

Secondary Solutions | Science

# Pearson 2013

SCHOOL ACHIEVEMENT SERVICES

Professional Development & Specialized Support Services

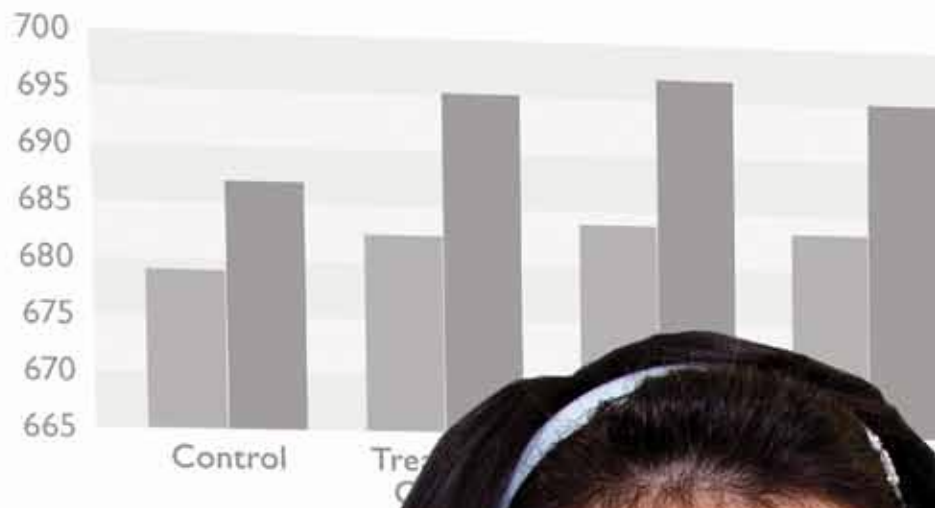


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[PearsonSchoolImprovement.com](http://PearsonSchoolImprovement.com)

ALWAYS LEARNING

PEARSON



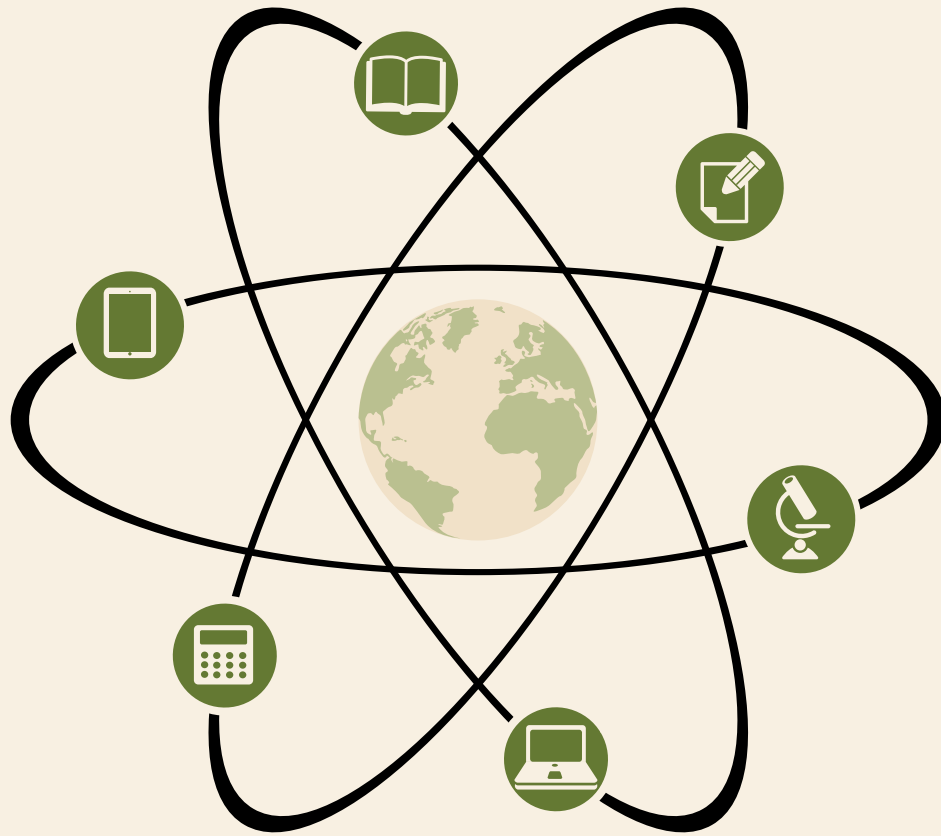
# Build Students' Interest and Achievement in Science

With engaging, personalized teaching strategies

- Address STEM concepts, the Next Generation Science Standards (NGSS), and the Common Core State Standards.
- Implement inquiry-based learning.
- Improve core scientific understanding.

