

Budgeting now but saving for later: Preparing students for the employment market

Mitchell Franklin
Le Moyne College

Michaele Morrow
Merrimack College

ABSTRACT

This teaching note requires students to watch videos, view online course material, and create a budget to choose between two job offers to develop an understanding of how personal budgeting, taxes, and retirement savings are linked. Students first view and read materials that explain the concept of compound interest and illustrate how a longer time horizon for retirement savings can result in significant differences in wealth accumulation. Students are then directed to online resources – videos and blogs – that illustrate techniques and provide resources for savings and budgeting. Students are then given two fictional job offers and asked to make a choice between the two, considering the effects of budgeting, retirement savings, taxes, and personal preferences. Students demonstrate technical skills and critical thinking skills through the analysis of various options that do not lead to one correct answer, but instead an answer that is supported by analysis and comparison of alternatives.

Keywords: retirement planning, budgeting, tax planning, tax education, savings, job offer evaluation

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INTRODUCTION

The millennial generation is frequently cited as one that struggles with financial literacy, budgeting, debt and planning for the future. Perhaps ironically, this generation is better educated than previous generations, but knowledge of math does not translate to financial literacy. A survey from PwC, using data from the 2012 National Financial Capability Study, reported that in a sample of 5,500 millennials, only 24% could demonstrate basic financial knowledge, while only 8% demonstrated high financial literacy.

What is the result of the lack of this widespread financial literacy? The PwC report cites some troubling statistics about debt, financial position, and retirement planning. The oft-cited statistics about debt are true – 80% of college-educated millennials are in long-term debt and over half of those are concerned about their ability to repay that debt. Even more troubling – over half of millennials carry a balance on their credit card account, nearly 30% regularly overdraw their checking accounts, and almost half say they could not come up with \$2,000 on short notice. And when cash runs short, this generation is likely to turn to so-called alternative financial services (payday loans, pawnshops, auto title loans) or worse – for the measly 36% that have a retirement account – take a loan against or cash out retirement.

Even though so many millennials struggle with managing their financial lives, they are reluctant to ask for help – the PwC report finds that only 12% and 27% were willing to seek professional help on debt management and savings and retirement, respectively. Financial literacy is also not widely required for students to graduate high school – as of 2016 only 17 states required that students took a course that included some “personal financial instruction” while only 4 states require a personal financial planning course (Prah 2014; Schwarz 2016). While many involved in the movement to increase financial literacy feel that it should be taught as early as preschool, this has not yet gained in popularity (Schwarz 2013). Many argue that parents should provide financial literacy education and illustrate good habits for children to mimic.

Regardless of the ongoing debate, there is currently a gap in financial literacy knowledge for many of the students in our undergraduate accounting courses and we are well positioned to address it. This project is intended to show students how some of the most important decisions they make upon graduation should closely consider budgeting, taxes, and retirement savings in addition to personal preferences. It also provides tools to assist in the decision-making process addresses the gap in financial literacy knowledge for the current generation of students. It uses videos, blogs, articles, and online tools that speak to what millennials expect and are comfortable with they seek information and make decisions.

Guthrie and Nicholls (2015) also introduce students to financial literacy through an in-class project. However, this project differs from theirs in several ways. First, their project provides students with specific estimates on costs for the budget, while this project requires students to research these costs as part of the project. While some students provided feedback that they would like more guidance on cost estimates, the process of researching basic costs of living stimulates more critical thinking and careful consideration of spending. Thus, this case is more self-directed and can be adapted for students at a higher level of learning – it is appropriate for undergraduate students in their Junior or Senior year of college.

This project also strongly emphasizes retirement savings since it requires students to consider retirement savings at early stages of their career and project earnings to see the value of early saving for retirement. In addition, it emphasizes the need for savings in general, asking

students to plan for and consider emergencies that can cause significant budgetary stress. Finally, this project is designed to be interactive and engaging to millennial and Gen Z students. It uses multimedia resources and videos geared to millennials to learn basic principles of financial literacy to help them complete the project.

This project uses a case setting to mimic the real-world scenario – for Accounting students – of competing job offers and to practice new skills that will directly impact their lives. The case method requires students to make decisions at a level of mastery that is greater than isolated homework assignments from a textbook and are more effective measures of learning (Bonk and Smith 1998; Albin and Crockett 1991). Harrington, Smith and Bauer (2016) examine the intent of college students to budget based on behavior and show that attitude and behavior control have a positive influence on budget behavior. The exercise in this case meets their definition of “low-effort” method of budgeting that can help a student recognize over-spending while increasing interest in maintaining a personal budget. Finally, this project also allows students to learn in a manner consistent with improved retention of professional skills as presented in der Merwe (2013).

THE CASE

Congratulations, you graduated with your Masters in Tax! And, as luck would have it, you have also already completed three parts of the CPA exam...you will take the fourth part shortly after starting your new job. Speaking of a new job, you have two great offers to choose from. You like both firms equally – the people and possible work at each are just what you are looking for! – so you decide to get together with your tax group to crunch some numbers and make a decision with your head AND your heart. You must make a decision by December 1st, both jobs start in January of next year.

