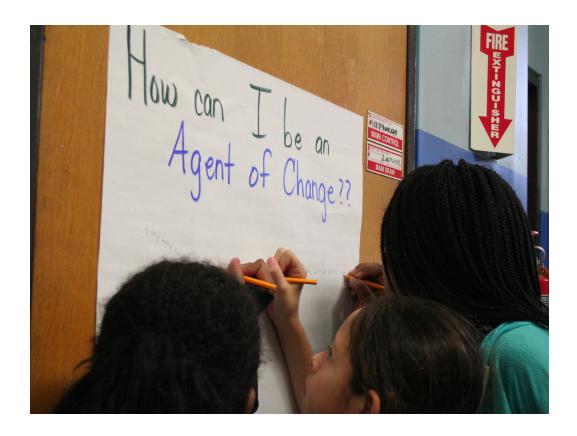
GRADE-SPECIFIC COMPETENCIES

- 1. Develop a long-term personal food plan with an overarching philosophy, daily meals with justification, ingredient lists, and recipes.
- 2. Develop an advocacy project that informs others about how to choose nutrient-dense food options for people with various diseases, such as diabetes, high blood pressure, and heart disease and also teaches others how to read food labels in reference to health.



- 1. Tour a local grocery store and develop materials to help the community choose healthier foods.
- 2. Meet with a local physician or dietician to learn about the impact of food choices on one's health.

FOOD EDUCATION STANDARD 7



We can advocate for food choices and changes that impact ourselves, our communities and our world.

As educators, we are responsible for providing an environment that maximizes student development and achievement. According to the USDA, nutritional status directly affects the mental capacity of school-aged children. Students who know how to make healthier food choices will reap the benefits, leading to fewer absences, more on task behavior in class, and higher exam scores. This Standard requires that educators inform students about how to make choices that will maximize their capacity for success.

—Bill Hook, Principal, Chicago High School for Agricultural Sciences

EXPECTATIONS

Students who demonstrate understanding can implement an action plan for bringing awareness of food equity and choices to surrounding communities. Advocate for personal, community or political change that impacts issues of equity, environment and health.

IL SEL

1B.1a. Identify one's likes and dislikes, needs and wants, strengths and challenges.

3B.1a. Identify a range of decisions that students make at school.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.6 CCSS.ELA-LITERACY.W.1,

W.2

IL **SS**: SS.IS.1.K-2 SS.IS.6.K-2

SCI (NGSS): K.ESS3.3 K-2.ETS1.1

MATH:

CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.6 ARTS:Anchor Standard 1, 10 HEALTH/NUTRITIONAL IL State Goal: 22, 23, 24

NHES: 4, 5, 6, 8

GRADE-SPECIFIC COMPETENCIES

- 1. Use MyPlate to make food swaps, explaining the reason for the exchange.
- 2. Make informed food choices when presented with options by designing a meal for their family.
- 3. Explain food in equitable terms (e.g. all people need food access, clean water is necessary, grocery stores are important to communities and their health).

REAL WORLD AND COMMUNITY EXPERIENCES

1. Organize a food drive for a local food pantry.

EXPECTATIONS

Students who demonstrate understanding can implement an action plan for bringing awareness of food equity and choices to surrounding communities. Advocate for personal, community or political change that impacts issues of equity, environment and health.

IL SEL

1B.2b. Explain how family members, peers, school personnel, and community members can support school success and responsible behavior.

2B.2b. Demonstrate how to work effectively with those who are different from oneself.

3B.2b. Generate alternative solutions and evaluate their consequences for a range of academic and social situations.

CROSS-CURRICULAR

FI A ·

CCSS.ELA-LITERACY.RI.3, RI.4, RI.5.8 CCSS.ELA-LITERACY.W.3, W 4

IL **SS**: SS.IS.7.3-5 SS.IS.8.3-5

SCI (NGSS): 3.LS2.1 3-5.ETS1.1

MATH:

CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.6

ARTS:

Anchor Standard 1, 10, 11

HEALTH/NUTRITIONAL

IL State Goal: 22, 23, 24 NHES: 4, 5, 6, 8

GRADE-SPECIFIC COMPETENCIES

3-5

- 1. Develop a school advocacy project about nutritional information of school-provided lunches using resources such as the school cafeteria manager, the USDA and FDA websites, and federal nutrition programs.
- 2. Find, adapt, or create recipes and prepare them in class to share with peers.
- 3. Produce informational posters, flyer or pamphlets sharing information about food with the larger school community.

