Will You Live to Be 100?

Standard 6: Planning for Retirement

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Grade Level	7th – 12th Grade	**Time Frame**	200 minutes
Subject	Financial Literacy, Social Studies	**Duration**	3-4 class periods
Course	Personal Financial Literacy		

Essential Question

Is it necessary to save for retirement? How do you save for retirement?

Summary

In this financial literacy lesson, students will explore the need to plan for retirement and discuss the amount of money that will be needed to retire comfortably. Students will investigate traditional ways to save for retirement, including personal savings, Social Security, mutual funds, 401K, IRAs, stocks, and bonds.

Snapshot

Engage

Students think about the oldest person they know. The class creates a Sticky Bars graph and draws conclusions from the collected data.

Explore

Students examine life expectancy versus retirement age. They calculate how much money someone might need to live on after they retire.

Explain

Students read about the benefits of savings and compound interest. With a partner, they compare the saving plans of three peers.

Extend

Students research different types of potential retirement income and report their findings to the class.

Evaluate

Students complete an Exit Ticket to reflect on what they have learned.

Standards

Oklahoma Academic Standards (Personal Financial Literacy (7th through 12th grade))

PFL.6: The student will explain and evaluate the importance of planning for retirement.
PFL.6.1: Describe the necessity of accumulating financial resources needed for specific retirement goals, activities and lifestyles, based on life expectancy.
PFL.6.2: Explain the roles of Social Security, employer retirement plans (401k or 403b) and personal investments (e.g., annuities, IRAs, real estate, stocks,and bonds) as sources of retirement income, and howto acquire these plans (e.g., banks, insurance companies).

Attachments

- Compound-Interest-Student-Reading - Spanish.docx
- Compound-Interest-Student-Reading.docx
- Financial Resource Links - Spanish.docx
- Financial Resource Links.docx
- Financial-Resource-Frayer-Model - Spanish.docx
- Financial-Resource-Frayer-Model.docx
- Lesson-Slides-Will-You-Live-To-Be-100.pptx
- The-Story-of-Kami-and-Jamil-and-Alex-Teacher-Notes-Will-You-Live-To-Be-100.docx
- The-Story-of-Kami-and-Jamil-and-Alex-Will-You-Live-To-Be-100 - Spanish.docx
- The-Story-of-Kami-and-Jamil-and-Alex-Will-You-Live-To-Be-100 - Spanish.pdf
- The-Story-of-Kami-and-Jamil-and-Alex-Will-You-Live-To-Be-100.docx
- The-Story-of-Kami-and-Jamil-and-Alex-Will-You-Live-To-Be-100.pdf

Materials

- Lesson Slides (attached)
- Compound Interest Student Reading (attached, one per student)
- The Story of Kami and Jamil and Alex (attached, one per student)
- The Story of Kami and Jamil and Alex Teacher Notes (attached)
- Financial Resource Frayer Model (attached, one per student)
- Financial Resource Links (attached, one per student)
- Sticky notes (one per student)
- Calculators
- Chart tablet paper
- Student devices with internet access

Engage

Use the attached **Lesson Slides** to guide the lesson. Begin the lesson by sharing the essential questions and lesson objectives on **slides 3–4**.

Display **slide 5**. Ask students to think about the oldest person they know. How old is that person? Do they know if that person is still working?

Engage students in a Sticky Bars activity. Recreate the chart from slide 5 on the board and pass out a sticky note to each student. Ask students to write the initials of the oldest person they know, that person's age, and whether that person is still working or is retired (no longer working). If students do not know a certain piece of information, they can write "don't know." Have students come to the board and place their sticky notes on the bar graph in the appropriate columns. Once all the notes are placed, allow students time to observe the pattern of sticky notes.

Display **slide 6**. Instruct students to take out a sheet of notebook paper to use in an I Notice, I Wonder reflection. Have them draw a line down the center of the paper and label the left column “I Notice” and the right column “I Wonder.”

Ask students to write a statement in the left column about what they notice about the pattern of sticky notes. After a minute or two of writing, have them share their observations with a partner. After a brief discussion, ask pairs to each share one observation with the class.

After the class discussion, ask partners to identify two questions that they still have about the bar graph results and list those in the right column of their charts. Have partners share their questions with the class. Compile a list of all the questions or have students turn in their papers. Tell students that these questions will be revisited at the end of the lesson.

Sample Student Responses

Ideally, during the "I Notice" part of the activity, students will make general observations about where sticky notes are clustered, how old the oldest person is, and who is working and who isn't. For the "I Wonder" part of the activity, encourage students to generate questions about what happens when or after a person retires from working.

In a general class discussion, ask students to share what they know about how people support themselves (make house payments, pay bills, buy food, etc.) after they retire or stop working.

Explore

Display **slide 7**. Tell students that, on average, people in Oklahoma retire at age 63 (Source: Department of Labor). The average life expectancy, however, is 79. That means there's a 16-year difference between the average age of retirement and the average life expectancy. If people retire (stop working) at age 63 but live until 79, how do they support themselves? Pose the question on the slide: How do people live without working for 16 or more years?

Display **slide 8**, which asks students to calculate how much money they would need in retirement if they retired at age 63 and lived until age 79.

Solution

The total amount would be $816,000.

Display **slide 9**, which explains the idea posed by financial experts that people can live on less money because their houses could be paid off by the time they retire or they might not have as big a car payment or need child care.

Have students calculate the yearly income for retirement on **slide 10** based on this lower estimation.

Solution

- 70% of $51,000 is $35,700 per year; the total amount for 70% would be $571,200
- 90% of $51,000 is $45,900; the total amount for 90% would be $734,400

Explain to students that regardless of the amount of money needed for retirement, people in the workforce need to think about their future BEFORE they are too old or decide not to work.

Explain

Display **slide 11**. Pass out copies of the **Compound Interest Student Reading**. Ask for volunteers to read the three sections of the article. As they listen and follow along, ask students to think about the question "What is the difference between compound interest and simple interest?" At the end of the reading, ask for volunteers to explain their answer to the question.

Display **slide 12**. Place students in working pairs. Pass out a copy of **The Story of Kami and Jamil and Alex** to each student. Read the two scenarios aloud and ask students who (Kami, Jamil, or Alex) they predict will earn the most money from their investment. Have pairs work together to complete the handout. Allow one class period (approximately 45 minutes) for students to complete this activity, their calculations, and the question section.

Teacher's Note: Calculators

Encourage students to use their personal calculators or their phones (if available) to complete the worksheet. You might also consider borrowing calculators from one of your peers in the math department.

Solution

Solutions for this activity can be found in **The Story of Kami and Jamil and Alex Teacher Notes**. The student handout includes a formula for calculating compound interest for Kami and Jamil's savings and an explanation for how to calculate simple interest for Alex's savings.

Call on pairs to share their answers from the handout as time allows. This activity can be used as an assessment.

Extend

Display **slide 13**. Now that students have investigated how personal savings, especially with compound interest, can add up, they will explore other financial resources that people typically use in their plans to save for retirement.

Tell students that they will be researching the different types of financial income that are often used for retirement purposes beyond personal savings. Assign students one of the other financial resources on slide 13:

1. Social Security
2. Medicare
3. Employer retirement plans
4. 401(K)
5. Roth IRAs and traditional IRAs
6. Mutual funds
7. Stock market (stocks and bonds)

Display **slide 14** and pass out a copy of the **Financial Resource Frayer Model** to each student. Ask students to write their assigned financial resource in the center of the Frayer Model.

Use slide 14 as a model of what students should be looking for during their research. Allow at least one class period for students to complete this research. You can optionally provide students with a printed or digital copy of the **Financial Resource Links** attachment to help them find appropriate references.

After students complete their Frayer Models, allow time for students who were assigned the same financial resource to meet together and compare their findings. Students should discuss and share the information they found and refine or add to their Frayer Models based upon their group's discussion. While they discuss, they will also prepare a poster on a sheet of chart tablet paper to share information about their financial resource with the class.

As groups present their posters, have other class members take notes about the various financial resources available for retirement on the back of their Frayer Model handouts.

Evaluate

Post on the board the I Wonder questions from the Engage activity. Go through the questions and see if they were answered during the lesson. If not, you could ask students to research the questions that are unanswered and share the next day as an optional activity.

Display **slide 15**, which includes an optional Exit Ticket activity. Ask students to respond to the two questions posted on the slide. For each question, they should write one paragraph that demonstrates their understanding. This Exit Ticket will serve as their evaluation for the lesson.

Teacher's Note: Looking for Hands-on Financial Literacy?

Mind Your Own Budget (MYOB) is a comprehensive game-based learning application for financial literacy. Mind Your Own Budget is aligned with the OK Passport and National Standards for Financial Literacy. Through game play, students encounter everyday financial tasks, such as making and keeping a budget, paying recurring and emergency expenses, managing financial accounts, and using financial instruments. Each scenario presents a new challenge and teaches new concepts while building on important budgeting basics. To find out more about K20 Digital Game-Based Learning, go to https://k20center.ou.edu/games/ or email k20center@ou.edu.

Resources

- K20 Center. (n.d.). Frayer Model. Strategies. https://learn.k20center.ou.edu/strategy/126
- K20 Center. (n.d.). I Notice, I Wonder. Strategies. https://learn.k20center.ou.edu/strategy/d9908066f654727934df7bf4f507d1a7
- K20 Center. (n.d.). Sticky Bars. Strategies. https://learn.k20center.ou.edu/strategy/d9908066f654727934df7bf4f505ee0f
- NerdWallet. (2017). Retirement calculator. https://www.nerdwallet.com/investing/retirement-calculator
- Smartasset. (2016). The average age of retirement by state. https://smartasset.com/retirement/average-retirement-age-in-every-state-2016