

Building Positive Economic Derivatives 8-Step PBLP (Grades 7–12)

Objective: To explore the concept of economic derivatives as tools for generating stability, reinvestment, and long-term community growth. By analyzing how small businesses, financial models, and local investments can produce outsized ripple effects, students will design innovative, real-world solutions that represent balanced, sustainable economic impact—falling within the "middle of the bell curve," avoiding both extreme speculation and minimal influence.

Round Table

- ❖ **Opening Discussion:**
 - What does it mean to stimulate an economy?
 - Can smaller businesses or social enterprises be seen as economic derivatives? How?
 - Why do some financial instruments hurt communities, while others support them?
- ❖ **Purpose:** Introduce students to the dual nature of derivatives: as financial tools and metaphors for high-impact, small-scale economic activity.
- ❖ **Materials:** Excerpts from economic case studies, an article that explains how derivatives are relevant to economics.

Reflection Point

- ❖ **Discussion Questions:**
 - How do smaller entities generate an outsized economic impact?
 - What does it mean for a financial instrument to operate within the "middle of the bell curve"?
- ❖ **Materials:**
 - Reflection journals

Knowledge Setting

Science (S): Understanding the Science Behind Derivatives	<ul style="list-style-type: none">❖ Objective: Understand the environmental and human health impacts tied to economic booms and busts.❖ Activity: Analyze how pollution, climate change, or stress-related health issues increase or decrease during periods of rapid economic growth. Use environmental impact assessments and public health data to study ripple effects.
Technology (T): Fintech & Financial Modeling Tools	<ul style="list-style-type: none">❖ Objective: Explore how technology supports the development and tracking of derivative models.❖ Activity: Investigate fintech tools and spreadsheet-based tools used to track derivative movements across various economic entities.
Engineering (E): System Design for Economic Instruments	<ul style="list-style-type: none">❖ Objective: Understand the infrastructure behind how financial products are designed.❖ Activity: Research a system map showing the lifecycle of a financial product from idea → market → regulation → reinvestment.
Arts (A): Economic Storytelling	<ul style="list-style-type: none">❖ Objective: Understand how storytelling can be used to highlight the human impact of financial tools.❖ Activity: Research a mini-documentary that spotlights a community business

	that functions like a local economic derivative.
Mathematics (M): Measuring Economic Impact	<ul style="list-style-type: none"> ❖ Objective: Understand how formats showcase the community value of economic derivatives. ❖ Activity: Research ROI, impact ratios, or compare income multipliers across case studies.
Social Studies (SS): Policy & Financial Regulation	<ul style="list-style-type: none"> ❖ Objective: Explore the regulatory environment around economic derivatives. Activity: Analyze a financial policy or regulation and its role in supporting or restricting derivative-based economic activity.

Project Examples

<p>Progress Map for Project Delivery</p>	<p>❖ Step 1: Project Proposal</p> <p>Students gather foundational knowledge through a collaborative knowledge-setting session to prepare for a project-based learning process. They meet with community partners (if possible) and create a written proposal outlining the project focus and intended community benefit.</p> <p>❖ Step 2: Initial Project Proposal and Community Engagement Plan</p> <p>Students submit proposals and reflect on community input, refining their plans. They outline how the project addresses real-world needs and aligns with learning objectives.</p> <p>❖ Step 3: Research Progress Update</p> <p>Students conduct research and gather data by consulting with community partners to guide their project development and ensure accuracy.</p> <p>❖ Step 4: Draft of Final Project</p> <p>Students compile findings into a working draft of their final project proposal.</p> <p>❖ Step 5: Final Project Refinement and Approval for Implementation</p> <p>Students apply final feedback to strengthen their project and submit it for approval. Approved projects move forward to the community involvement and assessment phases outlined in the SOP.</p>
<p>Science (S): Community Health During Economic Fluctuations</p>	<p>❖ Project Example: Partner with a local public health agency or wellness nonprofit to analyze health data during periods of economic boom or bust (e.g., mental health, ER visits, pollution exposure). Students will develop an</p>

	<p>infographic report or community health advisory tied to local economic patterns.</p>
<p>Technology (T): Modeling Local Economic Growth through Fintech Tools</p>	<p>❖ Project Example: In collaboration with a small business development center or community & economic development, build a discounted cash flow spreadsheet to track growth patterns for small businesses. Generate visual projections based on the behavior of economic derivatives and recommend derivative-based solutions that could support economic development.</p>
<p>Engineering (E): Designing Ethical Financial Product Flows</p>	<p>❖ Project Example: Work with a local credit union or economic justice nonprofit to draft a process map for an ethical financial tool (e.g., a community lending circle, mutual aid fund, or rotating savings club). Visualize how the product works from intake to reinvestment and effectiveness.</p>
<p>Arts (A): Telling the Story of Local Economic Derivatives</p>	<p>❖ Project Example: Partner with a local arts council to spotlight the story of a neighborhood entrepreneur or business that acts as an economic derivative — driving stability, opportunity, and reinvestment within the community. Create a visual storytelling piece, designed for the council or public display, that highlights the human impact of financial tools and illustrates how small entities generate broad economic ripple effects.</p>

Mathematics (M): Analyzing Economic Multiplier Effects	<ul style="list-style-type: none"> ❖ Project Example: Using data from local business improvement districts or neighborhood economic councils, calculate impact multipliers from a set of businesses or organizations. Model spending cycles, ROI, and cost-benefit comparisons, creating infographics that visualize how economic derivatives operate in real time.
Social Justice (SS): Long-time Community Derivative Ripple Effects	<ul style="list-style-type: none"> ❖ Project Example: In collaboration with a local policy think tank or housing/equity advocacy group, investigate how financial tools—like loans, credit access, or community reinvestment policies—act as economic derivatives with long-term ripple effects on neighborhood stability.

Community Involvement

<ul style="list-style-type: none"> ❖ Objective: Students complete and implement their final approved projects in collaboration with their community partners, putting their solutions into real-world action. ❖ Activity: After receiving final project approval, students work directly with their selected community partners—such as neighborhood economic councils, nonprofits, local businesses, or civic organizations—to bring their projects to life. Whether launching a policy proposal, distributing a financial literacy tool, showcasing a community storytelling piece, or presenting research findings, students wrap up the implementation phase by ensuring their work addresses real-world needs.

Assessment

- ❖ **Objective:** Evaluate learning outcomes, project quality, collaboration, and impact.
- ❖ **Methods:** Use a rubric that measures content mastery, creativity, implementation, and community impact. Include self-assessments, peer reviews, and feedback from the community partner.

Feedback Loop

- ❖ **Activity:** Encourage reflection and growth after implementation.
- ❖ **Journal Prompt:**
 - How did hearing from community partners or peers shape your understanding of economic ripple effects and financial tools?
 - What part of your project had the strongest impact on the community—and why?
 - How did your project challenge or confirm your view of how small businesses or local initiatives contribute to economic stability?
 - If you could build on this project in the future, what would you improve or expand?

Resume Integration

- ❖ Survey career interest in financial institutions and community development. Help students articulate their learning for future opportunities. Students write resume bullet points that summarize their project role and impact. Provide sample templates or hold a resume workshop.

For more 8-Step Project-Based Lesson Plans check out our website at www.steamsinitiative.org

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