People around the world face unfair obstacles based on their income, sex, age, disability, sexual orientation, race, class, ethnicity, or religion. For example, women living in rural areas are three times as likely to die in childbirth as mothers in urban areas. In developing countries, children in the poorest 20% of the population are three times as likely to die before they turn five as children in the richest segment of the populations. Across the globe, women are paid less than men. Inequalities like these can undermine self-esteem and the ability to lead a fulfilling life.

Why should we care about inequalities that don’t affect us?

Practically, global inequalities can have a negative impact on long-term social and economic development. But more importantly, we cannot make progress toward global sustainable development while excluding certain people or groups from basic services or the opportunity to build a better life. “Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly,” wrote Martin Luther King, Jr.

What can we do about it?

The United Nations is working toward reducing inequalities within and among countries as part of its Sustainable Development Goals (SDG) initiative. SDG #10 is focused on reducing inequalities by growing income for the bottom 40% of earners at higher-than-average rates, improving the regulation of global financial markets, reducing transaction costs for migrant workers sending money (remittances) back home, and more. As financial professionals, we can develop valuable tools that help people understand and respond to these inequalities.
Global Competencies Addressed:

*Investigate the World*: Initiate investigations of the world by framing questions, analyzing and synthesizing relevant evidence, and drawing reasonable conclusions about global issues.

*Recognize Perspectives*: Recognize, articulate, and apply an understanding of different perspectives.

*Communicate Ideas*: Select and apply appropriate tools and strategies to communicate and collaborate effectively — meeting the needs and expectations of diverse individuals and groups.

*Take Action*: Translate ideas, concerns, and findings into appropriate and responsible individual or collaborative actions to improve conditions.

### STANDARDS ADDRESSED

<table>
<thead>
<tr>
<th>Career/Technical Knowledge and Skills</th>
<th>Academic Knowledge and Skills</th>
<th>21st Century Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common Career Technical Core</strong></td>
<td><strong>Next Generation Science Standards</strong></td>
<td><strong>21st Century Interdisciplinary Themes</strong></td>
</tr>
<tr>
<td>Career Ready Practices:</td>
<td>Engineering Design:</td>
<td></td>
</tr>
<tr>
<td>1. Act as a responsible and contributing citizen and employee.</td>
<td>- <strong>HS-ETS1-1.</strong> Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.</td>
<td>- Global Awareness</td>
</tr>
<tr>
<td>4. Communicate clearly and effectively and with reason.</td>
<td>- <strong>HS-ETS1-2.</strong> Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.</td>
<td>- Creativity &amp; Innovation</td>
</tr>
<tr>
<td>5. Consider the environmental, social, and economic impacts of decisions.</td>
<td>- <strong>HS-ETS1-3.</strong> Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.</td>
<td>- Critical Thinking &amp; Problem Solving</td>
</tr>
<tr>
<td>6. Demonstrate creativity and innovation.</td>
<td></td>
<td>- Communication</td>
</tr>
<tr>
<td>7. Employ valid and reliable research strategies.</td>
<td></td>
<td>- Collaboration</td>
</tr>
<tr>
<td>8. Utilize critical thinking to make sense of problems and persevere in solving them.</td>
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<tr>
<td>9. Model integrity, ethical leadership, and effective management.</td>
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<tr>
<td>12. Work productively in teams while using cultural global competence.</td>
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<tr>
<td><strong>Finance Career Cluster</strong></td>
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</table>

- **FNC03** Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.
- **FNC05.03** Describe tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.
- **FNC05.05** Describe the tools, techniques, and systems that businesses use to create, communicate, and deliver value to finance customers and to manage customer relationships in ways that benefit the organization and its stakeholders.
- **FNC07** Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

### Common Core Academic Standards

**ELA/Literacy:**
- **CCRA.SL.1.** Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- **CCRA.SL.4.** Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- **CCRA.L.1.** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

**Mathematics:**
- **MP.1.** Make sense of problems and persevere in solving them.

This project stems from the United Nation’s Sustainable Development Goals (SDGs) initiative. The SDGs are a set of 17 goals that aim to end poverty, fight inequality, and stop climate change. Specifically, this project focuses on Global Goal #10: Reduce Inequality, with an emphasis on the gender wage gap. Students will engage in a design process to define the problem, brainstorm possible solutions, create and test a prototype or solution, and present their solutions to community and/or global partners.
**Goals:**
- Students will gain an understanding of the United Nations Sustainable Development Goals (SDGs) initiative and develop empathy for people directly affected by global inequalities.
- Students will apply knowledge of finance to a complex real-world problem.
- Students will use a design process to develop solutions to a complex real-world problem.

