

## CONCEPT-BASED LESSON PLANNING PROCESS GUIDE – PERSONAL FINANCIAL LITERACY LESSON

**Classroom Context:** This lesson was delivered to economics students at Prairie View High School. The 27 students . The participants had access to iPhones and notebooks necessary for the lesson. The participants were mostly high school seniors. I anticipated that participants had a very basic knowledge of investing, with a potential to be against investing in the stock market, given their awareness of, living through the 2007 recession.

<b>Shift in Instructional Design</b>	<b>Lesson Elements and Design</b>	<b>Metacognitive Reflection</b>
<p><b>The Unit Generalization and Focusing Lens asks students to ...</b></p>	<p><b>Lesson Focus:</b>  <b>Generalizations:</b></p> <ul style="list-style-type: none"> <li>• Investment decisions determine financial growth and future prosperity</li> </ul> <p><b>Focusing Lens:</b> Economic Decision Making</p> <p><b>Engaging Question:</b> How risky are you?</p> <p><b>Disciplinary connections:</b> Economics</p>	<p><b>How does this specific lesson advance the big idea or generalization of the unit? What connections might be made between other content areas?</b></p> <p><i>Students continuously learn about how to make financial decisions. In this lesson, they consider their risk tolerance and what that means to their investing decisions.</i></p> <p><i>Students will be able to see compound interest applied to different investment strategies</i></p>
<p><b>This lesson objective / learning target is critical to student understanding because...</b></p>	<p><b>Objectives / Learning Targets:</b></p> <ol style="list-style-type: none"> <li>1. Determine your personal investment risk tolerance</li> <li>2. Compare and contrast the returns of a diversified portfolio and a nondiversified portfolio</li> <li>3. Analyze expert commentaries and data on the costs and benefits of a diversified portfolio and a concentrated portfolio</li> </ol> <p><b>Key knowledge:</b></p> <ul style="list-style-type: none"> <li>• Investment strategies and their average rate of annual return</li> <li>• Diversified portfolio</li> <li>• Concentrated portfolio</li> <li>• Volatility</li> <li>• Stocks</li> <li>• Bonds</li> <li>• Rule of 72</li> <li>• The relationship of risk to reward</li> <li>• Levels of risk associated with typical investment strategies</li> </ul>	<p><b>In what ways does the learning target support the generalization?</b></p> <p><i>A person's investment risk tolerance influences their investment decision making. Gaining a deeper understanding of a diversified portfolio will help students make informed decisions about their investments</i></p>

	<p><b>Skills students will master in the lesson:</b></p> <ul style="list-style-type: none"> <li>Analyze investment strategies returns over an extended period of time.</li> <li>Apply textual evidence of expert opinion to argue in favor or against diversified portfolios as an investment strategy</li> </ul> <p><b>Learning Experience</b> (task description of student learning): ... so that students can decide what their personal investment risk tolerance is and the investment strategy that fits it best.</p>		
<b>Instructional strategies</b>	<p><b>Instructional Strategy Menu (not exhaustive):</b></p> <ul style="list-style-type: none"> <li>Think-pair-share</li> <li>Teacher-provided inquiry questions</li> <li>Hands-on/experiential</li> </ul>	<ul style="list-style-type: none"> <li>Discussion</li> </ul>	<p><b>Which instructional strategies will foster learning the lesson’s skills, processes, or content?</b></p> <p>All of the selected strategies engage students in critical thinking and encourage collaboration through primary and secondary source analysis</p>
<b>In the first 3-7 minutes of the lesson,</b>	<p><b>Opening (hook / anticipatory set / lesson launch)</b></p> <p>Having students fill out an investment risk tolerance questionnaire to determine their own risk tolerance</p> <p><b>Instructional Strateg(ies) chosen:</b> Paper/pencil questionnaire</p> <p>Class discussion</p> <p><b>Why is this strategy impactful:</b> This strategy supports student understanding of investment risk tolerance to transition into a discussion of investment strategies that fit different levels of investment risk tolerance.</p> <p><b>How does this strategy support meeting the “just-right challenge,” or “building relationships,” or “creating relevancy,” or “fostering disciplinary literacy”?</b> The point of the investment risk tolerance quiz was to create relevance in the subject and to contextualize the learning experience such that students would understand why they might select a more diversified portfolio, versus one that is less diversified .</p>		<p><b>In what ways does the chosen strategy work toward a larger purpose at the beginning of the lesson (e.g., engaging students, increasing curiosity, stimulating student-generated questions, etc.)?</b></p> <p>The selection of the investment risk tolerance quiz was intentional. It engages students and gives them a reference to contextualize the type of investment strategies that fits them best.</p> <p><b>In what ways does the chosen strategy(ies) work toward a larger purpose (e.g. increasing collaboration; interacting with complex texts; situating students in real-life, relevant experiences; increasing student agency; stimulating student discourse; etc.)?</b></p>
<b>The Learning Experience will</b>	<p><b>Learning Experience / Lesson</b></p> <p>Silent read two opinions: first opinion is in support of a diversified portfolio; second is in support of a non-diversified portfolio</p> <p>Direct instruction was used to have students analyze a table of investment strategies and their average return over a 37 year period. The range of investment strategies went from 100% invested in bonds, through an</p>		