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# Helping Today's Learners Develop Scientific Literacy

To succeed in college and the 21st century workplace, students need the content knowledge and reasoning skills that are part of a strong science education. Teachers must be prepared to help students improve conceptual understanding, use science content to practice reading and writing skills, and become active participants in their own learning.

## Address the New Standards

Educators learn how to:

- Use teaching strategies and best practices that support STEM and 21st century learning initiatives.
- Develop 21st century reading and writing skills in science content areas.
- Transition successfully to the NGSS with grade-appropriate interactive professional development.

## Implement Inquiry-Based Learning

Educators learn how to:

- Make explicit connections between inquiry and content.
- Evaluate student work to support data-driven decision making and differentiated learning paths.
- Address state and national science standards with inquiry-based science activities.

## Promote Core Understanding

Educators learn how to:

- Activate the built-in features of Pearson science programs to help students develop scientific literacy.
- Foster an understanding of the core ideas of science.
- Help students build the language they need to be successful in science.

Pearson professional development helps science teachers ensure fidelity of implementation, develop the strategies they need for effective science instruction, and improve student learning.

Our workshops are based on decades of experience, strong research, and high-quality, integrated resources. Expert consultants and authors help you assess where you are today and work with you to build a road map to get you where you want to be.

### LEGEND



English Language Learners



Response to Intervention



Common Core State Standards



Online Services

# Meet Our Science Experts

Pearson works with more than 1,000 authors and researchers to bring you practical, evidence-based professional development programs and resources. Our close association with key authors and architects of the Common Core State Standards ensures that the spirit and pedagogical approach of the initiative is embodied in our educational materials, assessments, and professional development.

A few of the experts we work with include:



**Mike Padilla, Ph.D.**  
Interactive Science™ Author

- Served as president of the National Science Teachers Association and as a writer of the National Science Education Standards
- Professor of science education at the Clemson University



**Zipporah Miller, M.A.Ed.**  
Interactive Science™ Author

- Former K–12 science supervisor and STEM coordinator for the Prince George's County (MD) Public School District
- NSTA's associate executive director for professional programs and conferences



**Kathryn Thorton, Ph.D.**  
Interactive Science™ Author

- Veteran of four space flights, logging over 975 hours in space, including more than 21 hours of extravehicular activity
- Currently the Associate Dean for Graduate Programs in the University of Virginia School of Engineering and Applied Science



**Don Buckley, M.Sc.**  
Interactive Science™ Author

- Founder of New York City Independent School Technologists (NYCIST)
- Long-time chair of New York Association of Independent School's annual IT conference
- Taught students on two continents and created multimedia and Internet-based instructional systems for schools around the world



**Michael Wysession, Ph.D.**  
Interactive Science™ Author

- Awarded the prestigious Packard Foundation Fellowship and Presidential Faculty Fellowship for his research in geophysics
- Expert on Earth's inner structure and has mapped various regions of the Earth using seismic tomography
- Associate Professor in Earth and Planetary Science at Washington University in St. Louis, MO

# Drive teacher effectiveness while measuring the fidelity of your Interactive Science™ implementation

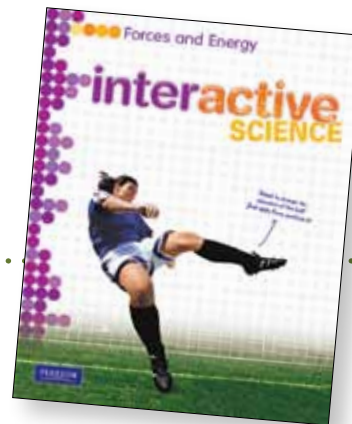
## Get the Results You Want

Pearson's wide array of Interactive Science™ professional development services coupled with additional science, Common Core, classroom technology, and assessment professional development support will help you design an ongoing educator professional development plan.