- 1. Organize a food drive for a local food pantry.
- 2. Write letters to local politicians in support of food-related policy.

EXPECTATIONS

Students who demonstrate understanding can implement an action plan for bringing awareness of food equity and choices to surrounding communities. Advocate for personal, community or political change that impacts issues of equity, environment and health.

IL SEL

1B.3a. Analyze how personal qualities influence choices and successes.

2A.3a. Predict others' feelings and perspectives in a variety of situations.

3A.3a. Evaluate how honesty, respect, fairness, and compassion enable one to take the needs of others into account when making decisions.

CROSS-CURRICULAR

ELA:

CCSS.ELA-LITERACY.RI.7, RI.8 CCSS.ELA-LITERACY.W.6,

W.7, W.8W.4 IL **SS**: SS.IS.3.6-8 SS.IS.8.6-8

SCI (NGSS): MS.LS2.1 MS.ETS1.1

MATH:

CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.6

ARTS:

Anchor Standard 1, 10, 11

HEALTH/NUTRITIONAL

IL State Goal: 22, 23, 24 NHES: 4, 5, 6, 8

GRADE-SPECIFIC COMPETENCIES

- 1. Prepare a grocery list for the family that supports positive food behaviors.
- 2. Create a meal from local foods to share with the community outside of school.
- 3. Develop an advocacy project to bring awareness about food deserts within the surrounding communities.

- 1. Organize a food drive for a local food pantry.
- 2. Write letters to local politicians in support of food-related policy.
- 3. Volunteer at a food pantry.

EXPECTATIONS

Students who demonstrate understanding can implement an action plan for bringing awareness of food equity and choices to surrounding communities. Advocate for personal, community or political change that impacts issues of equity, environment and health.

IL SEL

1A.5b. Evaluate how expressing more positive attitudes influences others.

2B.5b. Evaluate how advocacy for the rights of others contributes to the common good.

3A.5a. Apply ethical

CROSS-CURRICULAR

CCSS.ELA-LITERACY.RI.9-12 CCSS.ELA-LITERACY.W.9-12

IL SS: SS.IS.1-9.9-12 SCI (NGSS): HS.LS2.1 HS.LS4.6 HS.ETS1.1-4

MATH:

CC.MATH-PRACTICE.MP.1 CC.MATH-PRACTICE.MP.2 CC.MATH-PRACTICE.MP.3 CC.MATH-PRACTICE.MP.4 CC.MATH-PRACTICE.MP.5 CC.MATH-PRACTICE.MP.6 ARTS:

Anchor Standard 1, 10, 11

HEALTH/NUTRITIONAL IL State Goal: 22, 23, 24

NHES: 4, 5, 6, 8

GRADE-SPECIFIC COMPETENCIES

- 1. Compare and contrast nutritional information in a variety of foods to bring awareness to and promote positive eating options for yourself, family, and others.
- 2. Develop awareness of global food systems and advocate for change.
- 3. Develop a campaign to promote the participation of youth in volunteering and/or donating to food banks.
- 4. Develop awareness campaign around diseases associated with poor nutrition.



- 1. Organize a food drive for a local food pantry.
- 2. Write letters to local politicians in support of food-related policy.
- 3. Volunteer at a food pantry.

SAMPLE LESSONS



Pilot Light lessons are designed to be adaptable to classrooms of all grade and learning levels. Consistent with the integrative approach of the Pilot Light Model, teachers are encouraged to be creative in adapting the Pilot Light lesson library to meet their student's learning needs, by pulling from any of the grade band level suggestions and making modifications to activities or food experiences as appropriate for their classroom.

