

Grade 8	<h2 style="text-align: center;">SDG Challenge Curricular Connections</h2>
Grade 8 Science	<p><b>Skills (focus on research and inquiry skills to inform the decision-making process)</b></p> <p><b>Initiating and Planning</b></p> <ul style="list-style-type: none"> <li>• identify science-related issues</li> <li>• identify questions to investigate arising from science-related issues</li> <li>• select appropriate methods and tools for collecting relevant data and information.</li> </ul> <p><b>Performing and Recording</b></p> <ul style="list-style-type: none"> <li>• research information relevant to a given question, problem or issue</li> <li>• identify information and data that are relevant to the issue</li> <li>• select and integrate information from various print and electronic sources, or from several parts of the same source.</li> </ul> <p><b>Analyzing and Interpreting</b></p> <ul style="list-style-type: none"> <li>• apply given criteria for evaluating evidence and sources of information</li> <li>• identify new questions and problems that arise from what was learned</li> <li>• identify and evaluate potential applications of findings.</li> </ul> <p><b>Communication and Teamwork</b></p> <ul style="list-style-type: none"> <li>• work cooperatively with team members to develop and carry out a plan and troubleshoot problems as they arise</li> <li>• defend a given position on an issue, based on findings</li> <li>• evaluate individual and group processes used in investigating an issue and in evaluating alternative decisions.</li> <li>•</li> </ul> <p><b>Skills (focus on problem solving)</b></p> <p><b>Initiating and Planning</b></p> <ul style="list-style-type: none"> <li>• define practical problems</li> <li>• identify questions to investigate arising from practical problems</li> <li>• propose alternative solutions to a given practical problem, select one, and develop a plan</li> <li>• select appropriate methods and tools for collecting data and information and for solving problems.</li> </ul> <p><b>Performing and Recording</b></p> <ul style="list-style-type: none"> <li>• research information relevant to a given problem</li> <li>• construct and test prototype designs</li> <li>• use tools and apparatus safely.</li> </ul> <p><b>Analyzing and Interpreting</b></p> <ul style="list-style-type: none"> <li>• identify and troubleshoot problems, and refine the operation of prototype devices</li> <li>• evaluate designs and prototypes in terms of function, reliability, safety, efficient use of materials and impact on the environment</li> <li>• identify and evaluate potential applications of findings</li> <li>• identify new questions and problems that arise from what was learned.</li> </ul> <p><b>Communication and Teamwork</b></p> <ul style="list-style-type: none"> <li>• work cooperatively with team members to develop and carry out a plan and troubleshoot problems as they arise</li> <li>• recommend an approach to solving a given problem, based on findings</li> <li>• evaluate individual and group processes used in planning and carrying out problem-solving tasks.</li> </ul>

Grade 8  
English

### **1.1 Discover and Explore:**

Express ideas and develop understanding

- revise understanding and expression of ideas by connecting new and prior knowledge and experiences
- review, reread, discuss and reflect on oral, print and other media texts to explore, confirm or revise understanding

### **1.2 Clarify and Extend**

Consider the ideas of others

- acknowledge the value of the ideas and opinions of others in exploring and extending personal interpretations and perspectives

Combine ideas

- exchange ideas and opinions to clarify understanding and to broaden personal perspectives

Extend understanding

- reconsider and revise initial understandings and responses in light of new ideas, information and feedback from others

### **2.1 Use Strategies and Cues**

Use prior knowledge

- use strategies to supplement and extend prior knowledge and experiences when interpreting new ideas and information

### **3.1 Plan and Focus**

Focus Attention

- identify and trace the development of arguments, opinions or points of view in oral, print and other media texts

Plan to gather information

- choose a plan to access, gather and record information, according to self-selected parameters

### **3.2 Select and Process**

Use a variety of sources

- obtain information from a variety of sources, such as artifacts, debates, forums, biographies, autobiographies, surveys, documentaries, films, CDROMs, charts and tables, when conducting research

Access information

- expand and use a variety of tools and text features, such as subtitles, margin notes, key words, electronic searches, previews, reviews, visual effects and sound effects, to access information
- record key ideas and information from oral, print and other media texts, avoiding overuse of direct quotations

### **3.3 Organize, Record and Evaluate**

Organize information

- organize ideas and information creatively, as well as logically, to develop a comparison or chronology, or to show a cause–effect relationship

Record information

- make notes in point form, summarizing major ideas and supporting details; reference sources
- discard information that is irrelevant for audience, purpose, form or point of view

- use a consistent and approved format to give credit for quoted and paraphrased ideas and information

Evaluate information

- evaluate the relevance and importance of gathered information; address information gaps
- incorporate new information with prior knowledge and experiences to develop new understanding

### **3.4 Share and Review**

Share ideas and information

- communicate ideas and information in a variety of oral, print and other media texts, such as interviews, minilessons and documentaries
- integrate appropriate visual, print and/or other media to inform and engage the audience

Review research process

- assess the research process, and consider alternative ways of achieving research goals

### **4.1 Enhance and Improve**

Revise and edit

- revise by adding words and phrases that emphasize important ideas or create dominant impressions
- revise to enhance sentence variety, word choice and appropriate tone

### **4.3 Present and Share**

Present information

- plan and facilitate small group and short, whole class presentations to share information

Enhance presentation

- present information to achieve a particular purpose and to appeal to interest and background knowledge of reader or audience

Use effective oral and visual communication

- plan and shape presentations to achieve particular purposes or effects, and use feedback from rehearsals to make modifications

### **5.2 Work within a Group**

Cooperate with others

- propose ideas or advocate points of view that recognize the ideas of others and advance the thinking of the group
- use opportunities as a group member to contribute to group goals and extend own learning

Work in groups

- contribute ideas, knowledge and strategies to identify group information needs and sources
- organize and complete tasks cooperatively by defining roles and responsibilities, negotiating to find the basis for agreement, setting objectives and time frames, and reviewing progress

Evaluate group process

- evaluate the quality of own contributions to group process, and offer constructive feedback to others; propose suggestions for improvement