Grades 6–8

3.5.6-8.O Technology and Engineering: Applying, Maintaining, Assessing, and Evaluating Technological Products and Systems

Students who demonstrate understanding can interpret the accuracy of information collected.

Clarifying Statement: Developing specific criteria for what information is useful is important in making these judgments. Sometimes determining accuracy is easy—taking information from physical measuring devices like a water-purity tester, for example. At other times, accuracy is more difficult to determine, as when assessments are based on public opinion, which can differ greatly from group to group.

Assessment Boundary: N/A


Analyzing and Interpreting Data
Analyzing data in 6–8 builds on K–5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.
- Analyze and interpret data to determine similarities and differences in findings.

ISTE 3B
- Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

Communication
- Exhibits effective technical writing, graphic, and oral communication abilities.

Pennsylvania Context: Examples of Pennsylvania context include but are not limited to Pennsylvania’s utility industries and the Pennsylvania Public Utility Commission.

Pennsylvania Career Ready Skills: Analyze various perspectives on a situation.

Connections to Other Standards Content and Practices
<table>
<thead>
<tr>
<th>Standard Source</th>
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| **PA Core Standards: Reading and Writing in Science and Technical Areas**       | - CC.1.2.3.G: Use information gained from text features to demonstrate understanding of a text.  
- CC.1.2.4.G: Interpret various presentations of information within a text or digital source and explain how the information contributes to an understanding of text in which it appears.  
- CC.1.2.5.G: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.  
- CC.1.4.3.V: Conduct short research projects that build knowledge about a topic.  
- CC.1.4.4.V: Conduct short research projects that build knowledge through investigation of different aspects of a topic.  
- CC.1.4.5.V: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.  
- CC.1.4.3.W: Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.  
- CC.1.4.4.W: Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.  
- CC.1.4.5.W: Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. |
| **PA Core Standards and Practices: Math**                                       | N/A                                                                                                                                                                                                                                                     |
| **Integrated Standards for Science, Environment & Ecology, and Technology & Engineering Standards Grades K–12** | N/A                                                                                                                                                                                                                                                     |