



Weston Public Schools Textbook Adoption Form

School: WMS **Date:** 6/1/2018
Subject Area: Science
Grade Level: Middle School **Grades:** 6-8

Committee Members:

Jamie Charles, Science/Tech CIL, 6-12
D. Rosvally, M. Welsh – 8th grade teachers
C. Collins, P. Nizlek – 7th grade teachers
A. Kovac, J. Nolle-Berg – 6th grade teachers
<i>(Darcy Ronan – previous Science CIL)</i>

Selection criteria or parameters established for this textbook:

- Alignment of content to the NGSS, disciplinary core ideas, cross-cutting concepts, and science and engineering practices
- Age-appropriate reading/pedagogy
- Engaging and stimulating content
- Interactive features that enhance student learning (animations, simulations, videos)
- Diagrams, real-world examples, and review questions help reinforce curriculum

Weston Public Schools Textbook Adoption Form

Textbooks reviewed during the process:

Title: Interactive Science
Author: unknown
Publisher: Pearson
Publication Date: 2016

Title: Glencoe iScience
Author: unknown
Publisher: McGraw Hill
Publication Date: 2017

Research Conducted: With the changes to the curriculum at the middle school over the past two years in response to the adoption of the new science standards (NGSS), attention has been placed on finding appropriate, effective, and engaging resources to supplement this new curriculum. As textbook suppliers also shift their resources to align to the NGSS, there have not been many high-quality textbooks (or digital resources) available that closely link to the standards and engage the students in the science and engineering practices of the NGSS. After researching some possibilities that had been released, such as Pearson’s “Interactive Science” texts and Glencoe’s “iScience” texts, it seemed that the textbook suppliers required more time to truly shift their resources to the NGSS and not just push a product to the market that they claim was NGSS-aligned.

While at the National Science Teachers Association convention in Maryland in October 2017, several teachers reviewed several of the textbook options available and found the NSTA eBooks to be well-aligned, engaging, and interactive resources to supplement their curricular units in grades 6-8. After piloting several of the eBooks this year and reviewing other titles, these resources seem to be very appropriate, hands-on, challenging, and effective digital textbooks that leverage the availability of the one-to-one devices at the middle school. However, other textbook suppliers are continually in the process of creating NGSS-aligned resources, such as a new line of consumable plus digital textbooks coming out in spring 2019 by McGraw Hill publishers. Therefore, additional research will be needed to review new resources and pilot additional ones that may eventually fit more efficiently into our courses.

Pilot:

(If the text was piloted, please explain the process and include dates. If the textbook was not piloted, please explain the rationale for not piloting.)

These digital textbook resources were piloted for the second half of the 2017-2018 school year. After exploring the resource at the National Science Teachers Association conference in Maryland in October 2017, several of the middle school science teachers were interested in taking a closer look at the various eBooks. As a result, we ordered a variety of them for piloting/reference and gained access to them in February 2018. The teachers found them engaging, relevant, and effective for supplementing their curricula, and as a result, have chosen to order them for the future years.

Weston Public Schools Textbook Adoption Form

Committee Recommendations:

We recommend the National Science Teacher Association (NSTA) eBooks+ for use in the middle school science courses to supplement the curricular units in grade 6-8. These texts align well with the one-to-one digital access of all middle school students in Weston. The appeal of these digital textbooks include their interactive features (such as animations, simulations, and 'Check your Thinking' review questions) as well as age-appropriate readings, diagrams, and authentic real-world examples of class concepts. The specific titles are as follows:

- 1) *Ocean's Effect on Weather and Climate (6th grade)*
- 2) *Flow of Matter and Energy in Ecosystems (6th grade)*
- 3) *Plate Tectonics (7th grade)*
- 4) *Explaining Matter with Elements, Atoms, and Molecules (7th grade)*
- 5) *Force and Motion (8th grade)*
- 6) *Cell Structure and Function (8th grade)*
- 7) *Heredity and Variation (8th grade)*

Title: National Science Teacher Association (NSTA) eBooks+.

Author: Unknown

Publisher: NSTA

Publication Date: 2016

Planned date of next edition: Unknown

Unit Cost: Student editions: \$7.95 for 5-yr access (or \$3.16/yr)
Teacher editions: \$23.96/yr

Number of texts being purchased:

Student editions: 6th grade: 2 eBooks x 185 students

7th grade: 2 eBooks x 200 students

8th grade: 3 eBooks x 200 students

Teacher editions: 6th grade: 1 Teacher edition x 2 teachers

7th grade: 1 Teacher edition x 2 teachers

8th grade: 1 Teacher edition x 2 teachers

Total cost (including shipping): 5-year access (student editions): \$10,891.50

Teacher editions (1-year): \$ 143.76

Total: \$11,035.26

Based on criteria established, explain why this textbook is being recommended for purchase.

These digital textbook resources take full advantage of the one-to-one digital access of our middle school students and appropriately and effectively align with the content and expectations of the NGSS and science practices. Their focused content allows for the teachers to integrate these resources into their curriculum whenever relevant and provide their students with interactive, engaging, and dynamic readings, videos, examples, and practice questions to supplement and reinforce their comprehension of the class content and expectations.

Recommendation approved by:

Jamie Charles

Date: June 1, 2018

CIL

Lisa Deorio

Date: 6/1/2018

Principal

Dr. Kenneth Crow

Date: 6/7/2018

Assistant Superintendent