Capstone: Build Your Financial Future — Teacher Guide

Financial Algebra · Unit 10: Retirement & Inflation

5–8 class periods (or a 2–3 week project) | Individual (with peer review)

Skills: Skill 2, Skill 1, Skill 3, Skill 3, Skill 4, Skill 4, Skill 4, Skill 2, Skill 2

Overview

This capstone asks you to build a complete, realistic 10-year financial plan for a fictional version of your future self. You will choose a career pathway, build a budget, plan for transportation and housing, protect yourself with insurance, manage credit, and start investing for the future — then defend your plan in a final presentation.

Skills covered

- Estimate retirement savings (income-skill-02)
- Model inflation (budgeting-skill-01)
- Compare account contributions (banking-skill-03)
- Compare account contributions (credit-skill-03)
- Analyze purchasing power (borrowing-skill-04)
- Analyze purchasing power (housing-skill-04)
- Analyze purchasing power (insurance-skill-04)
- Estimate retirement savings (investing-skill-02)
- Estimate retirement savings (retirement-skill-02)

Required materials

- Student packet
- All unit cheat sheets
- Decision Labs for verification
- Spreadsheet software

Suggested pacing

Session	Focus
Days 1–2	Career, paycheck, budgets
Days 3–4	Banking, transportation, credit, insurance
Days 5–6	Investing, retirement, housing

Session	Focus
Days 7–8	Presentations and peer review

Implementation guidance

- Use checkpoints after each section with quick feedback.
- Allow students to reuse earlier unit projects as drafts.
- Students must never use real personal financial data.

Worked calculations

Example (dental hygienist)

1. $10,000 loans at 6.53% → $113.70/month.
2. Net pay on $70,000 (5% 401(k), $1,200 health): $50,745.80/yr ≈ $4,228.82/month.
3. 5% + 50% match up to 6% from age 22 at 6% → $1,205,746.77 at 67 (future $).

Sample student responses

> “My biggest tradeoff was housing vs. saving: renting with a roommate until 26 let me build a $9,000 emergency fund and invest 10%. At 28, buying only made sense if I planned to stay at least 8 years, so I chose to keep renting and save for a 20% down payment.”

Common misconceptions

- Building each section in isolation without checking the budget.
- Using gross pay in the budget.
- Ignoring inflation in later years.

Differentiation

Support

- Provide a section-by-section template and the cheat sheets.
- Reduce to five required sections.

Extend

- Add a family scenario with childcare costs.
- Include a market downturn in year 6.

Extension opportunities

- Exhibit night: students present plans to family or community members.

100-point rubric

Category (points)	Exemplary (100%)	Proficient (~80%)	Developing (~60%)	Beginning (~30%)
Financial understanding (20)	Correctly applies concepts from every unit and explains how decisions interact.	Mostly accurate explanations with minor vocabulary gaps.	Partial understanding; some concepts misapplied.	Little evidence of understanding.
Mathematical accuracy (25)	All calculations correct, labeled, and rounded appropriately; work is shown.	1–2 minor errors that do not change conclusions.	Several errors or missing work.	Calculations largely missing or incorrect.
Analysis & comparison (20)	Shows tradeoffs among sections and tests at least two “life happens” events.	Compares options with small gaps.	Comparison superficial or uneven.	Little analysis.
Justification (15)	Recommendation is supported by specific numbers and weighs non-financial factors and risks.	Mostly supported.	Mostly opinion.	No justification.
Communication & presentation (10)	Clear, organized, well-labeled tables, charts, and writing.	Minor clarity issues.	Hard to follow in places.	Disorganized.
Completion (10)	Every checklist item complete.	One item missing.	Two or three items missing.	Most items missing.

Total: 100 points. Alternative recommendations earn full credit when supported by accurate evidence.

Student documents (reference)

Pathway menu (fictional starting points)

Pathway	Training cost	Training time	Starting pay (est.)
Electrician apprenticeship	$3,000	4 yrs (paid ~$38,000/yr)	$62,000
Dental hygienist (AAS)	$24,000	2 yrs	$70,000
Accountant (BA)	$88,000 net	4 yrs	$60,000
Registered nurse (BSN)	$80,000 net	4 yrs	$78,000
Logistics coordinator (certificate)	$6,000	1 yr	$48,000
Graphic designer (BA)	$70,000 net	4 yrs	$52,000

Required plan sections

Section	Units used
Career & paycheck	1
Monthly budget (year 1 and year 5)	2
Banking & emergency fund	3
Credit plan	4
Transportation decision	5
Housing decision (rent now; rent or buy at 28?)	7
Insurance plan	8
Education cost & loans	9
Investing & retirement start	6, 10