Job Offer from AmP

The first job offer is from the Large IV firm, AmP, located in downtown City. The yearly salary is \$64,000. AmP also offered to reimburse you for your costs to take the CPA exam (which you charged to a credit card, yikes!), and will give you a \$10,000 bonus when you pass all four parts of the exam. The only catch is that you work for 3 years with AmP or you will need to repay the bonus.

AmP also provides you with retirement and healthcare benefits, amongst other things. A quick calculation lets you determine that your healthcare premiums will cost \$250 per month. You can also take advantage of the pre-tax t-pass program and buy a monthly pass, since you would live in East City with a roommate and wouldn't need a car. Your share of the rent would be \$1,500. AmP also has a gym on-premises for employees only. They have also promised to buy you a phone, a laptop, and provide free coffee all day every day! Retirement benefits are also attractive – if you put in 5% the employer match is double – but they do only offer a choice of a regular 401(k). AmP will also pay for your CPA license fees and continuing professional education each year.

Job Offer from BiD

The second job offer is from a Middle XIII firm, BiD, located in Suburb, State. The yearly salary is \$76,000. BiD doesn't offer to reimburse you for your CPA exam costs but mentioned that they offer a \$5,000 bonus when you pass all four parts of the exam. You would need to work for BiD for 4 years or repay the bonus.

If you work for BiD, you will move to Suburb and live with your cousin, who has agreed to rent you half of a duplex for \$1,000 per month. You would also need to buy a car to get to work and to get to Boston to see your friends. BiD's office doesn't have free parking, which is a bummer – that would cost \$300 a month. BiD does have an option for pre-tax parking benefits that you could use.

Your healthcare options with BiD are a little more expensive at \$275 per month. Like AmP, they have promised to buy you a phone, laptop, and provide free coffee all day every day. BiD offers a Roth 401(k) and a traditional 401(k). They double employee contributions up to 5% (meaning they put in 10%). BiD pays for CPA license fees and continuing professional education each year, too. Finally, BiD doesn't have an on-premises gym, but you can get a discounted gym membership at FIT 4EVER gym for \$35 a month.

Other Estimated Monthly Expenses

Other than rent, you have several other monthly expenses that you need to consider:

1. Student loans - \$300/month (you want to pay more if you can)
2. Renter's Insurance - \$100/month
3. Internet - \$75/month
4. Water – \$30/month
5. Gas - \$30/month
6. Electricity - \$80/month

If you live in East City, you won't have a washer and dryer, so you will need to figure out the cost to send laundry out or go to the laundromat. If you live in Suburb, you will have a washer and dryer, but it will increase your water, gas, and electricity costs slightly each month from the estimated. But, dining out and groceries will be cheaper in Framingham than if you live in East Boston. You also can't decide whether you want cable, Netflix, Hulu, Amazon Prime, or something else to watch your favorite shows and movies. Oh yeah...you will need to pay for gas and other things to drive around and maintain your car. If you live in the city you can just take public transportation, but you know that you will often be unable to resist an Uber, especially if it is cold outside! There might be other expenses you forgot; hopefully the Budget Worksheet can jog your memory.

Budgeting for Travel

One last wrinkle to your budgeting plans...your best friend suggested that you take a trip after tax season to celebrate passing the CPA exam (let's hope that didn't jinx it!); the two of you are tentatively planning to go hiking in Iceland. That sounds great – but the trip will cost around \$3,500 if you go in the height of busy season! Maybe you should wait until mid-September to

take the trip, when the price will drop to \$2,500? You need to decide on that soon, too, since the price of plane tickets will go up in the next few months.

CASE REQUIREMENTS

Module 1 – Retirement Savings

To start this module, watch these two videos on retirement savings:

1. The Power of Compound Interest: <https://www.youtube.com/watch?v=wf91rEGw88Q>
2. Retirement Savings Based on Birthday? Start Saving Now: <http://www.cnbc.com/2015/10/20/retirement-strategies-based-on-birthday-start-savings-now.html>

Next, view the PowerPoint presentation called “Retirement Savings.” Be sure to open the slides in Notes Pages view (Go to View, Notes Pages) so you can read all comments and explanations.

Assignment 1

After you have read through the materials provided, on a piece of paper – write down:

1. Two things you learned that will help you in the future
2. At least one question that you still have related to the material.
3. Go to Blackboard and read the JBCA WSJ article by Charlie Wells: *The Biggest Money Mistakes We Make – Decade by Decade*.

Module 2 – Budgeting

To start this module, Google “budgeting for millennials” or something similar. There are half a million results – this obviously an important topic. The goal of this module is to expose you to budgeting, budgeting techniques, and what to expect from your first big job offer and managing a household.