	<p><i>incremental adjustment of adding 10% in stock investments, to a portfolio of 100% in stocks.</i></p> <p><i>Students will also be shown a spreadsheet that reveals how different rates of return could change outcomes of long-term investing and, also, to get them to see the Rule of 72 in action.</i></p> <p><b>Instructional Strateg(ies) chosen:</b></p> <ul style="list-style-type: none"> <li>○ <i>Direct instruction</i></li> <li>○ <i>Think, pair, share</i></li> </ul> <p><b>Why is this strategy impactful:</b></p> <p><i>Direct instruction lessons are appropriate for teaching basic skills, facts, concepts, strategies, procedures, and knowledge which lends itself to being presented in small sequential steps. These lessons can also play an important role in lessons which emphasize higher level thinking. Higher level thinking cannot occur without having basic facts and content information. The content explicitly taught in direct instruction lessons may form the foundation for lessons which emphasize critical thinking and problem solving.</i></p> <p><i>The Think-Pair-Share strategy is designed to differentiate instruction by providing students time and structure for thinking on a given topic, enabling them to formulate individual ideas and share these ideas with a peer. Think-Pair-Share helps students develop conceptual understanding of a topic, develop the ability to filter information and draw conclusions, and develop the ability to consider other points of view.</i></p> <p><b>How does this strategy support meeting the “just-right challenge,” or “building relationships,” or “creating relevancy,” or “fostering disciplinary literacy”?</b></p> <p><i>Direct instruction was used, along with questions to check for student understanding of different types of investment strategies rates of return over time. This lesson introduced the concept of diversification, along with the content of stocks and bonds. Students have limited knowledge and understanding of investing and many are leery of investing, due to their exposure to the mortgage crisis of 2007.</i></p> <p><i>Think, pair, share promotes a just-right challenge by encouraging a high degree of pupil response, which can mete out student comprehension of the lesson content and concepts. Additionally, this strategy builds relationships for students to share their thinking with at least one other student which, in turn, increases their sense of involvement in classroom learning. Finally, students are able to look up vocabulary words they are unfamiliar with in a “safe” environment of a thinking partner.</i></p>	<p><b><i>In what ways does the chosen strategy cement the learning?</i></b></p> <p><i>Through engagement and personalization through questioning and collaboration.</i></p> <p><b><i>What evidence will show that the strategies impacted student learning? Were the strategies effective through the learning process?</i></b></p> <p><i>Following the sharing of source information, students engaged in a synthesis of the sources – discussing questions such as “Which sources reflect exploration? Why?” This type of questioning moved students towards an understanding of the concept of exploration.</i></p>
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<p><b>The closing activity reinforces the learning.</b></p>	<p><b>Closure</b></p> <p><b>Instructional Strategy chosen:</b></p> <ul style="list-style-type: none"> <li>• Discussion and Exit ticket</li> <li>• Questions asked: Which type of investment is riskier? What type of investment fits your risk tolerance? Can investing be secure?</li> </ul> <p><b>Why is this strategy impactful:</b>  <i>Instruction is organized around questions of significance for students to explore, analyze relevant evidence, and develop their own interpretations → What questions would a historian, geographer, economist, political scientist ask....?</i></p> <p><b>How does this strategy support meeting the “just-right challenge,” or “building relationships,” or “creating relevancy,” or “fostering disciplinary literacy”?</b>  <i>This strategy supports the “Just Right Challenge” and the “Building Relationships” instructional priorities by encouraging students to apply the information in a class discussion that they’ve learned through the analysis of sources. Through discussion, students make connections among the concepts illuminated in the sources.</i></p>	
<p><b>Technological resources that will support student learning and move students toward the learning target.</b></p>	<p><b>Technological Resource and application:</b></p> <p>N/A</p> <p><b>How:</b> In what ways does this chosen resource support meeting the “just-right challenge,” or “building relationships,” or “creating relevancy,” or “fostering disciplinary literacy”?</p>	<p><b>How will my students and I strategically use technology resources to enhance the learning experience (and support “meeting the just-right challenge,” “building relationships,” “creating relevancy,” and/or “fostering disciplinary literacy”)?</b></p> <p>N/A</p>

