

## Inspire Science: Designed to Fulfill NGSS

Since its inception, McGraw Hill's *Inspire Science*, Grades 6–8, has provided leading-edge science content and instruction developed specifically to the Next Generation Science Standards (NGSS). As a *comprehensive* science curriculum, it is designed to enable middle school teachers across a wide range of classroom settings to meaningfully implement the conceptual shifts in science education and engage *all* students in the content. The learning objectives of *Inspire Science* were systematically developed based on standards, learning science, and input from a range of expert authors, consultants, content reviewers, teacher reviewers, and curriculum advisers. Our development process includes opportunities to update content based on user experience, research, and other feedback, and *Inspire Science* ©2020 reflects that process of continuing refinement.

Developers of the NGSS standards as well as educational practitioners who are using them played key roles in the development of our instructional model and program structure. To learn more about the research foundation for *Inspire Science*, visit <u>NGSS</u> and the Research Foundations of *Inspire Science*. To learn more about how McGraw Hill designs curriculum and solutions around the principles of learning science, visit <u>What is Learning Science</u>? The program has been adopted in numerous states and districts that have implemented NGSS standards.

We acknowledge EdReports' desire to contribute to education by working to influence curriculum development through their reviews. At McGraw Hill, we welcome honest, transparent, and purpose-driven discussions about learning with those who interact with our programs. However, we respectfully disagree with the initial EdReports review of *Inspire Science* ©2020, and we stand by the approaches we took in our program. *Inspire Science* was designed to embody the spirit of the Framework for K–12 Science Education and fulfill the core principles and expectations of the NGSS—these comprised our "north star" in designing the program.

We note that McGraw Hill joins the large cohort of science curriculum publishers that did not receive a favorable rating from EdReports in these initial round of reviews. We parsed the responses of the 10 other publishers with reviews published (as of November 2020), and see several themes repeated among them that call into question the overall approach the EdReports team has taken in making sense of the design principles behind the Next Generation Science Standards. Although all ostensibly follow the same north star, EdReports methodology does not allow for variable or flexible approaches to NGSS, *which is the very foundation of the standards themselves*.

## **Inspire Science and NGSS**

The NGSS was designed to ensure instructional flexibility such that teachers are the drivers in designing learning opportunities around performance expectations (PE) within the three dimensions of learning. *Inspire Science* ©2020 was designed to support 3D learning across a multitude of educational settings and conditions, is built around phenomena, which drive student learning, and leverages the three dimensions deliberately and systematically throughout the program.

• Inspire Science was designed around phenomena-driven learning—each module and each lesson begin with a phenomenon that is explored throughout the module or lesson using the appropriate Disciplinary Core Ideas (DCI), Science and Engineering Practices (SEP), and Cross Cutting Concepts (CCC). The phenomena presented in Inspire Science are engaging, real-world events that prompt students to ask questions, and those questions drive the curiosity and subsequent learning, which lead to mastery of the PEs; in doing so, we are staying true to the recommended practice of NGSS of diving deeper into core ideas.

- Inspire Science was designed to support all three dimensions, as we recognize that all three are critical for "cultivating students' scientific habits of mind, develop their capability to engage in scientific inquiry, and teach them how to reason in a scientific context" (NGSS, 2012). The three dimensions are continuously woven throughout the program in a systematic and meaningful way.
- Inspire Science systematically approaches 3D integration with an effective, empowering structure that permits students and teachers to engage with DCIs, SEPs, and CCCs authentically, with gradually deepening complexity over time. The program systematically and consistently builds to 3D learning in a balanced approach, with targeted dimensions in focus during lessons and culminating in summative learning with all three-dimensions in the Module Wrap-Up, STEM Module Project, and Assessments.
- Inspire Science was designed to support 3D learning across a multitude of educational settings and conditions. As such, the program empowers teachers to vary in their approaches to instruction in order to support research-based learning progressions - for example, some learners may benefit from developing a solid understanding of DCIs and SEPs before exploring CCCs in concert with DCIs and SEPs.

## Conclusion

The National Research Council's "Guide to Implementing the Next Generation Science Standards" exhorts districts to "attend to coherence in the curriculum" with materials that are "designed with a coherent trajectory for students' learning . . . in **varied combinations** and in **multiple contexts** to be able to use them as required to meet the NGSS performance expectations" (page 5, our emphasis). We are confident that districts who select *Inspire Science* are ensuring their teachers and students in fact do have a program that delivers on that recommendation.

To discover for yourself how *Inspire Science* can spark students' curiosity and keep them thinking and talking about science, as well as the ways it empowers educators to provide engaging and equitable science experiences for all learners through flexible approaches grounded in research-based best practices, visit <u>Inspire-Science.com/6-12</u>.