LESSON LINKS

Bread Lesson:

http://pilotlightchefs.org/wp-content/uploads/2018/09/Bread-K-12.pdf

Seasonality: Everything In Its Own Time Lesson:

http://pilotlightchefs.org/wp-content/uploads/2018/09/Seasonality_-Everything-In-Its-Own-Time-K-12-1.pdf

CROSS-CURRICULAR STANDARDS SOURCES



Health Standards

Center for Disease Control/National Health Education Standards: https://www.cdc.gov/healthyschools/sher/standards/index.htm Illinois State Board of Education PE/Health Learning Standards: https://www.isbe.net/Pages/PE-Health-Learning-Standards.aspx

English & Language Arts

Common Core: http://www.corestandards.org/wp-content/uploads/ELA_Standards1.pdf

Mathematics

Common Core: http://www.corestandards.org/wp-content/uploads/Math_Standards1.pdf

Science

Next Generation Science Standards: https://www.nextgenscience.org/search-standards

Social Science

Illinois State Board of Education: https://www.isbe.net/Documents/K-12-SS-Standards.pdf

Arts

National Arts Standards: http://nationalartsstandards.org/

Social-Emotional Learning Standards

Illinois State Board of Education: https://www.isbe.net/pages/social-emotional-learning-standards.aspx

GLOSSARY

Culture - customs and beliefs that distinguish one group of people from another, passed on through language, ritual, religion, art, clothing, and cooking.

MyPlate - current nutrition guide with suggested consumption proportions for the 5 food groups, from the USDA Center for Nutrition Policy and Promotion. Replaced the former USDA food pyramid.

Food Systems - all stages of food production, starting with growing, harvesting and processing, all the way through transportation, marketing and consumption.

Seasonality - predictably recurring calendar of prime time frame for production for particular crops.

Sustainability - practices, agricultural or otherwise, that protect the environment, public health, human communities, and animal welfare.

Crop Rotation - the practice of growing different crops in the same areas in a sequence that helps reduce soil erosion, supports soil fertility and increases crop yield.

Factory Farms - a production approach towards farm animals (for meat, milk and eggs) that maximizes production at the lowest possible cost. Subject to criticism in regards to animal welfare, human health risks, and environmental impact.

Overfishing - depletion of the population of certain species of fish through overexploitation by the fishing industry, leading to potentially irreversible interruption of larger marine ecosystems.

Farmed Fishing - the production of fish for human consumption in controlled and high volume facilities. Health and environmental concerns include genetic modification, disease and parasites.

Hybridization - the crossbreeding of plant species to produce certain characteristics, improve disease resistance, or increase climate resiliency.

GMO - (genetically modified organisms) living organisms that have had their DNA artificially manipulated through genetic engineering. Used in agriculture to produce crops with desired traits that are not naturally occuring.

Farm Subsidies - governmental subsidies paid to agricultural businesses to supplement their income and manage the supply and cost of the goods they produce.

Trade Agreements - negotiated terms dictating the acceptable exchange of goods and services amongst parties involved.

Nutrient-Dense - containing a high content of a range of nutrients, such as vitamins, minerals, complex carbohydrates, lean proteins and healthy fats.

Healthfulness - conducive to a healthy state of body and/or mind.

Food Journal - detailed record of consumption of food and beverage over a period of time, typically for the purpose of tracking intake and/or identifying eating habits.

Balanced Meal - a meal that contains the correct proportions of carbohydrates, fats, proteins, vitamins and minerals to support good health.

Food Equity - refers to access to healthy food, as affected by income, food knowledge, and the presence of food resources (i.e. grocery stores, farmers markets), amongst other influences.

Food Desert - urban geographic areas in which it is challenging to access affordable or good-quality fresh foods.

Food Behaviors - habits of food-related activities, including the ways in which we source, prepare and consume food.

Cuisine - style or method of cooking, especially as characteristic of a particular country, region, or establishment.

Food Service Provider - any business or institution responsible for the preparation of any meal outside of the home. Including restaurants, schools, catering companies, and hospital cafeterias.

Community Asset Mapping - identifying the strengths and resources of a particular geographic area in a visual representation that can be used to develop solutions to community challenges.

Short-term Hunger - experiencing temporary discomfort and/or distress due to a lack of sufficient access to food.

Chronic Hunger - long-term lack of sufficient access to food, leading to distress and larger health and well-being consequences.

Physical Health - well-being of one's physical body, influenced by nutrition and diet, physical activity, medical care, and rest.

Emotional Health - ability to understand and be responsive to emotional experiences, and to be at ease with a full range of emotions.

USDA - United States Department of Agriculture, responsible for developing and executing federal laws related to farming, forestry, and food.

FDA - Food and Drug Administration, federal agency within the U.S. Department of Health and Human Services, responsible for promoting and protecting public health through the control and supervision of food safety, dietary supplements and prescription and over the counter drugs.