These recommended road maps show how you can implement Interactive Science™ with fidelity—just pick your focus area.



# Interactive Science™



## Interactive Science™: Successful Strategies for Reading and Writing in Interactive Science™

NUMBER OF DAYS: 1

Explore reading and writing strategies used in the *Interactive Science™* classroom. Participants learn best practices of reading and writing in the content areas and learn about the *Interactive Science™* write-in student edition that emphasizes the use of 21st century reading and writing skills.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Analyze strategies embedded in the program and discuss ways to enhance student involvement.
- Determine which strategies are most appropriate for each student based on the student's needs.

### TARGET AUDIENCE:

Educators, Instructional Coaches, Curriculum Developers, Administrators

NUMBER OF PARTICIPANTS: 30

ISBN: 112935

## Interactive Science™: Ease with Interactive Science™ Modules, Kits, and Labs

NUMBER OF DAYS: 1

Feel at ease with *Interactive Science™* lab preparations, lab materials, classroom management, and outcomes of labs. Labs can be an investment of time, and this workshop helps participants get the most out of each lab.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Learn strategies to engage a range of learners in modules, kits, and labs within the *Interactive Science™* program.
- Describe techniques for supporting labs, including lab equipment explanations (for those that are not intuitive) and care of equipment.

### TARGET AUDIENCE:

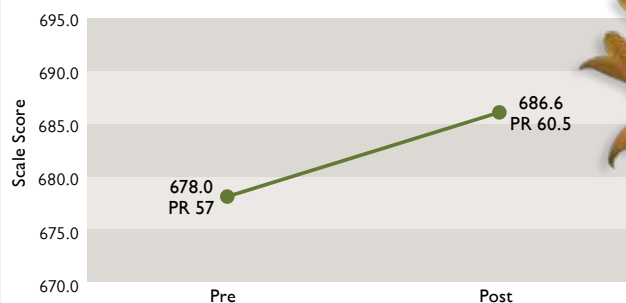
Educators, Instructional Coaches, Curriculum Developers, Administrators

NUMBER OF PARTICIPANTS: 30

ISBN: 112939

### RESULTS SNAPSHOT: INTERACTIVE SCIENCE™

Students who used Pearson *Interactive Science* showed significant growth in science performance as measured by the standardized TerraNova Science test and a developed science assessment aligned to the science content covered during the school year as well as national standards.





## English Language Arts Standards for Science and Technical Subjects

**NUMBER OF DAYS:** 1

Explore components of the Common Core State Standards (CCSS) for Grades 6–12 reading and writing in science and technical subjects. Participants explore the CCSS' emphasis on a framework for teaching and learning that supports college and career readiness. They also focus on instructional practices and strategies for teaching science content that integrates reading and writing CCSS literacy standards into classroom instruction.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Identify the domains and concept categories included in the 6–12 standards for science and technical subjects.
- Connect these 6–12 standards to inquiry-based instructional practices.
- Identify and use CCSS instructional strategies presented around relevant lesson topics of interest.
- Distinguish between inauthentic and authentic reading and writing tasks in the science classroom.

### TARGET AUDIENCE:

6–8 Educators

**NUMBER OF PARTICIPANTS:** 30

ISBN: Interactive Science™ 6–8 ©2011: 115354

## Interactive Science™: Long-Term Learning through Scenario-Based Investigations

**NUMBER OF DAYS:** 1

Explore the format of *Interactive Science*™ scenario-based investigations, and learn how to teach through these investigations. During this workshop, participants learn how to write their own scenario-based investigations.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Review cooperative learning strategies and ways to utilize them in the classroom.
- Experience and practice strategies that increase effectiveness of instruction and increase student learning within all the parts of a lesson.
- Describe strategies to engage a range of learners in effective graphic organizers and pictorial representations for solving problems.