Next, read these four articles about budgeting and budgeting apps:

1. Key Budget Tips for Urban Millennials: <https://www.thestreet.com/story/13572874/1/key-budget-tips-for-urban-millennials.html>
2. How to Budget for Beginners: A Six Step Guide: <http://www.thefinancegirl.com/how-to-create-a-personal-budget-for-beginners/>
3. Best Budgeting Apps for Millennials: <http://www.ibtimes.com/best-budgeting-apps-millennials-3-money-saving-options-young-adults-2118739>
4. 7 Free and Simple Budgeting Tools: <http://money.usnews.com/money/blogs/my-money/2015/01/14/7-simple-and-free-budgeting-tools>

You might also want to spend some time here: <http://brokemillennial.com/category/budgeting/>.

Now, go and watch this video: <https://www.youtube.com/watch?v=RjukJ-H78pc>, which is a sampling of the material from the folks at <http://www.personalfinancesquad.com/> and on twitter here: <https://twitter.com/FinanceSquad>.

Assignment 2

For this assignment, you will use a budgeting spreadsheet posted in Blackboard to help you choose a job and place to live. This spreadsheet is called “Budget Worksheet” and has four tabs:

1. Personal Monthly Budget – use this for your main analysis and decision making
2. Savings Estimator – use this to budget for any unbudgeted expenses, like vacations or large purchases
3. Buy vs. Lease a Car – use this only if you decide you need to purchase a car
4. Monthly College Budget – not needed for this assignment, but maybe for your life!

To complete this assignment, use the Budget Worksheet to answer the following:

1. Which job do you choose? Why? Give some of the practical reasons as well as the monetary reasons.
2. What is your biggest goal for your money? Saving? Paying off debt? Travel? Why?
3. Speaking of, do you take the trip to Iceland? When do you go? How do you plan to pay for it?
4. Both job offers offer retirement plans as a compensation benefit. Compare and contrast all retirement options available with both employers. As part of a long-term retirement strategy which job offer has the best retirement savings option? Explain why.

DISCUSSION QUESTIONS

1. What is the impact of compound interest on savings?
2. Conservatively estimating an average annual return of 5% per year, if you invest \$300 per month to the account beginning at age 22, what will the balance in the account be when you are 70? Assume that you decide to wait until you reach 30 years old to begin adding to the account, what will the balance in the account be when you are 70?
3. Explain how tax advantaged investments could alter the growth and ending balances in those accounts. What are some tax-advantaged investment options to consider?
4. Review the largest expense items in your budget. Are they required for survival? If the largest expense items are discretionary - do they really matter, or could they be reduced or eliminated? How could this be done?
5. How would your budget look without debt payments? What could be changed in your current budget to accelerate the pace at which you plan to pay off debt? How quickly could you conceivably pay off your debt if you reorganized your budget?
6. Budgets are never 100% accurate. In addition to planned expenses, there are always unplanned expenses – these could be unplanned medical expenses, emergency repairs to a house or car, etc. If one of these unplanned issues were to come up this month, how would you cover these costs without creating a budget shortfall?
7. What is your biggest goal for your money? Saving? Paying off debt? Travel? Why?
8. Do you take the trip to Iceland? When do you go? How do you plan to pay for it?

CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDELINES

Case Learning Objectives

The learning objectives for this project are to develop skills to understand principles of budgeting and personal finance and then apply those skills to a realistic situation that students will encounter in the near future, with an overarching goal that students are better prepared for real-life decisions concerning retirement savings, budgeting and taxes. For those students who pursue a career in tax, the decisions highlighted in the assignments are ones they might be asked to help future clients navigate. The critical thinking skills required to complete this assignment also complement the skills required on the revised Uniform CPA examination (Franklin and Morrow 2017). Specifically, the learning objectives are to:

1. Explain the impact of compound interest on savings
2. Explain the importance of saving early and often
3. Create a personal monthly budget to estimate and track spending
4. Evaluate a budget with mutually exclusive opportunities and select the one best suited to budget position

Implementation Guidelines

The project does not easily lend itself to a rubric for grading. A correct answer for one student might be a completely different answer for another student. However, students should watch the videos, read the articles, and have topics and questions prepared for class discussion in addition to the main deliverable, which is preparation of the budget worksheet and answering the associated questions. In general, students will realize that preparing a budget is complex and subjective, and often requires choices that consider the future rather than the immediate situation. Students might also recognize for the first time how significant the effect of payroll taxes, income taxes, saving for retirement and paying for fringe benefits can be on take-home pay. Some students might also be surprised at how quickly “necessities” like water, gas, and electricity can add up each month.

In-Class or Out-of-Class

An in-class discussion should address these items in the context of the assignment, and it might be helpful to discuss how and why these expenses might fluctuate and how to plan for them (e.g., more air conditioning in the summer = higher electricity bill). Instructors might also find it necessary to discuss why the topic of money is taboo in some cultures and how that could negatively affect financial decisions and relationships.

