

Lesson 6.4: Food Scarcity and Food Deserts

Unit: Unit 6, From Farm to Table (Food Systems and Production) **Topic:** 6.1 Where Food Comes From **Grade:** 6 to 8 (written at grade 7; see Differentiation for the grade 6 support and grade 8 stretch) **Days:** 1 class period of 40 minutes **Room:** Either (classroom or FACS lab)

Standards

- NYS module line: NYS FSP 4. Future of Food in a Global Society d) Identify the consequences of food scarcity and hunger on society
- NYS module line: NYS FSP 3. Current Issues Related to Food in Global Societies c) Explore factors that create current food-related health concerns around the world
- NYS module line: NYS FSP 3. Current Issues Related to Food in Global Societies b) Identify how current laws, regulations, and policies affect the availability, selection, and preparation of food in various regions and countries
- NYS module line: NYS FSP 5. Consumer Resources and Finance c) Apply consumer skills to selecting and purchasing of food items
- CTE theme line: CTE CCO 5. Community Needs Assessment b) Research community resources available to support individuals and families
- CTE theme line: CTE FCL 4. Buying Goods and Services g) Compare local, national, and global resources for obtaining goods and services
- NYS FACS Learning Standard 3 (Intermediate), Key Idea: Students will understand and be able to manage personal resources of talent, time, energy, and money and make effective decisions in order to balance their obligations to work, family, and self.; Performance Indicator A: Students understand how the family can provide for the economic, physical, and emotional needs of its members.
- CDOS Standard 3a Universal Foundation Skills: Thinking Skills
- National FCS 3.0: 14.3.4 Judge policies and practices that affect food security, sustainability, food integrity, and family nutrition.
- National FCS 3.0: 14.1.3 Look into how government, the economy, and technology shape food choices and practices.
- National FCS 3.0: 14.1.5 Examine laws and regulations that touch nutrition and wellness.

Note on FSP 3. b). Step 4 is where it is taught: SNAP, WIC, and school meals are policy, not charity, and the step says who runs each one and what it does and does not solve. The state's line ends with "in various regions and countries," and Step 4 is United States

programs only. Lesson 6.2 (local, seasonal, global) and Lesson 6.10 (one dish, three cultures) carry the other-countries half of the module's topic 3. If Sal wants the line fully met inside this period, the one-minute addition is to name one other country's program next to SNAP; the teacher notes say which. Four National FCS competencies instead of the usual one or two, because 14.1.5 is the competency the crosswalk pairs with FSP 3. b) and it is printed in the FSP module's own block.

How this lesson is handled

This topic sits close to some students' lives. Three rules, said out loud at the start and kept all period.

1. Nobody is asked about their own household. Not their fridge, not their groceries, not free lunch, not anything. Every example in this lesson is a described neighborhood on paper.
2. This is not something that happens only somewhere else. One in eight households in this country has trouble affording enough food in a given year, and there are families in every district in New York, including well-off ones. I say that plainly and I do not name anybody.
3. The tone is problem solving, not pity. The question is how a system produces this result and what communities do about it, not who to feel sorry for.

[Sal: you know your roster. If you know a student is living this, the person to loop in before this lesson is the counselor, not the student.]

Enduring understanding and essential question

Big idea: Having enough food is not only about money. It is also about distance, transportation, time, and what the nearest store actually stocks. Change any one of those and the same family eats differently. **Essential question:** Two families have the same twenty dollars. Why does one of them eat better than the other?

Objectives

By the end of this lesson, students will be able to:

1. (Low: understand) Define food insecurity and food desert in their own words and name three things that create one (distance, transportation, price, store selection).
2. (Mid: analyze) Using the described neighborhood map and the two price lists, compare what twenty dollars buys at the supermarket and at the convenience store, and calculate the difference.
3. (High: evaluate) Judge which two of five community responses would help the described neighborhood most, and defend the choice with evidence from the map and the prices.

Vocabulary

Tier 2 (general academic): access, distance, compare, defend, response Tier 3 (FACS): food insecurity, food desert, food pantry, SNAP, WIC, community garden, mobile market, unit price. See the unit vocabulary list (Vocabulary 06.md) for Turkish, Portuguese, and Spanish.

Materials and setup

- Handout 06.04 - Neighborhood Map and Price Comparison.md, one per student (the described neighborhood, the two price lists, the twenty dollar task, and the five responses)
- One highlighter per pair and one ruler per pair (the map has a scale bar)
- Calculators, one per pair
- Slides: Slides 06.04 - Food Scarcity and Food Deserts
- Setup notes: read the three rules above off the slide, word for word, before anything else. Have the school counselor's name and room number on the last slide, with the sentence "If anything today is about your house, my door and the counselor's door are both open, and you do not have to explain." No food today. No cost.