<p><b>Formative assessment will be a quick Check for Understanding in which students will demonstrate they are or are not on track.</b></p>	<p><b>Formative Assessment</b></p> <p><b>Formative Assessment tool/method:</b></p> <p>Investment Risk Tolerance Quiz  <a href="http://njaes.rutgers.edu:8080/money/riskquiz/">http://njaes.rutgers.edu:8080/money/riskquiz/</a></p> <p><b>Learning indicators of success:</b></p> <p>Students will be able to explain the risks and rewards of investing in diversified and non-diversified portfolios.</p> <p>Students will be able to argue in favor of, or against, investing in a diversified portfolio.</p>	<p><b>What “indicators of success” will show that the students are gaining mastery?</b></p> <p>Responses to the questions backed with evidence that students connect investment strategy with level of risk tolerance</p> <p><b>How will I use that evidence in a feedback loop?</b></p> <p>I will check for understanding by reading students’ responses to exit tickets and by asking them questions about the concepts of risk and diversified investing.</p>
<p><b>Reflection:</b> (What are the strengths in the lesson plan? What changes would I make in the lesson plan for next time?)</p> <p>The lesson was ambitious, but student understanding of the benefits of a diversified portfolio was achieved. I would have liked to have had more time to discuss a diversified portfolio more in depth, as to the types of companies to invest in, along with the different investment vehicles to use.</p> <p>Participant reflections (Questions were handed out on paper. The questions focused primarily on the participants’ learning). Students exit tickets revealed that the vast majority of students thought that a diversified portfolio was the best way to invest, to have a strong potential upside to their investing, while managing the downside.</p>		
<p><b>Connection to Performance Goal:</b> (What did I do in this lesson that gives evidence or may be used as an artifact for my professional growth plan?)</p>		
<p><b>Student Feedback:</b> (What did students say about the lesson? Did they find it engaging, interesting, appropriately challenging? Did their feedback confirm my own perception of the the lesson?)</p> <p>The students thought that the lesson was informative and valuable to affirm their thoughts about how to invest in a way that meets their potential investment goals, why taking into account risk.</p>		
<p><b>Time Suggested</b></p>	<p>50-60 minutes</p>	
<p><b>Materials Needed</b></p>	<p><b>Sources:</b></p> <p>Teachers should look up articles/websites on diversified vs. nondiversified portfolios, to find articles that fit best with their students’ reading levels and background knowledges.</p> <p>Suggested websites are:</p> <p><a href="http://www.investopedia.com">www.investopedia.com</a></p> <p><a href="http://www.forbes.com">www.forbes.com</a></p> <p><a href="http://www.finance.zacks.com">www.finance.zacks.com</a></p> <p><a href="http://www.fidelity.com">www.fidelity.com</a></p> <p>Chart website: <a href="http://qvmgroup.com/Allocation_B_612pix.png">http://qvmgroup.com/Allocation_B_612pix.png</a></p>	

	<p><b>Handouts/presentation materials:</b></p> <p>Document with opening question, standard, and terms to define</p> <p>Spreadsheet with compound interest calculations</p> <p>Chart of bonds and stocks portfolio allocation risk</p> <p>Student Reflection</p>
<b>Co-teaching Opportunity</b>	
<b>Cross-Content Connections</b>	math, economics

**Description of the Lesson Implementation: (This part was added by me – not part of the original template)**

Teacher hands out investing risk tolerance survey –

- Asks the question, how risky are you?
  - What is risk tolerance?
- Take 5-7 minutes to fill out the survey, and then you will score it, to determine your investing risk tolerance.
- Once, completed, share with a partner your risk tolerance and if your score makes sense to you.
- Where in your life does your score make sense to you? Where doesn't it make sense?
- On the overhead projector, teacher shows students the State standard evidence outcome: Compare and contrast the variety of investments available for a diversified portfolio
  - To provide relevance and direct the discussion to the context of a diversified portfolio.

Given the limited background of students about investing, the teacher directed them to take out a piece of paper and, using their smartphones, look up the definition of the words: stocks, bonds, volatility, and diversified portfolio

Teacher checks for understanding of these terms, by looking at all students notes

A one-page handout is given to students with two opinions, one in defense of a diversified portfolio and one in defense of a non-diversified portfolio.

Students read the opinions and are asked to write their understanding of each opinion.

Students get with their elbow partner to check their understandings and ask each other which opinion they agree with most.

After a total of 12 minutes for the above activity, the teacher brings the class together to discuss the two opinions

Questions asked:

*What is the difference between the two opinions of investing?*

*Which opinion do you agree with most?*

*Teacher directs students attention to screen at the front of the room. On the screen is a chart of different investment strategies , ranging from 100% in bonds to 100% in stocks, and their average rate of return over a 37 year period*

*Questions:*

*What does the chart show?*

*What is the rate of return for 100% investment in bonds?*

*What is the rate of return for 50% bonds and 50% stocks?*

*What is the rate of return for 100% in stocks?*

*So what is the bottom line to these investments?*

*Teacher presents an Excel spreadsheet that is set up with a compound interest calculations and an additional calculation for investing different amounts annually*

*Question: What is the outcome of different return rates shown in the chart, over a 20-year period, given a \$1000.00 investment. Teacher inputs the rate of return for the different investment strategies, to show students how compounded interest affects overall investment. (Teacher checked for student knowledge of compounded interest and found that students did understand its effect.)*

*Teacher adds in different investment amounts, to show the impact of continuous investing, as a subtle promotion for regular savings habit.*

*To close the class, students are given an exit ticket question, "Which type of investment strategy are you most likely to use and why?"*