### TARGET AUDIENCE:

Educators, Instructional Coaches, Curriculum Developers, Administrators

**NUMBER OF PARTICIPANTS:** 30

ISBN: 112938

## Interactive Science™: Integrating the CCSS, STEM, and NGSS into the Interactive Science Classroom

**NUMBER OF DAYS:** 1

Examine the impact that the Common Core State Standards (CCSS) for English Language Arts (ELA), Science, Technology, Engineering, and Mathematics (STEM), and Next Generation Science Standards (NGSS) have on classroom instruction. Participants evaluate a master teacher as she models best practices and develops a lesson plan that applies these practices. Participants explore each topic for approximately two hours.

### OUTCOMES:

By the end of this workshop, participants will be able to:

- Explore the Science and Technical Subjects standards found within the CCSS for ELA.
- Evaluate how to adjust their current instruction to meet the CCSS for ELA.
- Examine STEM and its connection to college and careers.
- Identify how to adapt current practices to meet STEM expectations.
- Identify how the NGSS will affect instructional practices.
- Explore the changes to instruction and assessment that are necessary to meet the rigor of the NGSS assessments.

### TARGET AUDIENCE:

6–8 Educators

**NUMBER OF PARTICIPANTS:** 30

ISBN: 119615



View free Interactive Science™  
tutorials on [myPearsonTraining.com](http://myPearsonTraining.com)!

### Interactive Science™: What's the Big Idea with the Understanding by Design® Framework and Interactive Science™ ©2011?

**NUMBER OF DAYS:** 1

Discover how to maximize the Understanding by Design® framework within *Interactive Science™* to encourage the transfer of knowledge of the Big Ideas of science.

**OUTCOMES:**

By the end of the workshop, participants will be able to:

- Define the keys of Understanding by Design®, such as Big Ideas, Big Questions, and transfer of knowledge.
- Implement the use of Understanding by Design® strategies as a means to enhance long-term and transferable learning for students.

**TARGET AUDIENCE:**

Educators, Instructional Coaches, Curriculum Developers, Administrators

**NUMBER OF PARTICIPANTS:** 30

**ISBN:** 112865

*Understanding by Design® and UbD™ are trademarks of ASCD, and are used under license*

### Interactive Science™: Creating Personalized Instruction Stories

**NUMBER OF DAYS:** 1

Explore the differentiated instruction and digital path features available in *Interactive Science™*. Participants examine sample student work and assessments to aide in data-driven decision making in order to create personalized instruction plans.

**OUTCOMES:**

By the end of the workshop, participants will be able to:

- Identify examples of differentiated instruction.
- Demonstrate implementation of key features, such as differentiated instruction, My Science Coach, Preference Navigator, data-driven decision-making, and personalized instruction plans.

**TARGET AUDIENCE:**

Educators, Instructional Coaches, Curriculum Developers, Administrators

**NUMBER OF PARTICIPANTS:** 30

**ISBN:** 112937

### Interactive Science™: Highlighting STEM within Interactive Science™

**NUMBER OF DAYS:** 1

Learn how to integrate science, technology, engineering, and mathematics into the classroom and engage students in the engineering design process. Participants integrate program features to support STEM and 21st century ideals by focusing on 21st century skills.

**OUTCOMES:**

By the end of the workshop, participants will be able to:

- Examine strategies to extract examples of STEM within *Interactive Science™*.
- Discuss ways to integrate 21st century skills into teaching with the proper technology in place.

**TARGET AUDIENCE:**

Educators, Instructional Coaches, Curriculum Developers, Administrators

**NUMBER OF PARTICIPANTS:** 30

**ISBN:** 112936

### Interactive Science™: Job-Embedded Services

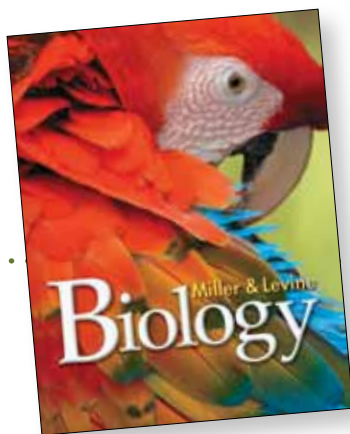
Pearson's three levels of job-embedded services offer the most effective way for schools and districts to build capacity. To learn more about Pearson's job-embedded services, Visit [PearsonPD.com](http://PearsonPD.com).