The authors created this project for use in an undergraduate individual income tax course. However, as discussed below, it has been edited for use in a Foundations of Business course for non-business undergraduate students and could be used in any personal finance class or even in a financial accounting course. The project was not designed to teach specific tax skills, but it does require a basic understanding of payroll taxes and income taxes not included in the assigned materials. The material students watch and read related to retirement planning does not require any prior knowledge but would benefit from a robust in-class discussion centered on student questions after viewing and reading the material. If the project is used in an income tax course, it

can provide a jumping-off point for discussion about tax policy and tax planning for the long-term, and how assumptions today can impact the long-term.

Group or Individual

The authors initially assigned this project as one complete online module in a face-to-face undergraduate individual income tax course to be completed with already-established student groups. In this instance, students were given no additional information in class in advance of the assignment and they were expected to draw upon payroll and income tax concepts discussed earlier in the semester. In the aforementioned Foundations of Business course – all students were non-business majors - the instructor assigned videos and readings in advance of a detailed in-class discussion about payroll and income taxes and retirement options. Students then completed the projects on an individual basis after the class meeting. An instructor using this project could easily break it up and assign some modules on an individual basis and some on a group basis.

Additional Implementation Suggestions

For many of the same reasons highlighted in Guthrie and Nicholls (2015), this project without edits is best suited for use in an accounting class. It uses an accounting job offer, where the process and rewards structure can differ significantly from job offers in other disciplines. The authors specifically selected a course taken approximately one year before students will be forced to make these same decisions with actual job offers. In addition, students will have completed coursework in financial and managerial accounting just prior to taking this course. Many of the tasks that students are required to complete for this assignment can serve as a capstone function to integrate principles such as budgeting with concepts of forecasting, cost behavior, savings and long-term decision making to income and tax impacts of financial and managerial decisions. Further, research shows that there is significant disparity between professional accountants and level of personal financial literacy (De Clerq and Venter 2009). This project can help close many of these gaps before graduates enter professional accounting employment.

This project could also be used in a personal finance course, but some states specifically do not permit courses in financial literacy to count as approved business or accounting coursework for CPA certification¹. At the same time, academic institutions will not allow financial literacy coursework to meet liberal arts requirements. Due to specific state regulations combined with college curricula requirements, many college students in an accounting program are not able to take a course in financial literacy as a result. In these situations, an upper level major course may be the only effective place to ensure that students have the necessary skills that this assignment delivers.

Finally, one of the schools where this project is used is a Jesuit/Catholic private institution. This institution operates under principles of *Cura Personalis*. This principle requires the education of the whole person. To accomplish this goal, the accounting program must specifically teach goals not only necessary for success in the decisions made for clients and

¹ <http://www.op.nysed.gov/prof/cpa/cpa150hour.htm>. New York is one state that will not allow personal finance to count towards business or accounting coursework. Though a course in the area can count towards the 150 hour requirements, restrictive curriculum requirements of specific schools make it difficult or impossible for a student to complete a course in financial literacy under this condition. This is the case at the institution where this project is utilized.

stakeholders but educate the student for the whole person and how decisions impact them personally. This assignment is critical to principles of *Cura Personalis* to ensure that the graduate additionally has the life skills that a Jesuit/Catholic institution would expect of a graduate.

TEACHING NOTES

Measurement of Learning Objectives and Discussion Questions

1. Explain the impact of compound interest on savings

Measuring whether students understand the powerful impact of compound interest on savings can be determined through classroom discussion with reference to Module 1 readings and questions and previous finance courses (if applicable). To stimulate critical thinking, the instructor could further demonstrate the impact of savings using one of the many savings calculators available on the Internet. Two scenarios that might be directly applicable – forgoing savings to take a vacation or withdrawing money from a retirement account to pay for a vacation. Simply comparing the balance in an account after 40 years where dollars are continually added versus one where withdrawals are made for vacation is powerful. More powerful is illustrating the consequences of an early withdrawal from a savings account – something that 15% of millennials said they do – by showing both the forgone compound interest and the tax effects (taxable income plus 10% penalty).

Students should be able to explain the basic impact of compound interest, but also the long-term impact of using savings from other purposes. As part of the project, students are asked to show how they would cover unplanned emergency expenses. In cases where they decide to borrow from savings to pay for these expenses, they should be able to explain the impact that taking \$1,000 from savings today has over a period of 40 years because of the effect of compound interest.

2. Explain the importance of saving early and often

Students will not understand the importance of saving early and often without a solid understanding of compound interest (LO1). Once they grasp that concept, students should be able to explain that saving early intersects with the element of compound interest to create the most significant growth and the largest balance at retirement. Many students will illustrate their understanding of this through their choice of job offer or declining to take a vacation – perhaps choosing the job with the “best” retirement savings that allows for the cheapest cost of living and more savings, and/or deciding to save or pay down debt rather than go to Iceland on vacation.

An additional in-class exercise could direct students to use an online savings calculator and answer the following questions:

- Based on your budget, you determine that you can invest \$300 per month in a retirement account. Once funds are invested in the retirement account, they will remain there until you retire, which you predict is age 70. Conservatively estimating an average annual return of 5% per year, if you invest \$300 per month to the account beginning at age 22, what will the balance in the account be when you are 70? Assume that you decide to wait until you reach 30 years old to begin adding to the account, what will the balance in the account be when you are 70? (For purposes of this calculation, assume that you set aside

\$300 per month in your interest-free checking account during the year, and at the end of the year make one deposit of \$3,600).

