

Lesson 3.4: Heredity, Environment, and Who I Am Becoming, and the Lifespan Stages Quiz

Unit: Unit 3, Growing Up, Getting Along (Human Development and Relationships) **Topic:** 3.1 Growing Across the Lifespan **Grade:** 6 to 8 (written at grade 7; see Differentiation for the grade 6 support and grade 8 stretch) **Days:** 2 class periods of 40 minutes (days 69 and 70 of the year). Day 2 ends with the Lifespan Stages Quiz, 15 minutes, the formal check for Topic 3.1. **Room:** Classroom or FACS lab

Standards

- NYS module line: NYS HDR 1. Human Growth and Development Across the Lifespan a) Identify the stages of human growth and development across the lifespan
- NYS module line: NYS HDR 1. Human Growth and Development Across the Lifespan b) Identify the relationships among and characteristics of the physical, emotional, social, and intellectual aspects of human growth and development
- NYS module line: NYS HDR 2. Self-Concept and Self-Image a) Define the term self-concept and identify factors which affect the formation of self-concept
- CTE theme line: CTE HSW 5. Social-Emotional Learning a) Discuss how personal habits, environment, and heredity affect social-emotional health
- CTE theme line: CTE CIR 4. Relationships b) Analyze the functions and expectations of various types of relationships and how they may change over time
- NYS FACS Learning Standard 2 (Intermediate), Key Idea: Students will know the basic principles of home and community safety. They can demonstrate the skills necessary to maintain their homes and workplaces in a safe and comfortable condition. They can provide a safe and nurturing environment for themselves and others.; Performance Indicator: none of the three Standard 2 indicators fits; the key idea's "nurturing environment" is the environment half of this lesson. The state assigns only Standard 2 to HDR.
- CDOS Standard 3a Universal Foundation Skills: Thinking Skills
- National FCS 3.0: 12.2.1 Examine how heredity and environment shape growth and development.

(The task asked for a CIR 4. line on family or influence. CIR 4. b) is the crosswalk's line for how relationships change over time and is cited verbatim; the influences map is a map of relationships. HSW 5. a) is added because it names heredity and environment in so many words. HDR 2. a) is introduced here through "factors which affect the formation of self-concept" and is defined fully in Lesson 3.5. The quiz covers HDR 1. a), 1. b), and 3. d) from Lessons 3.1 to 3.4.)

Enduring understanding and essential question

Big idea: Who you are becoming comes from two sources: what you were born with (heredity) and everything and everyone around you (environment). You do not pick the

first. You have more say over the second than you think. **Essential question:** Which has done more to make you who you are right now: what you were born with, or who and what has been around you?

Objectives

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

1. (Low) Given ten everyday traits or habits, classify each as mostly heredity, mostly environment, or both, and define both terms.
2. (Mid) On a private influences map, identify at least eight people, places, and things that have shaped them and label each with the aspect it shaped most (physical, emotional, social, intellectual).
3. (High) Judge which single influence on the map has had the largest effect and defend the choice in three sentences; on Day 2, demonstrate mastery of Topic 3.1 on the Lifespan Stages Quiz at 70 percent or better.

Vocabulary

Tier 2 (general academic): influence, trait, inherit, classify Tier 3 (FACS): heredity, environment, genes (named only), self-concept (introduced; defined in Lesson 3.5). See the unit vocabulary list (Vocabulary 03.md) for Turkish, Portuguese, and Spanish.

Materials and setup

- Handout 03.04 - My Influences Map.md, one per student (Day 1)
- Assessment 03.1 - Lifespan Stages Quiz.md, one per student (Day 2), plus the teacher key
- The 21 lifespan sort cards from Lesson 3.1, one set per team, for the Day 2 review game
- Slides: Slides 03.04 - Heredity Environment and Who I Am Becoming and Lifespan Quiz (slides 1 to 12 Day 1; slides 13 to 22 Day 2)
- Whiteboards or scrap paper and markers, one per team, for the review game
- Timer visible to the class
- Setup notes: print the quiz the day before. Day 1 setup is none. The influences map is private: it goes in the student's FACS folder, and the only thing collected is the Part 3 defense paragraph, which names no one (students write "a coach," "my aunt," not names).

Pre-assessment

The do now on Day 1 asks students to guess whether eye color, being good at math, and liking spicy food come from heredity or environment. The guesses show whether the class already sees "both" as an answer. Day 2 opens with the exit cards from Lessons 3.1 to 3.3 sorted by topic; the "needs more" piles set the order of the review game.

