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)