- Assume that you did not consider taxes in the previous ending balance estimates. Explain how tax advantaged investments could alter the growth and ending balances in those accounts. What are some tax-advantaged investment options to consider?

From this exercise, students should realize they have many choices when it comes to saving for retirement, and they should realize the impact saving an extra \$100 per month at the expense of leisure activities is significant over their working lives. Importantly, the calculations are simple enough for students to easily see this impact and for it to influence behavior consistent with Harrington et.al (2016). An in-class discussion should encourage students to think about vehicles such as the 401(k) and IRA, and the instructor can explain the difference between the traditional and ROTH options for an IRA and illustrate the online calculators to show the tax impact of these tax-advantaged savings vehicles. When students see this, many of them will have second thoughts about the trip to Iceland. This discussion will serve as a bridge from the concepts learned in a taxation class to those needed for financial planning.

3. Create a personal monthly budget to estimate and track spending

The materials assigned in Module 2 expose students to a variety of resources and tools related to budgeting. Students are specifically asked to Google “budgeting for millennials” so they can see the volumes of blogs, articles, and videos out there related to financial literacy for their generation. The resources also fit formats they are used to – videos to learn, apps to save, a twitter feed with a daily tip, etc. The assignment requires them to closely evaluate a detailed job offer and the resulting living situation and expenses. To complete the assignment, they must plug the numbers into Excel and make a series of decisions about needs versus wants - eliminating items based on budgetary constraints – that are a direct consequence of where they chose to work and live. Students are asked to use the Budget Worksheet illustrated in Exhibit 2 to record this personal monthly budget. As mentioned above, this will generate a robust – and sometimes uncomfortable – in-class discussion where the instructor can address any and all questions related to budgeting and evaluating a job offer. The following critical thinking questions will also require students to reflect on their individual budgets:

- Review the largest expense items in your budget. Are they required for survival? If the largest expense items are discretionary - do they really matter, or could they be reduced or eliminated? How could this be done?
- How would your budget look without debt payments? What could be changed in your current budget to accelerate the pace at which you plan to pay off debt? How quickly could you conceivably pay off your debt if you reorganized your budget?
- Budgets are never 100% accurate. In addition to planned expenses, there are always unplanned expenses – these could be unplanned medical expenses, emergency repairs to a house or car, etc. If one of these unplanned issues were to come up this month, how would you cover these costs without creating a budget shortfall?

The answers provided by students to the above questions will be based on the choices they made in their individual (or group) budgets. Typically, the largest budget items will be debt and housing payments. Students should recognize the importance of savings and mention the balance of savings versus debt. Ideally, they won't compromise savings to pay off debt, though some might choose to do so in the short-term. An answer that would demonstrate an understanding of the budget process might be that unplanned expenses will cause a short-term

reduction of discretionary expenses such as dining out and entertainment. The same reduction in discretionary expenses should also be a consideration in the early payment of debt. A less than ideal answer, of course, would be reducing savings to pay down debt before considering reducing discretionary expenses.

4. Evaluate a budget with mutually exclusive opportunities and select the one best suited to budget position

The purpose of a budget is to analyze alternatives and make decisions that satisfy needs as well as wants. In Assignment 2, students create a budget with monthly expenses that allows them to see the budgetary impact of selecting one alternative over another. Exhibits 3 and 4 include the Savings Estimator Worksheet and the Buy vs. Lease a Car Worksheet that they use to evaluate a few of these alternatives. The two questions given in the assignment serve as a jumping off point for class discussion:

- What is your biggest goal for your money? Saving? Paying off debt? Travel? Why?
- Do you take the trip to Iceland? When do you go? How do you plan to pay for it?

Students will reach a conclusion based on monetary and non-monetary considerations. Students should be able to provide an opinion on the best alternative for their goals and lifestyle, while supporting the conclusion with specific references to their budget calculations. This is a great opportunity to talk about both the monetary and non-monetary reasons for making these decisions – and the weight different people place on the factors in these decisions. Giving students a chance to open up about this generates the most engaged and memorable class discussion.

CLASSROOM VALIDATION

This assignment was recently used by the authors in an undergraduate individual income tax course at separate small private universities in the Northeast. For those classes, the assignment was given at the end of the semester, so students had been introduced to most of the concepts in the course, including payroll and income taxes. However, for the majority of the students, this assignment was their first exposure to creating a budget and planning for monthly expenses. No discussion or guidance related to retirement planning was provided prior to the assignment of the modules.

As mentioned above, the modules were assigned as part of an online class. The class regularly meets face-to-face, but the authors were scheduled to be away and instead of canceling class decided to assign the two modules. Students were told to complete the readings and watch the videos individually, but the remainder of the assignment was done with their (previously existing) group of four, including creating the budget. All student groups – except one – scored a B+ or higher on the assignment. A summary of average student grades is included in Table 1.

