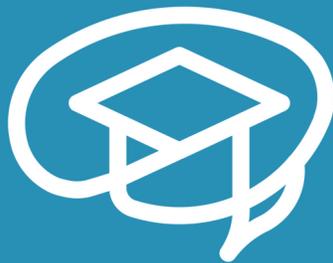


YOU BE THE FINANCIAL ADVISOR

AN INQUIRY LEARNING LESSON



NEVERBORE



“You Be The Financial Advisor”

An Inquiry lesson on personal finance

Teacher Notes:

This lesson was created to enable high school students in a personal finance, business or economics course to learn principles of personal finance by applying them to a fictional case study. The case study “Lydia and Tyler” was written by Prof. Donald Liu of the University of Minnesota and used in Minnesota’s 2016 Personal Finance Decathlon State Competition. It is included here with Prof. Liu’s permission.

The lesson may be used at any time during the course or as an extension project. The teacher is encouraged to read the entire case study and be prepared to offer explanations and supplemental materials to help the students in their inquiry. Some students may be able to manage the inquiry on their own, using free online resources, but others may need significant scaffolding.

Scheduling Notes:

The inquiry involves six separate steps, which should be separated by several days (or one week) to give students time to investigate and answer questions. In addition, presentations may take place on a seventh day.

Learning Targets:

Students will be able to:

- Build a personal understanding of key aspects of personal finance
- Advise a fictional young family on personal finance decisions, including debt management, savings, insurance, taxes and budgeting.
- Collaborate with peers to prepare recommendations in writing or as an oral presentation.

Key Concepts:

- Debt, loans, credit, debt management
- Savings, investment vehicles, retirement accounts
- Health insurance, car insurance, renter’s insurance, life insurance, disability insurance
- Taxes, tax rates, tax deductions
- Budgeting, spending, fixed and variable expenses

Materials:

- Activity 1 “Lydia and Tyler” case study, one per student
- Devices with internet access, one per group
- Chart paper, possibly post-it notes
- Teacher may wish to prepare lists of websites or background materials on topics like debt, insurance and taxes, or students can be free to seek their own resources



Procedures:

Explain to students that in this activity they are going to work as professional financial advisers to a young couple planning to get married. They will need to make recommendations in five areas:

- Debt management
- Savings
- Insurance
- Taxes
- Budgeting/spending

Explain to students that they will work in collaborative groups to develop their recommendations over six course sessions (with additional time in between), an introduction and sessions focusing on each aspect of the case. At the conclusion of each session, they will create written or oral recommendations to be shared. **Recommended:** Require students to submit slides addressing each of the recommendation questions at the conclusion of work on each session.

Assign students to groups, or allow students to select their own groups of 2-4 students.

Distribute the “Tyler and Lydia” case study (Activity 1) to students.

Session 1

In this session, students should read the entire case and familiarize themselves with Tyler and Lydia. Students may want to divide the reading within their group and explain each section to other group members, in jigsaw fashion. Encourage students to highlight unfamiliar terms and note down questions.

Once groups have had time to read the case study, the teacher should use chart paper to make two lists: “Information We Have” and “Questions.” Students may contribute to the lists verbally, or the teacher may ask students to write the information and questions on lists around the room. Another option is to have students in groups write “information” and “questions” on post-it notes and add them to the class lists. The lists should be saved and posted during future lessons.

Session 2

In this session, students will develop their recommendations about how Lydia and Tyler should manage debt. This includes student loans, car loans, credit cards, and potential mortgage debt. Recommendations should be as specific to the case as possible and also reveal that students understand the pros and cons of various types of debt and how interest rates impact repayment.

Ask students working in groups to re-read all sections of the case study that relate to debt, loans, borrowing or credit. Encourage students to review questions on chart paper that relate to these



terms as well. Students should research each type of debt to understand its benefits and costs before making recommendations.

Recommendations should address these questions:

- How quickly should Lydia and Tyler pay down their existing debts?
- Should Tyler borrow money to go to law school? Why or why not?
- Should Lydia and Tyler buy a new car? Why or why not?

Students should prepare recommendations in writing or as an oral presentation before the next session.

Some helpful online calculators for calculating debt repayment are:

Payoff Loan Calculator

- <https://www.calcxml.com/calculators/pay-off-loan?skn=#results>

Financial Aid Loan Calculator

- <http://www.finaid.org/calculators/loanpayments.phtml>

Mortgage Payment Calculator

- <http://www.interest.com/mortgage/calculators/mortgage-calculator/?MSA=5602>

Session 3

In this session, students will develop their recommendations about how Lydia and Tyler should manage savings. This includes a “rainy day” fund as well as saving for a car, more college, their wedding, future children (and their education), retirement and any other goals in the case study. Recommendations should be as specific to the case as possible and also reveal that students understand the pros and cons of various types of savings and investment.

