Connecting to the Next Generation Science Standards (NGSS Lead States 2013): The chart below makes one set of connections between the instruction outlined in this article and the NGSS. Other valid connections are likely; however, space restrictions prevent us from listing all possibilities. The materials, lessons, and activities outlined in the article are just one step toward reaching the performance expectation listed below.

**Standard**

4-LS1 From Molecules to Organisms: Structures and Processes

**Science and Engineering Practices**
Engaging in Argument from Evidence
Construct and/or support an argument with evidence, data, and/or a model.

**Classroom Connection:**
- Students asked questions about the species on their school campus, how they compare to those at another site, and how species abundance changes with the seasons.
- Students made observations about their school campus, collecting data that would become their evidence to answer the driving research questions.
- Students constructed explanations and presented findings and possible solutions to City Park and Recreation Commission.

**Disciplinary Core Idea**
LS1.A: Structure and Function
- Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

**Classroom Connection:**
- Students used a card sort to focus on matching beak, feet, and food source.
- Students compared food sources available at second location to compare the different structures/functions (ex: Webbed feet found on birds at pond unseen on campus species.)
- Students built and tested a variety of beaks to determine function based on structure.

**Crosscutting Concept**
Systems and System Models
A system can be described in terms of its components and their interactions.

**Classroom Connection:**
- Students compared campus ecosystem with secondary site (wetland pond) to compare the two systems.
- Students tracked bird populations at two sites to compare seasonal differences in bird populations and resources available.

**Performance Expectation**
4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
Connections to the Common Core State Standards (NGAC and CCSSO 2010):

ELA
W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (4-LS1-1)
SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. (4-LS1-2)

Mathematics
4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded across the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. (4-LS1-1)