For this group of students, time in class was utilized after the assignment to answer questions about the material and then debrief the decision-making process, along with soliciting answers to some of the critical thinking questions mentioned above. Both group of students also wanted to discuss work-life balance, how to talk about money with a significant other, and how to pay off student debt

Informal feedback from the students indicated that they really liked the assignment and felt like it was interesting and a positive learning experience. Many commented that they would use the excel spreadsheet template in the future for their personal budgets. Interestingly, several

students expressed the desire to do the assignment on an individual basis, especially the budget preparation. Apparently, it was extremely tough for four people in a group to agree on what expenses were necessary, where to live, where to work, what type of transportation to use, etc. While this is something that was not considered when the case was assigned, it created a learning opportunity and a topic for discussion – how do you create a budget when you are in a relationship with someone whose monetary preferences are different from yours? In a family? A summary of this feedback is included in Table 2.

Some students also provided feedback that they wanted more guidance to help estimate costs, and not be left to do this research on their own. However, a benefit of this exercise is to require students to research and find the information (it is all available on the Internet) despite the extra work involved. The authors wanted to expose these upper-class students to a similar exercise as what they might do for a client when they have to locate data to make estimates. Any detailed guidance would also make the exercise less realistic and reduce the level of ownership students feel about the budget decisions.

One author also used this case as part of a guest lecture in a Foundations of Business course. Students were non-business majors taking the course for exposure to a variety of concepts, including Accounting. Students were asked to view the videos and read articles in advance of class discussion, which was focused on explaining basic concepts of payroll and income taxes, fringe benefits, and retirement savings. Students were then asked to complete Assignment 2 – the budget – on an individual basis. As of this writing, the assignment is not yet due. However, students had very positive feedback about the pre-class materials and in-class discussion and felt that it should be a required part of the curriculum for non-business majors.

CONCLUSION

This project integrates financial literacy into accounting undergraduate courses, a topic that is often overlooked in business education. For accounting students, some states specifically will not allow courses with a focus on personal finance to count as a business or accounting course requirement for CPA licensure, so this is often ignored by students focused on the CPA exam. The original goal in developing this project was to illustrate the importance of considering retirement savings, budgeting, and taxes in the context of a job offer – preparing students enrolled in an undergraduate individual income taxation course to evaluate job offers in the not-too-distant future. The project requires students to consider the tax efficiency of retirement vehicles, as well as tax considerations in a lease versus purchase decision, so this assignment is suitable for the introductory tax class to demonstrate the importance of tax efficiency in budgeting and planning decisions. However, the flexible content of the project allows it to be edited for use in a variety of classes across an accounting or business curriculum. As evidence continues to mount about the financial illiteracy of millennials, this project can help educate accounting and business students. Specifically, this project can be used as an exercise consistent with Harrington et al. (2016) that can have a positive influence on budget behavior.

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Exhibit 1: Budget Worksheet

PERSONAL MONTHLY BUDGET

GROUP MEMBER NAMES HERE

PROJECTED MONTHLY INCOME	Income 1	\$0.00
	Extra income	\$0.00
	Total monthly income	\$0.00
ACTUAL MONTHLY INCOME	Income 1	\$0.00
	Extra income	\$0.00
	Total monthly income	\$0.00

PROJECTED BALANCE (Projected income minus expenses)	\$0.00
ACTUAL BALANCE (Actual income minus expenses)	\$0.00
DIFFERENCE (Actual minus projected)	\$0.00

HOUSING	Projected Cost	Actual Cost	Difference
Mortgage or rent	\$0.00	\$0.00	\$0.00
Phone	\$0.00	\$0.00	\$0.00
Electricity	\$0.00	\$0.00	\$0.00
Gas	\$0.00	\$0.00	\$0.00
Water and sewer	\$0.00	\$0.00	\$0.00
Cable	\$0.00	\$0.00	\$0.00
Waste removal	\$0.00	\$0.00	\$0.00
Maintenance or repairs	\$0.00	\$0.00	\$0.00
Supplies	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

ENTERTAINMENT	Projected Cost	Actual Cost	Difference
Video/DVD			\$0.00
CDs			\$0.00
Movies			\$0.00
Concerts			\$0.00
Sporting events			\$0.00
Live theater			\$0.00
Other			\$0.00
Other			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

TRANSPORTATION	Projected Cost	Actual Cost	Difference
Vehicle payment			\$0.00
Bus/taxi fare			\$0.00
Insurance			\$0.00
Licensing			\$0.00
Fuel			\$0.00
Maintenance			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

LOANS	Projected Cost	Actual Cost	Difference
Personal			\$0.00
Student			\$0.00
Credit card			\$0.00
Credit card			\$0.00
Credit card			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

INSURANCE	Projected Cost	Actual Cost	Difference
Home			\$0.00
Health			\$0.00
Life			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