**Objectives:**
- Research attitudes about and responses to global inequalities, especially the gender wage gap.
- Research various financial tools and their real-world applications.
- Brainstorm and evaluate multiple possible ways to help companies narrow the gender wage gap.
- Develop a plan to design one specific tool within a team.
- Design a specific tool to help companies narrow the gender wage gap.
- Engage in a feedback and revision process to strengthen designs.
- Explain and defend the potential impact of your proposed tool.

**SCENARIO OR PROBLEM:** What scenario or problem will you use to engage students in this project?

A gender wage gap can be measured in countries across the globe, but Iceland and Rwanda have made notable progress in narrowing those gaps. As a financial expert at the U.S. Department of Labor, you have been assigned to a team tasked with designing an app or website that can encourage companies to work toward closing the wage gap. What kind of financial tracking or modeling tools could help businesses reduce these inequalities while still remaining viable?

<table>
<thead>
<tr>
<th>Essential Questions</th>
<th>Grade Level Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do inequalities affect the human experience?</td>
<td>It may be appropriate for higher-level classes to choose a different parameter of inequality (i.e., based on race, age, country of origin, etc.) to examine and address instead of having all groups focus on the gender wage gap.</td>
</tr>
<tr>
<td>What’s the value of reducing inequality within and among countries?</td>
<td>Some classes may be able to develop a model or prototype of their financial tool; others may focus just on the design.</td>
</tr>
<tr>
<td>How can professionals apply specialized knowledge and skills to make the world a better place?</td>
<td>The project could be presented as a class competition where teams compete against one another to create the best tool.</td>
</tr>
</tbody>
</table>
- Teachers can stipulate a certain budget for the project based on industry standards.
# ASSESSMENT: How will you determine what students have learned? (Check all that apply)

<table>
<thead>
<tr>
<th>FORMATIVE</th>
<th>SUMMATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes/Tests</td>
<td>Multiple Choice/Short Answer Test</td>
</tr>
<tr>
<td>Notes/Graphic Representations</td>
<td>Essay Test</td>
</tr>
<tr>
<td>Rough Draft</td>
<td>Written Product with Rubric</td>
</tr>
<tr>
<td>Practice Presentation</td>
<td>Oral Presentation with Rubric</td>
</tr>
<tr>
<td>Preliminary Plans/Goals/Checklists of Progress</td>
<td>Other Product or Performance with Rubric</td>
</tr>
<tr>
<td>Journal/Learning Log</td>
<td>Self-evaluation or Reflection</td>
</tr>
<tr>
<td>Other:</td>
<td>Evaluation by Authentic Audience</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
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</tbody>
</table>

## MATERIALS, RESOURCES, or CONSTRAINTS: What materials and resources will be needed? Are there any perceived challenges?

**Materials:**
- Computers with internet access
- Posters and markers
- Project rubric
- Optional: Tools to help students develop models or prototypes of their designs (e.g., digital design software such as the Adobe Suite; website-building templates such as Squarespace, Weebly, Google Sites, or Wix; and/or app development tools such as appinventor.org or MIT's App Inventor, etc.)

**Resources:**
- Library access for three days (access to journals, magazines, newspapers, and/or books)
- U.N. Department of Economic and Social Affairs
- United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States (UNOHRLLS)
- U.N. Sustainable Development Goals
  - Goal #10: Reduce Inequality
- Video resources:
  - United Nations Foundation’s video, “A Look at the Sustainable Development Goals” (1:00) An introduction to the 17 Sustainable Development Goals from the United Nations Foundation.
- Gender wage gap:
  - NPR’s, “New Law in Iceland Aims at Reducing Country’s Gender Pay Gap.” (3:50 audio clip from All Things Considered)
  - Netflix’s, “Why Women are Paid Less,” (18:36 episode Season 1, Episode 3 of Explained)
• U.S. Department of Labor, Women’s Bureau’s, “Breaking Down the Gender Wage Gap,” (government report and infographic)

• Financial Tools
  o Maryalene LaPonsie’s “How 7 Financial Tools and Services Simplify Life for Millennials,” (July 27, 2018 article in U.S. News)
  o Barbara A. Friedberg’s, “10 Best Tools for Financial Advisors,” (October 7, 2018 article in Investopedia)

Possible Constraints & Solutions:
• Authenticity of final presentations could be limited due to availability of volunteer industry representatives and/or community members. To mitigate this, consider realizing the final presentations via Skype, Zoom, or another video conferencing program.

SUPPORT, MODIFICATIONS, AND EXTENSIONS: What is needed to provide support for students who have difficulty learning the content, modify for students with special learning needs, or to provide enrichment for advanced students?

Support & Modifications:
• Provide assistance navigating library resources in weeks 1 and 2.
• Prepare a predetermined work plan for week 3, and check in at the end of each day to check students’ progress.
• Create rubrics to guide students in giving feedback during week 4.

Extensions:
Advanced students may choose to enter their projects in a contest or fair such as the Google Science Fair or Microsoft’s Imagine Cup.