Ask students working in groups to re-read all sections of the case study that relate to savings, retirement and long-term goals. Encourage students to review questions on chart paper that relate to these terms as well. Students should research each type of savings and investment vehicle to understand its benefits and costs before making recommendations.

Recommendations should address these questions:

- How much should Lydia and Tyler have in a “rainy day” fund? Why?
- How much should they save for retirement? Why?
- What type of retirement funds should they have? Why?
- How much should they save for their own education or the education of their future children? Why?
- What type of funds should they use to save for educational expenses? Why?



- How much should they save for a house? Why?

Students should prepare recommendations in writing or as an oral presentation before the next session.

Some helpful online calculators for calculating savings and investments are:

Net Calculator

- <http://www.calculator.net/loan-calculator.html>

Retirement Calculator

- <https://www.investor.gov/additional-resources/free-financial-planning-tools/compound-interest-calculator>

Session 4

In this session, students will develop their recommendations about how Lydia and Tyler should manage insurance. This includes health insurance, car insurance, renter's insurance, life insurance, long-term disability insurance and any other types of insurance they may need. Recommendations should be as specific to the case as possible and also reveal that students understand the pros and cons of various types of insurance – and the use of deductibles to impact premiums.

Ask students working in groups to re-read all sections of the case study that relate to insurance. Encourage students to review questions on chart paper that relate to these terms as well. Students should research each type of insurance to understand its benefits and costs before making recommendations.

Recommendations should address these questions:

- Should Lydia and Tyler consider joint insurance under one employer or individual insurance elsewhere? Why?
- Should they have additional insurance on their cars? What will happen to their car insurance if they buy a new car?
- Should they have renter's insurance? Why or why not?
- Should they have additional life and long-term disability insurance? Why or why not?

Session 5

In this session, students will develop their recommendations about how Lydia and Tyler should manage taxes. This includes whether they should file a joint return or separate returns and any strategies for reducing their tax liability, such as retirement savings, charitable giving, etc.



Recommendations should be as specific to the case as possible and also reveal that students understand personal income taxes and how to reduce their tax burden.

Ask students working in groups to re-read all sections of the case study that relate to taxes. Encourage students to review questions on chart paper that relate to these terms as well. Students should research personal income taxes and deductions and exemptions to understand various strategies before making recommendations.

Recommendations should address these questions:

- Should Lydia and Tyler file a joint return or individual returns? Why?
- What steps can they take to reduce their tax burden?

Session 6

In this session, students will develop their recommendations about how Lydia and Tyler should manage their monthly budget. This includes identifying fixed v. variable expenses, needs v. wants, and also savings recommendations from Session 3. Recommendations should be as specific to the case as possible and also reveal that students understand key elements of a household budget, including housing costs and utilities, transportation costs, internet/phone, entertainment and charitable giving.

Ask students working in groups to re-read all sections of the case study that relate to budgeting and spending. Encourage students to review questions on chart paper that relate to these terms as well. Students should research costs of typical household items and include key expenditures from previous sessions, including (if applicable) a car, law school, insurance, etc.

Recommendations should address these questions:

- How much should Lydia and Tyler plan to spend in key budget areas?
- How much will they be able to save each month?
- Will they be able to manage their monthly budget and meet their stated goals, or do they need to revisit their goals?
- How can they save money on monthly expenses as well as long-term expenses?

Following Session 6, students should prepare their final recommendations, addressing all areas addressed in the lessons.



Activity 1

FAMILY FINANCIAL PROFILE

FAMILY MEMBERS

Lydia and Tyler have known each other for more than five years and have decided to get married this summer. Lydia feels strongly that, before walking down the aisle, the couple should consult with a financial advisor to go over their finances and come up with a financial plan that they both can live with. While a bit hesitant, Tyler does not think that it is that horrible of an idea. You are the financial consultant whom Lydia and Tyler retain.

Lydia holds a bachelor's degree in mathematics and a master's degree in math education. For the past eight years, she has been working as a full-time math teaching at The Blue Ridge Mountain High. Tyler holds a bachelor's degree in political science and has been working as a full-time lobbyist assistant for a lobbyist firm called "The Truth Telling" during the past four years. Prior to that, Tyler worked as a substitute social studies teacher for three years at an area high school. The ages and gross annual incomes of the two individuals are reported in the table above.

TAXES

Both Lydia and Tyler think that they should file their income taxes jointly once married. They figure that about 25% of their combined gross income will be withheld for the purposes of federal and state income taxes, and FICA taxes. (Note that for purposes of this case study the 25% withheld does not



include any pre-tax deductions for health insurance and employer-sponsored retirement plan.) In allocating their after-tax income into spending, saving and sharing, Lydia and Tyler need to come to an agreement as to what their goals are in each of the five areas (see below) they consider important and how to accomplish the goals.