Pre-assessment

The do now asks students to define "food desert" from the words alone before any instruction. Most will guess a place with no food at all. The gap between that guess and the real definition is the opening of Step 1.

Do now and hook (Time: 5 min)

On the board: "The words 'food desert' are used to describe some neighborhoods. From the words alone, what do you think it means? One sentence. There is no wrong guess here."

Debrief: take four guesses without correcting any of them. Then the hook: "In the neighborhood you are about to map, there is plenty of food for sale. There is a store on almost every corner. And it is still hard to put a decent dinner on the table. Your job is to figure out why."

Procedure

Step	Teacher will	Students will	Time
1. Direct instruction: the two terms and the four causes	Define food insecurity: not having reliable access to enough affordable food. Define food desert: a neighborhood where getting to a full grocery store is	Write both definitions in their own words on the handout, then list the four causes with one example each.	8 min

	hard because of distance, transportation, or both. Show the four causes with one slide each: distance, transportation, price, and selection. Say the national figure and say that it happens everywhere, using the wording in “How this lesson is handled.”		
2. Learning activity: map the neighborhood	Release the map task. The described neighborhood has one supermarket at the far corner, three convenience stores spread through the middle, a bus that runs once an hour, and 4,000 residents. Students measure the walking distance from three marked homes to the supermarket using the scale bar, and to the nearest convenience store. Circulate with the clipboard checklist.	In pairs: measure and write the six distances, highlight the route from Home C to the supermarket, and answer the two questions (who has the hardest trip, and what would make it easier).	10 min
3. The twenty dollar comparison	Release the price task: build a dinner for a family of four with twenty dollars, first from the supermarket list, then from the convenience store list. Rule: both carts have to feed four	Build both carts on the handout. Total each. Write the difference in dollars and in what the family actually eats. Note the one item that was not available at all at the convenience store.	10 min

	people one dinner. Then calculate the difference in what twenty dollars bought.		
4. Five responses, pick two	Show the five community responses in one minute each: food pantries, SNAP and WIC, community gardens, mobile markets, and school meals. Keep it factual: what each one is, who runs it, what it does and does not solve. Then the task: which two would help this neighborhood most, and why. Take four answers.	Rank the five, circle the top two, and write one sentence of evidence for each from the map or the price lists. Two students read theirs.	5 min

Questions to ask

Monitor understanding:

- What is the difference between food insecurity and a food desert? Can you have one without the other?
- Home C is 1.4 miles from the supermarket. What makes that hard, beyond the walking?
- Which food was not on the convenience store list at all?

Deepen learning:

- The convenience store owner charges more for the same can of beans. Are they doing something wrong? What would you need to know to answer that?
- A mobile market shows up twice a month. Is that a solution or a patch? What would make it a solution?
- The bus runs once an hour and you have frozen food. What does that do to what a person buys?
- Two families, same twenty dollars, different dinners. Which cause from Step 1 did the most damage here?

Check for understanding

Clipboard checklist during Steps 2 and 3: for each pair, yes or no on “six distances measured with the scale,” “both carts total twenty dollars or less,” “the difference is stated in dollars and in food,” and “the missing item named.” A pair that builds a convenience store cart with fresh vegetables on it gets sent back to the price list to check availability, not corrected out loud.

Closure (Time: 2 min)

One sentence on the exit card: “A food desert is , **and the thing that would help the most is** because ____.” Two students read a line. Sort into “got it” and “needs more.” Any card that defines a food desert as “a place with no food” gets a thirty-second correction at the start of Lesson 6.5.

Differentiation and supports

- ELL: the map is visual and the distances are numbers, so the task works with limited English; both price lists use pictures beside every item; the words access, afford, distance, pantry, and garden are on the vocabulary card in Turkish, Portuguese, and Spanish (see Vocabulary 06.md); sentence frame: “Home ____ has the hardest trip because ____.”
- IEP and 504 (general): pairs, calculators for everybody, the scale bar conversion printed on the map (“1 inch equals 0.4 miles”) so no student has to derive it; a version of the price task with four items instead of eight; extended time by doing the supermarket cart only and comparing to a printed sample convenience cart.
- Grade 6 support: measure two distances instead of six, build one cart, and compare it to the printed sample of the other. Rank three responses instead of five.
- Grade 8 stretch: compute the unit price (price per ounce or per pound) for the three items that appear on both lists, then answer the harder question: the convenience store’s prices are higher and its profit is not large. Explain how both of those can be true, using volume and cost.
- UDL checkpoint used: multiple means of representation (a map, two price lists, and a spoken walkthrough of one family’s trip) and multiple means of engagement (the task is a problem to solve about a neighborhood on paper, which keeps the work from turning into anyone’s personal story).
- No-kitchen alternative: not needed. No food is used or handled in this lesson.

