Grades 9-12, Career Technical Education

Standards:

CA CCSS Writing Standards for Literacy in Science and Technical Subject (WHST)
9.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
   a. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
   b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.
   c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.
   d. Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers.
   e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
   f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

Grades 9-12, Career Technical Education
Sector: Building and Construction Trades
Pathway A: Cabinetry, Millwork, and Woodworking, Standards A6.0 & A6.1
A6.0 Compare and contrast the advantages and disadvantages of using laminates versus using veneers.
A6.1 Demonstrate a working knowledge of joinery, fasteners, and adhesives.

Lesson Idea:

Students in the Cabinetry, Millwork, and Woodworking Pathway will demonstrate their understanding of different types of joinery, fasteners, and adhesives in making various types of cabinetry or woodwork.

Some of the types of joinery, fasteners and adhesives we have been studying in class are listed below:

- Joinery (wood): dovetail, mortise-&-tenon, butt, biscuit, dado, lap, miter, rabbit, scarf, and finger joints.
- Fastener: all types of nails, tacks, all types of screws.
- Adhesive: any type of glue (such as animal, white [polyvinyl acetate], yellow or carpenters [aliphatic resin], hot melt, and polyurethane) and contact cement.
In this task students will write a paper that explains and provides information about their choice of a wood joinery method, fastener and/or adhesive to be used in their woodworking or cabinetry project. The paper also must describe the process in using their specific selections as applied in their project.

Students will demonstrate their working knowledge of the type of joinery, fastener and/or adhesive selected as related to their specific project. The paper will introduce the choices made and provide relevant and sufficient facts, definitions, and concrete details on the use of each. Students will provide a visual model to illustrate the type of joinery method and the relationship to the type of fastener and/or adhesive being used. Students will use accurate and appropriate vocabulary when talking about the joinery, fastener and/or adhesive. The paper will provide a concluding statement that follows from and supports the information and explanation presented in their paper.