CALENDAR OF MAJOR LEARNING ACTIVITIES: What are the learning activities or tasks for each day? Are there any project milestones? When will formal assessment activities occur?

| Week 1 |
|------------------|-----------------|-----------------|-----------------|------------------|
| Monday           | Tuesday         | Wednesday       | Thursday        | Friday           |
| **Initiating:**  | **Initiating:** | **Initiating:**  | **Initiating:** | **Initiating:**  |
| Introduce SDG #10. Lesson should focus on answering the question, “What kinds of inequalities exist in the world?” | Expand on and deepen Monday’s conversation. Lesson should focus on answering the question, “How do inequalities affect marginalized groups? How do they affect global progress?” | Students generate questions related to three categories: types of inequalities, attitudes about inequalities, and active responses to inequalities. | Students research global inequalities based on the questions generated yesterday. Separate students into three groups based on the three question | Students present the results of their research from yesterday. Provide 15-20 minutes for groups to assimilate their major findings. |
Questions could be generated by dividing students into groups and allotting 10 minutes to write down as many questions as they can think of in a specific category on a poster. At the end of 10 minutes, groups rotate posters and add new questions to the next category. Or use the Question Formulation Technique (QFT). Find more information on the QFT in Module 2 of Global Competence Through CTE.

Then, have each research group present to the whole class OR have students form groups of three to share information with one student from each research group (i.e., types of inequalities, attitudes about inequalities, and active responses to inequalities) in each trio.

At the end of the day, students reflect individually on the week:
• List three things you learned this week.
• What’s one thing you would do differently if you could do the week over?

Week 2

**Initiating:** Students create personal statements in response to the prompt, “I care about reducing inequalities because…” Students can write, draw, or use another medium to express themselves. Statements should clearly express the student’s personal commitment to addressing this global issue and can be supported with details.

**Initiating:** Students search for examples of real-world financial tools. What platform does the tool use (e.g., app, software, website, etc.)? What does the tool do? Who is it for? How is it advertised? How does the tool work?

**Planning:** Assign project groups. (These groups will remain constant for the rest of the unit.) In their groups, students brainstorm designs for a tool that enables companies to define, track, analyze, and/or report financial data related to the gender wage gap. By the end of the day, students should have three to five ideas.

**Planning:** Groups evaluate the pros and cons of each of their brainstormed concepts. By the end of the day, students should agree on one idea.

At the end of the day, students reflect individually on the week so far:
• List three things you learned this week.

**Executing:** Teams make a work plan for next week. By the end of the week, they should have a detailed design of an app, website, or other financial tool that enables companies to work toward closing the gender wage gap. Students must also create a written explanation that a) explains and justifies their design choices, b) places their tool in the context of current issues, and c) contains a reflection on the process of developing the tool.
further research if appropriate.

- What’s one thing you would do differently if you could do the week over?

context of global inequalities, and c) convinces companies to use the tool. Students identify tasks, set goals for each day, and assign tasks to team members. Approve work plans.

### Week 3

<table>
<thead>
<tr>
<th>Executing:</th>
<th>Executing:</th>
<th>Executing:</th>
<th>Executing:</th>
<th>Executing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team work time according to student work plans.</td>
<td>Team work time according to student work plans.</td>
<td>Team work time according to student work plans.</td>
<td>Team work time according to student work plans.</td>
<td>Introduce or remind students about the concept of constructive criticism. Emphasize the importance of revision: identifying the weak points of our designs is an important part of making our projects stronger.</td>
</tr>
</tbody>
</table>

At the end of the day, students reflect individually on the week so far:
- List three things you learned this week.
- What’s one thing you would do differently if you could do the week over?

Teams present their designs and rationales to other teams and provide feedback to each other. Repeat as time allows.

### Week 4

<table>
<thead>
<tr>
<th>Executing:</th>
<th>Executing:</th>
<th>Executing:</th>
<th>Closing:</th>
<th>Closing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students implement feedback from Friday.</td>
<td>Teams present their designs and rationales to other teams and provide feedback to each other. Repeat as time allows.</td>
<td>Students implement feedback from Tuesday.</td>
<td>Teams present their designs to industry representatives and/or community members.</td>
<td>Teams present their designs to industry representatives and/or community members.</td>
</tr>
</tbody>
</table>

At the end of the day, students reflect individually on the week:
- List three things you learned this week.
### Student Reflection Activities: How will students reflect on their work? Add reflection questions and/or activities here.

At the end of the unit, students compile their weekly reflections and respond to two final questions:

- How do global inequalities affect the human experience?
- What's another way I could use my skills to solve an issue or problem?

Adapted from:

- “Unit Planning Template” by the Southern Regional Education Board, n.d., Atlanta: Southern Regional Education Board.

Works Cited: