While career opportunities in Science, Technology, Engineering, and Math (STEM) increase each year, qualified candidates for these careers continue to fall short. This is known as the STEM Gap. This gap represents a great opportunity for the students in your classrooms today to become the innovators of the future.

Inspire Science helps students build innovative thinking skills by empowering them to explore and learn from our world’s amazing natural phenomena in exciting, hands-on ways.

- By fostering student’s innate curiosity, you elevate their critical thinking.
- By facilitating hands-on investigation, you deepen their understanding.
- By encouraging creative problem-solving, you inspire their innovation.

A new generation of innovators is growing up right now. Are you ready to inspire?

Let’s Embrace Change, Together.

The Next Generation Science Standards (NGSS), offer a new approach to K-12 Science education. With this new, more hands-on and application-oriented approach, a number of questions will no doubt be at the forefront of every science educator’s mind…

- How can I easily transition to NGSS?
- How will NGSS be engaging and accessible for all my students?
- How will I manage the increase of hands-on activities?

The Inspire Science development team at McGraw-Hill Education has put solutions to these challenges (and more) at the forefront of our work through years of close collaboration with educators like you. The result - a user-friendly approach to implementing NGSS, so you can focus your energy on the art of teaching, and the joy of inspiring the next generation of innovators.

Let’s take a look at how Inspire Science will help you with a smooth transition to NGSS.
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Thomas Edison
Invention: Electrical Light
Date of Invention: 1879

America’s Greatest Inventor
On February 11, 1847, an inventor and businessman who would influence the world was born in Milan, OH. Thomas Edison has been described as America’s greatest inventor, holding 1093 US patents and hundreds more across the world. His most famous patent was for the incandescent light bulb.

Edison began his work on the incandescent light bulb in 1879. He wanted to invent a light bulb that would replace gas lights and last for extended periods of time. After much trial and error and numerous attempts with different types of materials, he finally succeeded in lighting the first incandescent light bulb on October 22, 1879. It stayed lit for roughly 14 hours! The success of the light bulb led to many additional patents, which earned him the label of America’s Greatest Inventor.

Edison’s success with the light bulb and other successful patents led the launch of a number of businesses in the United States and worldwide. Throughout history, Thomas Edison’s innovations have revolutionized life as we know it, and influenced many inventors, including Nikola Tesla.

“I have not failed. I’ve just found 10,000 ways that won’t work.” —Thomas Edison

Nikola Tesla
Invention: The Tesla Coil
Date of Invention: 1905

An Electric Personality:
Nikola Tesla was born on July 10, 1856 in Smiljan, Croatia. He was an inventor, electrical and mechanical engineer, and physicist. He is best known for his ground-breaking contributions to the design of the alternating-current (AC) electrical system.

From a young age, Tesla showed an interest in science. After working for Thomas Edison for a year, Tesla struck out on his own and received more than 30 patents for his inventions. In 1891, Tesla invented the Tesla coil - an induction coil used in radio communications. Throughout his life, Nikola Tesla obtained 278 patents.

Today we use Tesla’s inventions in many ways, most notably every time we ‘flip a switch’ to turn on a light!

“The day science begins to study non-physical phenomena, it will make more progress in one decade than in all the previous centuries of its existence.”

— Nikola Tesla
A Smooth Transition to NGSS

NGSS isn’t just about a new set of standards. It’s a new philosophy for K-12 Science education focused on helping you prepare students for career and college readiness.

At McGraw-Hill Education, we understand that making the shift to new standards can be challenging, and we want to help make it easier on you. That’s why the Inspire Science team has been studying the NGSS standards for years, while testing ideas with teachers like you to create a user-friendly experience for both teachers and students.

How does Inspire Science Ensure a Smooth Transition to NGSS?

Let’s look at a few inspiring ways Inspire Science will help you make the transition to NGSS as smooth as can be.
A Smooth Transition to NGSS

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User-Friendly Instructional Model

Inspire Science provides the proven and research-driven 5E instructional model enhanced to align with the demands of the NGSS for three-dimensional, phenomena-driven learning.

Support for NGSS

The transition to NGSS requires a few shifts in science instruction and learning, and Inspire Science supports you through each one.
- Progressive, Three-Dimensional Learning
- Depth Over Breadth
- Phenomena-Driven, Inquiry-Based, Hands-On Learning
- Performance-Based Testing
- Integrated Engineering

Built with Teachers, Since the Beginning of NGSS

Our close collaboration with the NGSS writers, and educators just like you has resulted in a tried-and-true approach to NGSS that you’ll love.

Professional Learning When You Need It

Inspire Science includes an expansive library of relevant, self-paced, professional learning courses to support implementation, instructional progression and mastery — all available 24/7.

A New Level of Innovation
Ensure Student Engagement

As educators, we understand what happens when students are truly engaged: a classroom full of excitement, increased focus, and deeper conceptual understanding.

That's why Inspire Science places student engagement at the forefront. Each module and lesson is designed to tap into students' natural curiosity about the world around them through the investigation of real-world phenomena. Student engagement is further fueled through an innovative digital experience, and the connections to real-world applications with the STEM Career Connections and STEM Module Projects.
Animals

Did You Know?
The trees can grow up 32 feet tall. The goats climb all the way to the top because they are attracted to the fruit.

Talk About It
Look at the photo and watch the video of the goats climbing the tree. What questions do you have? Talk about your observations with a partner.

GO ONLINE
Watch the video Climbing Goats to see the phenomenon in action.

ENCOUNTER THE PHENOMENON

Hands On
INQUIRY ACTIVITY

Materials
plant
hand lens
crayons
flashlight

Observe Plant Parts
You observed the parts of a tree. Observe parts of another plant.

Investigate
BE CAREFUL
Wear gloves.

1. Choose three different plant parts.
2. Draw a picture of each part in the table.
3. Use the hand lens. Look at each part. Observe the color and shape.
4. Use your hands. Carefully feel each plant part.
5. Use a flashlight. Shine light on each plant part.

Make a Prediction
How are parts of the plant different?

Explore
Module: Plant Structures and Functions

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Hands-On Support

Program Overview

Enjoy the Increase in Inquiry-Based Hands-On Activities That NGSS Requires

NGSS require a marked increase in inquiry-based learning, resulting in more hands-on activities. This shift makes for a more exciting classroom experience, but it also comes with new logistical challenges that can be managed and mitigated with support structures. Inspire Science offers a number of support structures to help make the shift more manageable and more fun for you and your students.

How does Inspire Science Make the Increase in Inquiry-Based Hands-On Activities Easier for Educators?

Let’s look at some of the ways Inspire Science will help you look forward to more hands-on learning.
Enjoy the Increase in Inquiry-Based Hands-On Activities That NGSS Requires

NGSS require a marked increase in inquiry-based learning, resulting in more hands-on activities. This shift makes for a more exciting classroom experience, but it also comes with new logistical challenges that can be difficult to manage. With Inspire Science, we’ve provided a number of support structures to help make this shift more manageable and more fun for you and your students.

Inquiry Activity Planners

The Inspire Science Inquiry Activity Planners make preparing for hands-on activities easier than ever — listing out all the materials needed for the entire module and clearly noting which materials are included in the Collaboration Kits.

Engaging Inquiry Activities with Options

Every lesson in Inspire Science offers multiple inquiry-based activities, along with techniques that scientists and engineers use in the real world. These inquiry activities include differentiation strategies (through the Inquiry Spectrum), and various pacing options ranging from simple investigations to complex lab explorations.

The Inquiry Spectrum

Depending upon the available time and the topic being investigated, structured inquiry might be perfect, or your class may be ready for open inquiry. The Inspire Science Inquiry Spectrum provides flexible options to adjust the inquiry level to align with the learning needs of each student.

Collaboration Kits

Nothing is more engaging than rolling up your sleeves and digging into hands-on activities, but we understand managing the materials to support hands-on time can be a challenge. Developed specifically for group collaboration, the Inspire Science Collaboration Kits make hands-on activities a breeze — freeing you to focus on the activity rather than planning and hunting for supplies.
Ensure All Students Have Success with NGSS

Students of all learning levels have questions about their world and phenomena they see every day, and they need equal access to instruction, support, and content.

Inspire Science fosters deep learning for every student by providing built-in supports for differentiated instruction, EL strategies, and language-building resources at the module level and at multiple points throughout each lesson. Each student is given an opportunity to construct explanations of phenomena and use evidence-based logic to make connections, building critical skills at every step.

Universal Access

How does Inspire Science Inspire All Students?

