## Description

Student loan debt and delinquency is a widely reported problem among American millennials. This activity uses the problem-based learning method to analyze the costs and benefits of debt-financing a college education. Groups of two to three students will actively engage in a complex problem that requires selfdirected research and multiple iterations to their solutions. Groups should not expect to find quick, one size fits all solutions with little inquiry or experimentation. I will check in with students to provide feedback and direction.

Students will apply economic topics including decision analysis, tradeoffs, the economics of labor markets, and financial literacy. The activity has three parts, described below. Groups work on the majority of the activity together and individual students complete the third part. The second and third parts use the postmortem and pre-mortem techniques, respectively.

Post-mortem is Latin for "after death". In medicine, the term refers to the examination or process that takes place after death. In business, post-mortem refers to the analysis that takes place after a finished event, such as a completed project or release of a new feature. The analysis answers the question "what went wrong and why?". A pre-mortem is the hypothetical opposite of a post-mortem, where the discussion of what could go wrong happens at the beginning of a project. It assumes the project failed, and the discussion generates plausible reasons for its failure. ${ }^{1}$

## Part One

Research the problem of student loan debt among millennials. In no more than two single-spaced pages, answer the following questions. A thorough response will include at least five resources. Cite all sources on a third page.

1. Briefly describe the current trends in student loan debt among millennials.
2. Describe the effect student loan debt has on millennial's homeownership rates, credit score, and overall standard of living.
3. Research federal student loan repayment plans, briefly commenting on eligibility requirements, pros, and cons.

## Part Two: Post-mortem

Read the following scenarios for three student loan borrowers. Construct a post-mortem analysis for each borrower.

1. Create a monthly budget for each individual, leaving room for a reasonable student loan payment.
2. Select the optimal repayment plan for the borrower and calculate their monthly payment and total repayment amount using the student loan debt calculator at studentloanhero.com. Update the borrower's budget with this monthly payment.
3. What went wrong and why? Examine the tradeoff(s) the borrower faces. What could they have done differently in the past? What can they do differently in the future?
[^0]
## Jessica

Two years after earning a degree in sociology, Jessica struggles to find a job in her field that pays a reasonable salary. She takes an administrative assistant job at an accounting firm and discovers she is wellsuited for accounting which requires a CPA or MBA. After researching both options, she enters a part-time evening MBA program. Three years later, she accepts an accounting position with a $\$ 70,000$ salary. She contributes $6 \%$ of her pre-tax salary to her 401 K retirement plan. Jessica's student loan debt totals \$48,000 with a $5.7 \%$ interest rate. She has also accumulated $\$ 12,000$ in credit card debt with a $15 \%$ interest rate. Her monthly expenses (rent, car payment, insurance, food, entertainment, etc.) are \$2,400. Now 27 years old, Jessica would like to save toward a down payment on a home which she estimates to be around \$25,000.

## Sam

Sam attends a state university for two years, but lacks the readiness and maturity required for a college degree. Given her poor grades and family demands, she withdraws from the university to work full-time and support her family. She ignores her student loan payments, embarrassed that she has no degree to show for them. Five years later, she attempts college a second time at a for-profit college, where she benefits from small class sizes and seemingly limitless federal financial aid. Upon graduating, Sam takes a job as a medical assistant with a $\$ 44,000$ salary. Her student loan debt totals $\$ 82,000$ with a $5.9 \%$ interest rate. Sam does not have credit card debt. Her parents take care of her two children three days a week, alleviating some childcare costs. Her monthly expenses (rent, car payment, insurance, food, entertainment, childcare, etc.) are $\$ 2,200$. Sam is considering a part-time job to supplement her family's income.

## Zach

Zach is passionate about helping people in his community. He works for a non-profit human service agency and is determined to go to law school. Upon graduating with his law degree, he starts his own human service agency. Given the volatility of self-employment income, he earns anywhere from \$2,000 to \$5,000 per month. He takes on part-time work as a legal consultant, earning an additional $\$ 1,800$ per month. After consolidating his student loans, his debt totals $\$ 152,000$ with a $3.8 \%$ interest rate. Zach does not have credit card debt and is a thrifty consumer. He lives with a roommate, drives an old car with no car payment, and limits his entertainment and food expenses. His monthly expenses (rent, insurance, food, entertainment, etc.) are $\$ 1,800$. Now at 29 years old, Zach would like to save toward a down payment on a home and take a $\$ 2,000$ vacation once a year.

## Part Three: Pre-mortem

Construct a pre-mortem analysis of your financing your own education. ${ }^{2}$ Your analysis should apply what you've learned from parts one and two.

1. Estimate your student loan debt balance upon graduation, adding additional debt from any graduate education you are considering.
2. Create a post-graduation monthly budget for yourself, leaving room for a reasonable student loan payment.
3. Select your optimal repayment plan and calculate your monthly payment and total repayment amount using the student loan debt calculator at studentloanhero.com. Update your budget with this monthly payment.
4. What could go wrong with this plan and how can you prevent it? Identify specific problems or changes that could occur in your future, which would impact your budget, financial goals, and overall quality of life. How can you reduce the probability of these complications and/or minimize the effect they have on your long term goals?
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[^0]:    ${ }^{1}$ Paraphrased from the Harvard Business Review article "Performing a Project Premortem" by Gary Klein (2007).

[^1]:    ${ }^{2}$ I will keep your information confidential. That said, I understand you may want to keep some information private. Share as much as you feel comfortable with. If you prefer to share little information, perhaps you can analyze a hypothetical friend's pre-mortem.