Do now and hook (Time: 4 min, Day 1)

On the board: “Heredity means what you were born with. Environment means everything around you. Where does each of these come from: (1) your eye color, (2) how good you are at math, (3) whether you like spicy food? Write H, E, or both.”

Debrief: hands for each. Eye color gets H from nearly everyone. Math and spicy food split the room, and that split is the hook: “Most of you is ‘both.’ Today we figure out how much, and who did it.”

Procedure

Day 1

Step	Teacher will	Students will	Time
1. Direct instruction: two sources	Slides 3 to 5. Heredity: passed from biological parents through genes; height range, eye and hair color, some health risks, some parts of temperament. Environment: everything and everyone around you since birth; family, home, food, school, friends, language, neighborhood, screens, money, luck. Then the honest part, slide 5: almost every trait is both. Height is inherited but food and sleep decide where in the range you land. Temperament is inherited but the people around you teach you what to do with it.	Copy the two definitions and the “almost everything is both” rule onto the handout, Part 1.	7 min

2. Learning activity: the everyday sort	Slide 6, ten everyday items (handout Part 1 table): eye color, height, your accent, being ticklish, liking a certain music, being shy or outgoing, being good at drawing, your first language, a food allergy, how you handle losing. Pairs mark H, E, or B and write a reason for three of them. Reveal slide 7 with the answers and the reasons that make “both” the best answer for most.	Classify ten items with a partner. Write three reasons. Check against the reveal; change any answer with a note on why.	8 min
3. My influences map (private)	Slides 8 to 10. Show a blank map: a circle in the middle labeled “me,” and around it rings for people, places, and things. Model with a fictional example (a coach, a grandmother’s kitchen, a library card, a phone, a language). The rule: at least eight influences, no names (use roles), each labeled P, E, S, or I for the aspect it shaped most. Say clearly: this page is yours. It goes in your folder. Nobody reads it unless you want them to.	Build the map on Part 2. Label each influence with an aspect letter. Star the three biggest.	13 min
4. Share by choice	Ask: “Anyone want	Volunteer or listen.	4 min

	to share one influence and one aspect, no names?" Take three. Then assign Part 3: which one influence on your map has done the most to make you who you are, and three sentences on why. This paragraph is the only thing collected.	Write the Part 3 defense.	
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Day 2

Step	Teacher will	Students will	Time
Do now	On the board: "Write the seven stages in order without looking. Then write what object permanence means." Collect nothing; this is the warm-up for the game.	Write. Check against the board timeline when it goes up.	3 min
1. Review game: Lifespan Lightning	Slides 14 to 20. Teams of four, one whiteboard each, the 21 cards from Lesson 3.1 in a pile face down. Round 1 (stages): draw a card, write the stage, hold up; a point per right board. Round 2 (milestones): six age questions from the Ages and Stages chart. Round 3 (myth or fact): six adolescence statements. Round 4	Play. Write on the board, hold up, correct. Ask about anything missed.	17 min

	(heredity or environment): six everyday items. Keep score on the board. Reteach any question that half the boards miss, for thirty seconds, right then.		
2. Formal check: Lifespan Stages Quiz	Clear desks. Hand out the quiz. 15 minutes, 12 items, no notes. Read the directions aloud. Collect at the timer.	Take the quiz. Fill the exit line at the bottom. Hand it in.	15 min

Questions to ask

Monitor understanding:

- What is one thing that is mostly heredity? Mostly environment?
- Why is “both” usually the best answer?
- Which aspect (P, E, S, I) did the most influences on your map shape? (No names needed.)

Deepen learning:

- If you cannot change your heredity, what can you change about your environment starting this week?
- Two siblings have nearly the same heredity and the same house. Why can they turn out so different? (Different friends, different birth order, different treatment, different choices; environment is not the same even under one roof.)
- Look at your map. Who put those influences there? How many did you choose yourself? What does that tell you about the next five years?

Check for understanding

Day 1, thumbs at the Step 2 reveal: thumbs up if the pair got eight or more of ten. Then a whiteboard check: “Write H, E, or B for ‘your first language.’” A “got it” answer is E, with “you were born able to learn any language, and the one around you is the one you got.” Day 2: the review game itself. A question missed by half the boards is retaught on the spot.