Let’s look at some of the practical ways this program inspires all students with equal access to rigorous science content.
Ensure All Students Have Success with NGSS

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Differentiated Instruction

Inspire Science incorporates the research-based Universal Design Learning Principles to ensure that all students have access to rigorous curriculum. Robust differentiation support is found within the Teacher’s Edition, as well as through leveled informational text resources such as the leveled readers and INVESTIGATOR articles. Support with practical strategies is found at the module and lesson level at multiple points. Leveled text aligns with the Lexile ranges of the CCSS.

English Language Support

Rooted in learning sciences research, Inspire Science applies the best instructional practices for teaching EL students. Each module and lesson has scaffolded activities that offer students of any level of English language proficiency the opportunity to engage in academically challenging science and engineering content while supporting language acquisition.

CER Framework

The Claim, Evidence, Reasoning (CER) framework in Inspire Science — which becomes increasingly sophisticated from K-12 — ensures every student is engaged in rigorous scientific inquiry and argument from evidence.

Next Generation Assessments

Ensuring students are well prepared for the state-wide tests can seem daunting, but with Inspire Science’s next generation assessment tools, in partnership with Measured Progress (STEM Gauge), you’ll know what to expect and how to prepare your students for success with mastery of the Performance Expectations.

Online Assessment Center

**Program Overview**

**Universal Access**

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**Online Assessment Center**
Resources for Every Classroom

At McGraw-Hill Education, we understand that different classrooms have different needs for tactile and digital resources. We know those needs can change day to day. Inspire Science is designed to fit all of your resource needs through a wide array of print, digital, and hands-on materials so you have access to all of the great learning resources in any form you’d like, whenever you need them.

How does Inspire Science Meet All of My Classroom Needs for Print, Digital, and Hands-On Resources?

Let’s look at how with this program, you’ll have everything you need for success with NGSS.
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Print Resources
Every Inspire Science print book includes a digital companion to complement the digital interactive resources such as simulations, 3D models, videos, and learning-based games.

TEACHER’S AND STUDENT EDITION
(Grades K-5, Four Kits Per Grade)

SCIENCE READ ALOUDS
(Grades K-6)

INVESTIGATOR ARTICLES
(Grades 2-5)

LEVELED READERS
(Grades 6-8)

Collaboration Kits
Inspire Science Collaboration Kits make planning for hands-on time easier, so you can focus more of your time on the activities than the planning. Each Collaboration Kit contains the materials needed for the hands-on inquiry activities, organized by unit and module.

Digital Resources
In addition to the digital versions of each print book, Inspire Science provides a digital experience designed with advantages for both you and your students, including innovative interactives, videos, simulations, learning-based games, personal tutors, and more.

See the Collaboration Kit Guide to learn more about what each unit kit includes.

Designed to Fit Any Classroom

Explore Our Phenomenal World

Collaboration Kits
Grades K-5

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Inspire Science

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Let Them Dream Big

Americans have always been at the forefront of innovation and invention. With the emphasis Inspire Science places on curiosity, investigative skills, and innovative thinking, just imagine what the students in your classroom today might dream up to improve our lives someday — in our country and beyond.

How Might the Future Innovators of America Impact Our World Someday?

We know that students in our classrooms today have the potential to solve the problems of tomorrow. Inspire Science is designed to help you build the skills students need to carry on America’s legacy of inspired thinking.

Let’s look at some of the possibilities for the future innovators.
A Future Full of Possibilities

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A Future Full of Innovation

With the creative thinking and problem-solving skills your students will build with Inspire Science, they will have so many opportunities to impact the world. What problems will you inspire them to solve in the future?

Innovative Solutions for Global Warming
New solutions to reduce carbon emissions and clean up the carbon from our atmosphere?
Practical fuel cell transportation to power cars from water, emitting only steam?
An influential role in global carbon emissions management?

Innovations in Health Care and Disease Management
Advances in cellular immunotherapy treatments to leverage our own immune systems to stop cancer and diseases in their tracks?
Advances in using robotics for healing and repairing the human body?
New ideas for identifying and stopping diseases before they happen?

Innovations for Natural Resources
Practical ways to harness energy from the ocean waves?
Creative solutions to food creation and distribution to address world hunger?
Explore Our Phenomenal World

Inspire Curiosity
Inspire Investigation
Inspire Innovation

Learn more at inspire-science.com