**Coaching and Modeling:** ISBN: 112934

**Lesson Study:** ISBN: 117136

**Consultative Services:** ISBN: 117146

*Build capacity! Pair any Interactive Science™ workshop with a day of consultative services.*



# Miller & Levine Biology

## Miller & Levine Biology: ELL Maximizing ELL Instruction in Miller & Levine Biology

NUMBER OF DAYS: 1

Utilize *Miller & Levine Biology's* multiple instructional supports to enhance the learning of English learners (ELs). Participants examine the various instructional methods and supports available to teachers in the implementation of these strategies.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Describe the various instructional strategies to support EL students found in the *Miller & Levine Biology* program.
- Discuss strategies to enhance EL instruction and the implementation of these strategies.

### TARGET AUDIENCE:

Educators, Coaches, Curriculum Developers, Administrators

NUMBER OF PARTICIPANTS: 30

ISBN: 112866

## Miller & Levine Biology: The Understanding by Design® Framework

NUMBER OF DAYS: 1

Fully examine the implications of the Understanding by Design® Framework within *Miller & Levine Biology*. Participants enhance their understanding of the framework and deepen their understanding of the program.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Describe the implications of the Understanding by Design® framework within *Miller & Levine Biology*.
- Discover how the Understanding by Design® framework drives *Miller & Levine Biology* and enhances student learning.

### TARGET AUDIENCE:

Educators, Coaches, Curriculum Developers, Administrators

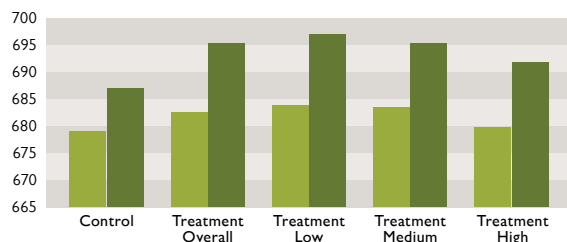
NUMBER OF PARTICIPANTS: 30

ISBN: 112655

*Understanding by Design®* and *UbD™* are trademarks of ASCD, and are used under license

## RESULTS SNAPSHOT: MILLER & LEVINE BIOLOGY

### Growth in SAT9 Scores for *Miller & Levine Biology* Students vs. Control Students



Independent studies confirm that *Miller & Levine Biology* generates significant gains in student learning when implemented with high fidelity.

We can help your district get results too.



## Miller & Levine Biology: Personalize and Differentiate Instruction with Miller & Levine Biology

NUMBER OF DAYS: 1

*Miller & Levine Biology* provides teachers with a wide array of strategies and resources to develop personalized learning plans. In this workshop, participants learn the suggested strategies and resources as a means to make the best instructional decisions for individual students. Participants examine student work samples or sample data to guide them through data-driven decision making. They then apply their knowledge to their own student work and data. Instructional decision making is directly tied to *Miller & Levine Biology* and the various editions of the program.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Describe the differentiated instruction features in the On-Level and Foundation Edition texts, program workbooks, lab manuals, and testing program workbook.
- Design a personalized learning plan using the differentiated instruction features of *Miller & Levine Biology*.
- Implement several personalized learning plans simultaneously.
- Incorporate appropriate additional supports for students, such as mini-lessons.

### TARGET AUDIENCE:

Educators, Science Coaches, District Science Supervisors

NUMBER OF PARTICIPANTS: 30

ISBN: 112945



View free Miller & Levine Biology  
tutorials on [myPearsonTraining.com](https://myPearsonTraining.com)!



# Next Generation Science Standards (NGSS) Professional Development

Are you ready for the Next Generation Science Standards (NGSS)? Pearson offers grade-appropriate interactive professional development focused on transitioning to the new NGSS. The professional development focuses on the three dimensions of the standards:

- Scientific and Engineering Practices
- Crosscutting Concepts
- Disciplinary Core Ideas

Learn new strategies and best practices to help your students develop scientific literacy, apply STEM concepts, and gain an understanding of the core ideas of science.

Ask your Pearson Account Executive for more information and availability.

