Example 1: Grade 8 Mathematics

SPBL Unit Plan

Stage 1: Learning Intentions (a Major Concept for the Unit and a CASEL Competency)

1. Content learning intention: I can apply the knowledge gained from learning about linear equations and systems of linear equations in order to make an informed decision on which mortgage would be the best decision for different scenarios (PS.1, PS.2, PS.3, PS.4, PS.5, PS.6, PS.7, PS.8, AI.DS.3, AI.L.3, AI.L.4, AI.L.5, AI.L.6, AI.SEI.1, AI.SEI.3, AI.SEI.4).

2. SEL learning intention (responsible decision making): I can make an informed financial decision for purchasing a house using a mortgage based on multiple different variables, including but not limited to income, other expenses, roommate situation, down payments, and interest rates.

Stage 2: Success Criteria (Daily Learning Goals)
You could have multiple goals, written without context or specificity.

Surface-Level Success Criteria for Content	**Deep-Level Success Criteria for Content**	**Transfer-Level Success Criteria for Content**
• I can write the equation of a line given the slope and y-intercept. • I can write the equation of a line given two coordinate points. • I can find the intersection of two lines through graphing, substitution, or elimination.	• I can interpret the slope and y-intercept of a line given a real-world context. • I can translate a real-world situation into a mathematics problem. • I can interpret the intersection of two lines, as well as the initial and ending behavior of two lines, given a real-world context.	I can use my knowledge of the way linear equations work to make an informed financial decision for purchasing a house using a mortgage based on the criteria presented to me.
Surface-Level Success Criteria for SEL	**Deep-Level Success Criteria for SEL**	**Transfer-Level Success Criteria for SEL**
I can define various terms, including, but not limited to, *financial literacy*, *mortgage*, *interest rate*, *down payment*, *income*, *expenses*, and *break-even point*.	I can explain the impact that changing variables, such as interest rate, down payment, length of mortgage, and others, will have on both immediate and long-term financial situations and goals.	I can use my knowledge of the way linear equations work to make an informed financial decision for purchasing a house using a mortgage based on the criteria presented to me.

Stage 3: Driving Question (Written at the Transfer Level)

Driving question: To what extent can we use mathematics in order to create a more financially literate world?

Authentic context: Students will simulate being loan officers for a mortgage company, giving advice to people seeking to purchase a home. "Judges" will be given various scenarios or situations in order to seek advice from the loan officers.

Stage 4: Tasks (Specific Strategies and Activities)		
Surface-Level Content Tasks **Reading:** Engage in minilessons on slope, *y*-intercepts, linear equations, and systems of linear equations. **Writing:** Do practice assignments on writing, graphing, and solving linear equations, as well as systems of linear equations. **Speaking:** Do a 2-1-1 with two classmates on what methods you prefer to write, solve, and graph linear equations or systems of linear equations.	**Deep-Level Content Tasks** **Reading:** Read multiple real-world contexts that can be represented using linear equations. **Writing:** Write your own interpretations of slope, *y*-intercept, intersection of lines, and the beginning and ending behavior of the lines that represent your real-world context. **Speaking:** Do a think-pair-share to brainstorm how this might help you apply your knowledge to the entire project.	**Transfer-Level Content Tasks** **Reading:** Consider the scenario presented to you that provides you with multiple different variables. **Writing:** Use the variables to find a house that you want to purchase. Then, write multiple equations that represent different options for purchasing that house using a mortgage. Create some graphic organizers to model your equations. **Speaking:** Explain the real-world meaning of each part of each equation that you wrote to the "judge."
Surface-Level SEL Tasks **Reading:** Read articles that discuss issues in financial literacy. **Writing:** Complete a worksheet on definitions of financial literacy terms. **Speaking:** Have small-group discussions on the importance and impact of financial literacy.	**Deep-Level SEL Tasks** **Reading:** Read articles about policy in poverty and science in poverty. **Writing:** Write a reflection on your individual belief for the driving force of financial illiteracy. **Speaking:** Debate whether science and mathematics or policy is more influential in helping combat financial illiteracy.	**Transfer-Level SEL Tasks** **Reading:** Read a family scenario that gives in-depth detail about the home the family is looking to buy, as well as other factors (such as income). **Writing:** Write and graph multiple equations that represent multiple mortgage options for the same house. **Speaking:** Present the family's options, and suggest which option you would choose as well as why you believe the family should choose that option.

Stage 5: Entry Event
A loan officer will come in and explain the basics of what he or she does as a job—"a day in the life of a loan officer." He or she will describe the basics of a mortgage and why helping the customer select the correct mortgage is important. Students will use a "know or need-to-know" format to begin the process of inquiry. Know or need-to-know categories will be: • Mortgages • Linear equations • Systems of linear equations