Closure (Time: 4 min Day 1; 5 min Day 2)

Day 1: 3-2-1 on the bottom of the handout: 3 things about you that are mostly environment, 2 that are mostly heredity, 1 influence you want more of next year. Two students read their “1” aloud by choice. Day 2: after the quiz, a one-line exit on the quiz’s last line: “The one

thing from Topic 3.1 I am surest about is ____." Say what Topic 3.2 is: "Next week is about self-concept, friends, and stress. Bring the influences map; it comes back."

Differentiation and supports

- ELL: the ten sort items have picture cues; word bank on the handout for heredity, environment, family, friend, and influence in Turkish, Portuguese, and Spanish; the map can be drawn with pictures and single words; sentence starter for Part 3: "The biggest influence on me is ____ because ____." The quiz accommodations are in the quiz file (read aloud, word bank, extended time).
- IEP and 504 (general): the map requires five influences instead of eight; Part 3 can be two sentences or spoken to the teacher; the review game has a fixed recorder role for a student who does not want to hold up the board; extended time on the quiz into the next do now, or the quiz taken in a quiet room.
- Grade 6 support: six sort items; five influences on the map; Part 3 is two sentences.
- Grade 8 stretch: Part 4 on the handout: pick one influence and write how it might look different for a student in another country or another decade, and whether the aspect it shaped would change. On the quiz, item 12 has a stretch line.
- UDL checkpoint used: multiple means of engagement (the map is private and sharing is by choice; the game is a team competition) and multiple means of action and expression (the map can be words or pictures; Part 3 can be written or spoken).
- No-kitchen or no-machine alternative: not needed.

Assessment

Objective	Standards met	Learning task	Assessment (formative or summative; tool)
1. Classify ten items and define both terms	HDR 1. b); HSW 5. a); National FCS 12.2.1	Everyday sort, Day 1 Step 2	Formative; thumbs at the reveal, whiteboard check; summative on the quiz, items 11 and 12
2. Build a private influences map with aspects labeled	HDR 2. a); CIR 4. b); National FCS 12.2.1	Influences map, Day 1 Step 3	Formative; checked for eight entries and aspect letters at a glance (the content is not read); daily work, complete or partial
3. Defend the largest influence; pass the quiz	HDR 1. a), 1. b), 3. d); CDOS 3a Thinking Skills; Std 2 KI	Part 3 paragraph, Day 1; Lifespan Stages Quiz, Day 2 Step 2	Part 3 formative, scored complete, partial, or missing; the quiz is summative, 20

			points, Topic assessments category, one retake after review
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Homework

None on Day 1 beyond finishing Part 3 if it is not done. None on Day 2.

Connections

Inside the building: science, if the grade 7 life science course covers genes and traits the same month; agree on the words “heredity” and “trait” so students hear them twice. The counselor gets the “1 influence I want more of” lines (no names) as a read on what students say they are missing. *[Sal: decide whether to share those.]*

Sources

- NYS Middle Level CTE FACS Content Module 02, Human Development and Relationships (nyctecenter.org, June 2018), lines 1. a), 1. b), 2. a), and 3. d). Copy in 02 Standards/NYS Module PDFs/.
- NYS Middle Level CTE Theme Module, Health, Safety, and Wellness, line 5. a); Theme Module, Communication and Interpersonal Relationships, line 4. b). Same folder.
- NYS Learning Standards for Health, Physical Education, and Family and Consumer Sciences (1996), Standard 2, Intermediate, FACS strand. Wording per 02 Standards/STANDARDS SOURCES - web research.md, section 2.
- National Standards for Family and Consumer Sciences Education 3.0 (LEAD FCS Education, 2018), competency 12.2.1.
- Sal’s own materials: the influences map borrows the “circle of people and places” idea from his Unit 2 All About Me one-pager (Lesson 2.3) so students recognize the shape.

Teacher notes

- The map is private and that promise is the whole activity. Say it before they start and again when you collect Part 3. Collect only Part 3.
- If Day 1 runs short, cut Step 2 to five items. If Day 2 runs short, cut the game to three rounds; never shorten the quiz below 15 minutes.
- Common mistake: a student labels everything heredity because “that is science.” The first language example fixes it fastest: born able to learn any language, got the one in the house.
- The Day 2 game needs the 21 cards from Lesson 3.1. If they went missing, the stage names on slips of paper work.
- *[Sal: your Brentwood students come from many countries and languages. The first language example lands hard there; use it, and let a student who wants to name their language do it. Nobody has to.]*