TAXES	Projected Cost	Actual Cost	Difference
Federal			\$0.00
State			\$0.00
Local			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

FOOD	Projected Cost	Actual Cost	Difference
Groceries			\$0.00
Dining out			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

SAVINGS OR INVESTMENTS	Projected Cost	Actual Cost	Difference
Retirement account			\$0.00
Investment account			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

PETS	Projected Cost	Actual Cost	Difference
Food			\$0.00
Medical			\$0.00
Grooming			\$0.00
Toys			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

GIFTS AND DONATIONS	Projected Cost	Actual Cost	Difference
Charity 1			\$0.00
Charity 2			\$0.00
Charity 3			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

PERSONAL CARE	Projected Cost	Actual Cost	Difference
Medical			\$0.00
Hair/nails			\$0.00
Clothing			\$0.00
Dry cleaning			\$0.00
Health club			\$0.00
Organization dues or fees			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

LEGAL	Projected Cost	Actual Cost	Difference
Attorney			\$0.00
Alimony			\$0.00
Payments on lien or judgment			\$0.00
Other			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00

TOTAL PROJECTED COST	\$0.00
TOTAL ACTUAL COST	\$0.00
TOTAL DIFFERENCE	\$0.00

Note: This is a standard template in Excel that can be customized to suit goals of the instructor.

Exhibit 2: Savings Estimator Worksheet

**WINTER BREAK
TRIP TO ICELAND**

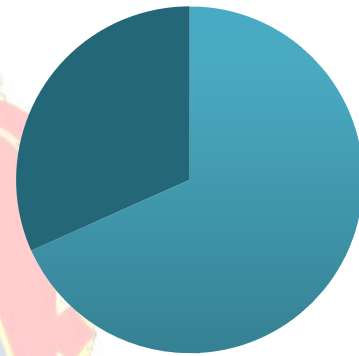
Start Saving On:
05.04.18

Finish Saving By:
10.31.18

Save Money:
BI-WEEKLY

TRIP COST: \$6,000
PRIOR SAVINGS: \$300

CURRENT SAVINGS GOAL: \$5,700



If I save \$475 Bi-Weekly, as of 09.01.18:

I have saved:	\$4,100
I still need to save:	\$1,900

■ Saved ■ Still need

SAVINGS PLAN DETAILS

Savings Interval	Daily	Weekly	Bi-Weekly	Monthly	Yearly
Amount to save:	\$32	\$222	\$475	\$1,140	\$0
Time Interval	Days	Weeks	Bi-Weeks	Months	Years
Time until goal is reached:	180	26	12	5	0

Note: This is a standard template in Excel that can be customized to suit goals of the instructor.

Exhibit 3: Buy vs. Lease a Car Worksheet

BUY vs. LEASE

MAKE & MODEL	[MAKE] [MODEL]
--------------	----------------

LEASE		BUY	
Suggested retail price	\$12,000.00	Suggested retail price	\$12,000.00
Tax, title, etc.	\$250.00	Tax, title, etc.	\$250.00
Refundable security deposit	\$150.00		
First month's payment	\$200.00		
Capital cost reduction payment	\$100.00	Down payment	\$2,000.00
Last month payment in advance?	Yes		
Payment (if yes)	\$200.00		
Selling price at end of lease	\$7,500.00	Resale value	\$7,500.00
Monthly lease payment	\$225.00	Monthly loan payment	\$188.71
Lease term (years)	5	Term of loan (years)	5
Discount for present value	5.00%	Loan rate	5.00%
Future value of last payment	\$256.67	Present value of resale	\$5,844.04
Initial costs	\$900.00	Initial costs	\$2,250.00
Financing costs	\$11,747.59	Financing costs	\$10,000.00
Present value of refund	-\$116.88		
Present value of total costs	\$12,530.71	Present value of total costs	\$6,405.96
		DIFFERENCE	-\$6,124.75

Note: Positive value favors leasing.

TAXATION

Tax bracket	25.00%
Business use percentage	6.50%
Sales tax percentage	9.50%

TAXATION	LEASE	TAXATION	BUY
Title	\$150.00	Title	\$150.00
Fees	\$150.00	Fees	\$150.00
Sales tax	\$1,140.00	Sales tax	\$1,140.00
Potential financing deduction	\$13,500.00	Interest deduction	\$1,322.74
Total potential deductions	\$14,940.00	Total potential deductions	\$2,762.74
Potential tax savings	\$728.33	Potential tax savings	\$134.68

Note: This is a standard template in Excel that can be customized to suit goals of the instructor.