GOALS

- (1) **Managing debt:** Lydia understands the importance of living within their means and, unless there are good reasons for doing so, she would like the new family to be as debt free as possible. Tyler is more care-free and has so far managed to accumulate a non-trivial amount of debts.
- (2) **Building reserve:** Lydia understands the importance of saving for rainy days. Ideally, she would like to build an emergency fund enough to cover 6 months of the household's after-tax expenditures. As to Tyler, saving is a habit that he is yet to acquire.
- (3) **Having children:** The couple plans to have their first child in three years, and a second child two years thereafter. Understanding the power of compounding interest, Lydia would like to save for the children's college education as soon as feasible.
- (4) **Seeking a post-graduate degree:** Tyler does not feel that he has a knack for being a lobbyist. He is thinking about pursuing a law degree, but he would need to quit his current job to become a full-time student. Lydia is supportive of the idea and believes that Tyler has the tenacity and intellectual capacity to complete a law program, which will take three years if going full-time. Before committing to the venture, however, she wants to know the future benefits and the opportunity costs of this undertaking.
- (5) **Saving for retirement:** Both Lydia and Tyler understand the importance of saving for their retirement. Social Security benefits aside, they would like their pensions to provide at least 70% of their pre-retirement income. They both plan to retire when they turn 66.

SAVINGS

- **Savings account:** For the past several years, Lydia has managed to set aside 8% to 9% of her monthly income in her savings (currently, \$400 per month). The current balance is \$33,000, with annual percentage yield currently hovering around 1%. Tyler does not have a savings account.
- **Checking account:** Both Lydia and Tyler directly deposit their paychecks to their individual checking accounts, from which each pays her/his monthly expenses.
- **Retirement fund:** Lydia contributes 7% of her salary to her pension, with the school district matching 9%. The current value of her pension is about \$71,000. With Truth in Telling, Tyler has an option for a 401K, which has a \$0.50 on the dollar match for the first 6%. However, he has not yet elected to participate; not has he chosen to put money in an individual retirement account, such as a Roth IRA.

DEBT



- **Car loan:** Lydia drives a 2010 Nissan Altima 2.5S that is paid off. Tyler owns a 2002 Volkswagen Jetta which is also paid off. However, the Jetta needs to be replaced in two years. Both cars have liability coverages.
- **Student loan:** Lydia doesn't have any student loan debt. Tyler's student loan debt is currently at about \$10,000, for which he pays \$191 a month. The interest rate is 5.5% and he has 60 monthly payments remaining.
- **Credit card debt:** Lydia has no credit card debt. Tyler carries a balance of \$5,000 on his Visa card which has a 17.6% APR.

MAJOR EXPENSES

- **Housing:** Lydia pays \$1,050 per month for her one-bedroom apartment and Tyler's rent is \$950 per month. The couple is considering buying a three-bedroom house for their future family, aiming at a price range of \$250,000-\$275,000 in a neighborhood that is close to Lydia's school. They are not sure if they can afford such a house and would like to know whether they should buy now or rent a two-bedroom apartment for a couple of years until they have their first child.
- **Health insurance:** Both Lydia and Tyler have medical and dental insurance through their respective employers. The premium is \$200 per month for Lydia and \$250 for Tyler.
- **Life and Long-term disability insurance:** Lydia has group term life insurance, paid through her employer, of 2X her salary. Tyler has group term life insurance, paid through his employer, of 1x his salary. Neither of them has any long-term disability and long-term care insurance.
- **Education:** If Tyler is to pursue a law degree, not only would he need to quit his current job, he would also need to secure additional student loans to pay for the tuition, fees and other related expenses. The couple needs advice on how to manage their reduced income when Tyler is at school and the best way to proceed with the student loan arrangement.
- **Others:** Needless to say, Lydia and Tyler want to figure out how to budget their monthly and annual expenses on food, transportation, insurance, utilities, entertainment, vacations, charitable giving, etc.

SOME QUESTIONS TO CONSIDER

In your final recommendations, you should consider addressing the following questions and any other additional recommendations for the family that is about to be formed:

1. How can they control their spending to live within their means?
2. What can they do to pay back their debts?
3. What can they do to build their savings?
4. What are the factors they need to consider in deciding whether Tyler should pursue a law degree? What is your recommendation and why?
5. If the decision is in favor of going back to school, what are the steps that the couple can take to cope with the accompanying financial burdens?



6. What are the factors they need to consider in deciding whether they should buy a house now or rent an apartment for a couple of years? What is your recommendation and why?
7. What are the steps they can take to build their children's college education fund?
8. What are the steps they can take to address their retirement needs?
9. Do they have sufficient protections/ Are there additional insurance policies they should consider?
10. How should they best handle their federal and state income taxes?

JUDGING RUBRIC

Judging Criteria	Points
Knowledge of personal finance issues displayed in recommendations	50%
Relevance and comprehensiveness of recommendations	30%
Teamwork displayed in process and recommendations	10%
Presentation and communication skills	10%