

Capitalizing on Amplify Science in a responsive relaunch, NYC

The learning disruptions of the past year due to COVID-19 have created wide disparities in the amount and quality of science teaching and learning that has taken place in schools. The resulting unfinished learning in science will vary in each school and classroom, and for each individual student. This brief highlights five key features of Amplify Science that can be leveraged in responsive relaunch plans. These recommendations are intended to support instructional leaders and teachers as they envision what science teaching and learning will look like in the upcoming back-to-school season and beyond. [The full guidance document can be found here.](#)

1. Amplify Science is NGSS-designed.

The New York State Science Learning Standards (NYSSLS) are not a list of discrete pieces of knowledge for students to acquire; rather they are a set of three-dimensional expectations that emphasize both the knowledge and also the practices of science and engineering. Thus, our systems of relaunch should emphasize helping students continue to progress in their ability to think critically and problem-solve like a scientist, using all three dimensions of the NYSSLS.

Recommendations

- **Move forward with this year.** Focus on the current grade level standards and units rather than working to identify “missing” content or trying to backfill discrete science ideas from the previous year.
- Continue strengthening the use of the **Science and Engineering Practices and Crosscutting Concepts**. Authentic engagement and development of these scientific critical thinking skills is what allows students to apply their knowledge to real-world situations in and out of the classroom.

2. In Amplify Science units, students are figuring out phenomena.

Figuring out phenomena can be a source of motivation, relevance, and deep learning for all students. Each Amplify Science unit is designed to engage students in a coherent sequence of instruction where students take on the role of a scientist or engineer and figure out a real-world phenomenon.

Recommendations

- Focus on **quality teaching** of full Amplify Science units, even if it means fewer units will be taught. This will ensure they engage in the full phenomena-based storyline.
- **Protect science time**, particularly in elementary school. In a situation where science time is not adequately protected in instructional schedules students are denied the opportunity to become curious, skeptical, critical thinkers who are ready to tackle more complex scientific ideas in the years to come.

3. Amplify Science has a robust system of formative assessment.

Formative assessment is always an essential practice in science instruction to ensure that all students are making progress towards the grade level learning goals. With the prospect of unfinished learning from the year prior, the Amplify Science system of formative assessment can be used to closely monitor student understanding, track student progress, and be able to offer just-in-time support.

Recommendations

- **Get to know the formative assessment system** and plan for how to use it to provide targeted feedback and support.
- Keep moving forward with instruction, but **allow time as needed to gather data and respond** to student progress via the system of embedded formative assessments.

4. Amplify Science has a strong emphasis on literacy development.

Reading, writing, listening and speaking are fundamental aspects of students' work to figure out complex ideas in science. We can leverage these core practices in Amplify Science to accelerate literacy development and address a variety of priority instructional content in English Language Arts.

Recommendations

- **Teach full units with integrity** to provide students with the explicit instruction and practice opportunities with developing disciplinary literacy and to engage fully in reading, writing, listening, and discourse.
- Be aware of **CCSS-ELA standards addressed in Amplify Science** to see where there are opportunities for overlap and to strengthen practices in Language Arts. Capitalizing on these synergies can also help to protect science time.

5. Amplify Science is for all students.

The NYSSLS offers a vision for “all standards, all students.” Teaching with Amplify Science aligns with this vision to support students in developing their identities as builders and active users of science knowledge, to promote cultural and linguistic inclusion, and to provide access to deep learning.

Recommendations

- **Take time to establish a culture of figuring out.**
- Utilize the **differentiation notes** in the Lesson Brief of each lesson.