Assessment

Objective	Standards met	Learning task	Assessment (formative or summative; tool)
1. Define the two terms and name the causes	FSP 4. d); FSP 3. c)	Definitions and the four causes, Step 1; exit card	Formative; exit card sorted; a definition that includes distance or

			transportation counts as “got it”
2. Compare what twenty dollars buys and calculate the difference	FSP 5. c); FCL 4. g); Std 3 PI A; National FCS 14.1.3	Map measurement and the two carts, Steps 2 and 3	Formative; handout scored complete, partial, or missing for daily work. Assessed summatively on the Food Systems Quiz, item 7 (the food desert scenario)
3. Judge which two responses would help most	FSP 4. d); FSP 3. b); CCO 5. b); National FCS 14.3.4; CDOS 3a Thinking Skills	Ranking and defense, Step 4	Formative; each of the two picks needs one piece of evidence from the map or the prices

Homework

None, and deliberately none. Nothing about this lesson goes home as an assignment.

Connections

Social studies: this is a geography and civics lesson as much as a FACS lesson, and the map task is the same skill as any thematic map reading. Math: unit price and scale conversion. Community: a food pantry coordinator is usually willing to speak for ten minutes and to explain what the pantry actually needs, which is almost never canned corn. A pantry drive is a real service option, and it belongs in the Unit 7 capstone if a class wants to run one.

[Sal: if your school runs a pantry or a backpack program, the coordinator is the right guest, and the visit should be arranged so no student in the room is identified as a client.]

Sources

- NYS Middle Level CTE FACS Content Module 06, Food Systems and Production (nycetecenter.org, June 2018), lines 4. d), 3. b), 3. c), and 5. c). Copy in 02 Standards/NYS Module PDFs/.
- NYS Middle Level CTE Theme Module 01, Career and Community Opportunities, line 5. b); Theme Module 03, Financial and Consumer Literacy, line 4. g). Same folder.
- NYS Learning Standards for Health, Physical Education, and Family and Consumer Sciences (1996), Standard 3, Intermediate, FACS strand, Performance Indicator A. Wording per 02 Standards/STANDARDS SOURCES - web research.md, section 2. *[Sal: confirm against the NYSED PDF.]*
- CDOS Intermediate Standard 3a Universal Foundation Skills, Thinking Skills. Same file, section 3.
- National Standards for Family and Consumer Sciences Education 3.0 (LEAD FCS Education, 2018), competencies 14.3.4 and 14.1.3.

- The neighborhood, the distances, and the two price lists on the handout are constructed for teaching. The prices are written to feel like a real Long Island supermarket and a real corner store, and the handout says so on its face. *[Sal: update the supermarket column from this week's circular and the convenience column from whatever store is near the school; students will believe the numbers more if they recognize them.]*
- Program facts on SNAP and WIC are stated at the level of what each program is and who runs it. *[Sal: verify current New York eligibility language on the state OTDA and Department of Health pages before you teach it, and keep it to facts.]*

Teacher notes

- Read the three rules out loud. Do not paraphrase them. The lesson only works if the room knows it is safe.
- If time runs short, cut the convenience store cart and use the printed sample. Never cut Step 4; ending on “here is what people do about it” is the whole reason this lesson is teachable at this age.
- One optional minute inside Step 4, if you want FSP 3. b) met on both halves in this period: after SNAP, name one other country's program in a sentence, for example the United Kingdom's Healthy Start vouchers for pregnant women and young children, or Brazil's national school meal program, which buys a set share of its food from small local farms. Say the point in one line: every country decides by law who gets food help and what the money can buy, and that decision changes what is on the shelf. *[Sal: pick a country your students have a connection to; the Turkish and Portuguese speakers in the room will have one.]*
- Common mistake: students decide the convenience store owner is the villain. Redirect with the volume question in the “deepen” list. The point is a system, not a bad guy.
- Watch the room. If a student goes quiet, let them be quiet, and check in after class without making it a conversation about food.
- Do not ask for a show of hands on anything about money or food at home. Not once, not as a warm-up, not as a joke.
- This lesson pairs naturally with the Unit 2 budgeting work and with ClassroomStreet. A student who ran a budget in that simulation already knows what a fixed income feels like. Use that language.
- *[Sal: your Brentwood students knew which stores near them were expensive. That knowledge is an asset in this lesson, but let them volunteer it about stores, not about themselves.]*