



Curriculum Units by Fellows of the National Initiative

2025 Volume I: Art, Design, and Biology

Constructing by Deconstructing Anatomy

Guide for Curriculum Unit 25.01.10, published September 2025

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Both art and science require close observation skills to understand the subject we are studying. Art enthusiasts stand for hours examining a piece of art to understand the artist's inspiration as well as examining individual brush strokes and techniques used to create the overall product. In science we also do close observation—not to observe brush strokes in the painting of a bird, but to examine whether or not the barbs of the feathers, the pattern of the individual scales of a reptile, or the bone structure of the animal or human being drawn or painted have been properly represented. If we look at the artist and naturalist John James Audubon, we can see art that is as close as possible to representing what the artist saw.

Our students can learn more through a well-rounded approach that teaches as well as takes into consideration all possible related materials and has the added benefit of holding the students' attention while opening their minds. There was a time when teaching was more instruction from a textbook mixed with some examples for the student involvement experience. This practice would lead students to embrace the material, spend time and effort to study, and understand the subject matter instead of simply regurgitating talking points from a lecture given by a teacher. This is to help us get back to that place before social media, such as TikTok challenges and attention spans that are ever diminishing, by engaging students' creativity. Creating a connection to biology through art should not only feel natural and proper but also be fulfilling for both students and teachers.

(Developed for Biology, grades 9-12; recommended for Art, grades 8-12, and Physical Science, grades 8-9)

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