**Table 1:
Summary of Average Student Grades**

Questions	Potential Points	Student Average
Which job do you choose? Why? Give some of the practical reasons as well as the monetary reasons.	20	17
What is your biggest goal for your money? Saving? Paying off debt? Travel? Why?	25	22
Do you take the trip to Iceland? When do you go? How do you plan to pay for it?	25	23
Both job offers offer retirement plans as a compensation benefit. Compare and contrast all retirement options available with both employers. As part of a long-term retirement strategy which job offer has the best retirement savings option? Explain why.	30	26
Total	100	88
N = 151		



**Table 2:
Responses to Post-Assignment Survey**

Survey Question	Sample Responses
<p>1. How did you and your group members approach the decision of which job to choose?</p>	<ul style="list-style-type: none"> • <i>We filled the budget sheets for each and compared.</i> • <i>The budget sheets</i> • <i>We looked at the pros of cons of each option that come with the location, then compared with the budget sheets.</i> • <i>Voted on which job sounded the best for our career, then looked at the budgets. We felt that taking a job that is best for a career is more important than the budget.</i>
<p>2. How did you and your group members approach completing the budget?</p>	<ul style="list-style-type: none"> • <i>We did the sheets together. We used the Internet to estimate many of the expenses</i> • <i>Each team member was responsible for certain expenses, and re researched the costs we needed and put it all together.</i> • <i>We googled expenses and put them into the budget</i> • <i>One of our team mates was a non-traditional student, so helped us estimate the expenses from his own experiences</i> • <i>Estimated expenses together and put in spreadsheet</i> • <i>Broke spreadsheets into parts, each filled out our parts and put together</i>
<p>3. What are the largest expense items in your budget? Are they required for survival?</p>	<ul style="list-style-type: none"> • <i>Housing, and yes required.</i> • <i>Student loan payments. At the end of a college career, required</i> • <i>Rent required</i> • <i>Rent. Required, unless we could live with our parents</i> • <i>Loan payments- required</i>
<p>4. How would your budget look without debt payments? What could be changed in your current budget to accelerate the pace at which you plan to pay off debt?</p>	<ul style="list-style-type: none"> • <i>Debt was a large part of our budget. No travel and less entertainment can pay it off quicker</i> • <i>Loan payments are a large part of the budget. Eat out less</i> • <i>Save less for retirement until debt is paid off</i> • <i>Live with relatives until debt is gone</i> • <i>Have lots more each month. Afford the trip to Iceland</i>

<p>5. Budgets are never 100% accurate. In addition to planned expenses, there are always unplanned expenses – these could be unplanned medical expenses, emergency repairs to a house or car, etc. If one of these unplanned issues were to come up this month, how would you cover these costs without creating a budget shortfall?</p>	<ul style="list-style-type: none"> • <i>Spend less on entertainment for the following month</i> • <i>Have an emergency fund and save money every month so these can be paid for</i> • <i>Take from retirement until paid off.</i> • <i>We had extra set aside each month to plan for these expenses. If we did not have these expenses the money goes in an emergency fund for future months when we have them.</i> • <i>Not eat out</i> • <i>Would cancel trip and use saved money for emergency</i>
<p>6. What was the most difficult part of this assignment?</p>	<ul style="list-style-type: none"> • <i>Figuring out some of the expenses to put in the budget</i> • <i>Estimating and projecting for retirement</i> • <i>Knowing what many of these costs are, as many of us have not lived on our own</i> • <i>Time to complete</i>
<p>7. What was the easiest part of this assignment?</p>	<ul style="list-style-type: none"> • <i>Making decisions from the budgets</i> • <i>Getting expenses we already know</i> • <i>Using the spreadsheet. We are saving it to use when we really have to decide on jobs</i> • <i>Seeing how small changes in salary impact the whole budget</i> • <i>Having a template</i>
<p>8. Are there other resources I could provide to help you be more successful on this assignment?</p>	<ul style="list-style-type: none"> • <i>Help estimating expenses</i> • <i>More guidance in class</i> • <i>More time to complete the assignment.</i> • <i>More cost of living information on the cities.</i>
<p>9. What did you learn from this assignment?</p>	<ul style="list-style-type: none"> • <i>Take home pay is less than salary by a lot. Don't just look at job offer but look at amount deposited in bank account.</i> • <i>Budgets are important</i> • <i>Retirement saving is important</i>

	<ul style="list-style-type: none"> • <i>Save money now</i> • <i>Look at more than salary to consider jobs. Higher salary is not the only thing to look at</i>
10. Any other comments?	<ul style="list-style-type: none"> • <i>Great assignment. You teach us skills other than how to read a textbook, but so I can be successful as a professional person.</i> • <i>Budgeting keeps people out of bankruptcy</i> • <i>First job paycheck does not go far, even though accounting graduates get paid well.</i> • <i>Glad someone here cares enough to teach me this stuff.</i>

Note: Before answering the survey above, students were reminded of the following:

For this assignment, you were asked to work in your groups to complete a budget worksheet to help you choose a job and place to live. You then answered the following questions:

1. Which job do you choose? Why? Give some of the practical reasons as well as the monetary reasons.
2. What is your biggest goal for your money? Saving? Paying off debt? Travel? Why?
3. Speaking of, do you take the trip to Iceland? When do you go? How do you plan to pay for it?
4. Both job offers offer retirement plans as a compensation benefit. Compare and contrast all retirement options available with both employers. As part of a long-term retirement strategy which job offer has the best retirement savings option? Explain why.