



*Superintendent*  
Greg Baker

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**TO:** Dr. Baker  
**From:** Middle School Science Committee  
**Date:** May 29, 2018  
**RE:** Proposal for adoption of instructional materials in middle school science

**Introduction**

The current instructional materials for middle school science are well over 15 years old, designed for a previous set of standards and are no longer available for purchase in many cases. The overwhelming need and rationale for the creation of the adoption committee was to identify materials that are specifically designed for the Next Generation Science Standards (Washington State Science Learning Standards). These standards are built on sense making in science through phenomenon-based and three-dimensional (the purposeful blending of disciplinary core ideas, cross-cutting concepts and science and engineering practices) learning experiences.

In October 2017, applications for participation on the middle school (6-8) science committee were solicited from staff, parents and community members. The committee met seven times between November and April. The composition of the committee included a sixth, seventh and eighth grade teacher from each middle school, one English Language Learner Specialist, four parent/community members, the District’s Science Teacher on Specialist Assignment, a middle school Principal, and the Director of Teaching and Learning (curriculum). We used the Norms of Collaboration from the Center for Adaptive Schools. We also created local meeting guidelines to enhance our teamwork. The committee was deeply committed to a unified outcome including a common scope and sequence based on common instructional materials.

**Plan of the work:**

The work of the committee built on two years of study by our middle school science teachers of the Standards. We outlined the tasks and timeline for adoption of materials and affirmed/refined our vision statements for effective science instruction. Effective Science education includes or is:

- Authentic science and engineering experiences highlighting collaboration
- Accessible to all students—equity
- Student led inquiry
- Students actively constructing understanding
- Emphasis on science and engineering practices
- Developing lifelong interest, curiosity and excitement about science
- Developing critical thinkers, critical consumers of information and citizenship

**List of core instructional materials considered in the process:**

Materials	Publisher
<i>IQWST</i>	Activate Learning
<i>Project Based Inquiry Science</i>	Activate Learning
<i>Amplify Science</i>	Amplify (Lawrence Hall of Science- developer)
<i>Dimensions</i>	Houghton Mifflin Harcourt
<i>iScience</i>	McGraw Hill
<i>Elevate</i>	Pearson
<i>Science Alive!</i>	TCI

We developed a screening tool based on our vision statements. Then we screened the above comprehensive science programs. After eliminating three programs, we scheduled publisher presentations for four semi-finalist programs. Following the presentations, we eliminated another program. Next, we invited Bellingham High School teacher and NGSS expert, Jamie Yoos, to lead us in applying the [EQuIP rubric](#) to our three semi-finalist programs: *Amplify Science*, *Elevate* and *Science Alive*!

After thorough review and discussion, we found that *Amplify Science* is the program most strongly aligned with our vision. It works well with our 1:1 devices and Microsoft classroom tools. Bellevue School District adopted this program a year ago and they are also a Microsoft classroom district.

In addition to committee meetings, we also asked teachers who were not on the committee to give us feedback regarding the three semi-finalists programs. Teachers both on and not on the committee preferred *Amplify Science*.

The issue of scope and sequence has been discussed throughout the committee process and will continue into the first week of June. *Amplify Science* units were designed to be modular. That is, they can be moved around to meet needs of school districts and/or states. However, there is a recommended integrated sequence that we are also considering. The committee is dedicated to either finding a strong sequence match to the Conceptual Progressions Model for middle school described in [Appendix K](#) of the Next Generation Science Standards or to implementing the integrated sequence that is recommended by *Amplify Science*.

#### **“Demo pilot”**

As part of the final decision-making process, several teachers at Shuksan and Whatcom middle schools tried out the materials with their students in April and May. This “demo pilot” affirmed our belief that these materials will be a good fit for our students and will work well with our technology devices.

Sam Stoner and Bobby Marsee of Whatcom Middle School were able to try out lessons and collect student responses in OneNote. They were excited about how easy it is to share content with students and to save information and notes for future years. Alli Neils-LeMoine and the team of 8<sup>th</sup> grade teachers at Shuksan piloted a unit that included simulations and the building of “inheritance” models using K’Nex construction (toy) materials. Students and teachers were engaged with these lessons.

Students particularly appreciated the simulations that were provided as part of the lessons in Amplify. They expressed interest in having both hands on and computer/tech-based learning opportunities.

#### **Public Forum**

We conducted a parent/community form on May 2 and we provided an online survey for parent/community input. Although in person participation was low – five community members/parents- the participants expressed their excitement about a refresh to our middle school science curriculum. They like the idea of learning about student lessons through the 1:1 devices. There were no responses to our online survey.

#### **Committee information**

Link to minutes and meeting documents can be found here: <http://bellingshamschools.org/about/committees-advisory-groups/middle-school-science-adoption-committee/>

**Recommendation:**

The committee concluded its main timeline on May 17, 2018. We strongly recommend the adoption of *Amplify Science* materials for all middle school science classes: Science 6, Science 7, and Science 8 to be implemented in the fall of 2018 by all grade levels. *Amplify Science* is designed specifically for the Next Generation Science Standards and we believe the program is highly engaging. The materials will be delivered as a part of our implementation of 1:1 technology.

For more information about *Amplify Science*, please visit the publisher's website:

<https://www.amplify.com/curriculum/amplifyscience/middle>

**Committee members**

**6th grade teachers:** Mike Finley, Fairhaven; Megan Butcher, Kulshan; Beth Insera, Shuksan; Nicole Brown, Whatcom

**7th grade teachers:** James Fegel, Fairhaven; Laurie Mueller, Kulshan; Will Middlebrooks, Shuksan; Sam Stoner, Whatcom

**8th grade teachers:** Miguel Boriss, Fairhaven; Julie Bennett, Kulshan; Alli Neils-LeMoine, Shuksan; Chad Wertz, Whatcom

**ELL Specialist:** Patricia Kadel

**Educational Technology Coach:** Lynnelle Larson

**Parent/community members:** Don Burgess, Marit Olson, Andrew Rodrigues, Doug Stark

**Principal:** Meagan Dawson, Kulshan

**Committee facilitated by:** Charisse Berner, Director of Teaching and Learning; and Sarah Walker, Science Teacher on Special Assignment

**Ex-officio:** Mike Copland, Deputy Superintendent