# Language Central for Science

Language Central for Science 

NUMBER OF DAYS: 1

Explore strategies and solutions to help English learners (ELs) develop fluency as readers, writers, listeners, and speakers of academic English while learning science concepts. Program activities help scaffold and support EL instruction to help students learn in meaningful ways that promote academic success and achievement. Participants learn the tools they need to help students build background and access prior knowledge, learn vocabulary using visual clues, practice writing and speaking, and learn essential science skills.

#### OUTCOMES:

By the end of the workshop, participants will be able to:

- Use the program strategies to help students build background and access prior knowledge.
- Teach science vocabulary through activities and visual clues.
- Provide opportunities for students to use science content to practice using reading, speaking, writing, and listening.
- Use the program to reinforce essential science skills.

#### TARGET AUDIENCE:

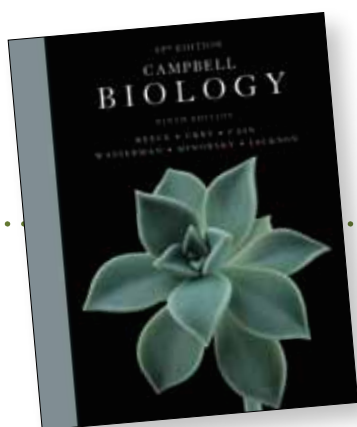
Educators, Specialists, Coaches, Administrators

NUMBER OF PARTICIPANTS: 30

ISBN: 115392



View free Language Central  
for Science tutorials on  
[myPearsonTraining.com!](http://myPearsonTraining.com)



# Campbell Biology

## Campbell Biology and the New College Board Curriculum: Self-Paced Course

EQUIVALENT SEAT TIME: 3 hours

Focus on the AP\* Test Prep Workbook for Campbell Biology. Participants learn how to utilize the workbook to prepare students for the new AP\* Biology Exam.

### OUTCOMES:

By the end of this course, participants will be able to:

- Identify the changes for the new AP\* Biology Exam.
- Examine the conceptual understandings and content that support the new AP\* Biology Exam.
- Describe the advanced inquiry and reasoning skills needed to develop students' college and career readiness.

### TARGET AUDIENCE:

Educators

### PER SEAT PRICING

ISBN: 119625



## Science Navigator<sup>®</sup> Professional Development Solutions

Are you and your students prepared to address the rigor of the Common Core? Research shows that to succeed in college and in the 21st century workplace, students need the content knowledge and reasoning skills that are part of a strong science education.

Pearson offers high-quality professional development and job-embedded services to help schools and districts implement *Science Navigator*<sup>®</sup> with fidelity. These on-site services are grounded in relevant research and explicitly connected to best instructional practices.

### What is Science Navigator<sup>®</sup>?

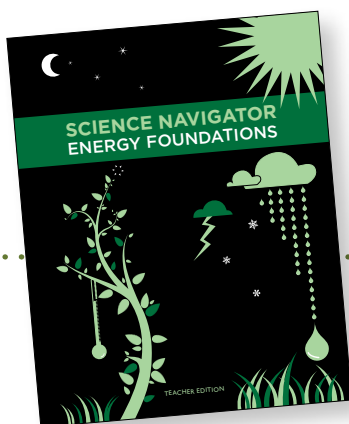
*Science Navigator*<sup>®</sup> is a supplemental program that prepares middle school students for success in their high school science classes. The program can also be used as an intervention to help high school students become college and career ready.

Using inquiry-based lessons to foster an active engagement in science and deepen student learning, *Science Navigator*<sup>®</sup> consists of three modules that explore the subject of energy—a subject that is hard to learn and to teach. Energy is an important science concept that spans multiple subject areas, including earth science, life science, and physical science.

### Science Navigator<sup>®</sup> professional development services include:

- Product Implementation Essentials workshops for the program's instruction model
- Connections to the Common Core State Standards
- Job-embedded services





# Science Navigator®

## Science Navigator®: RtI Product Implementation Essentials

**NUMBER OF DAYS:** 1

Explore how to implement instructional materials, group students based on need, and plan effective instruction to ensure a deeper understanding of science concepts using the *Science Navigator*® lesson series. Participants explore the energy-themed series to enhance their understanding of how to use best practices and strategies for teaching science.

### OUTCOMES:

By the end of the workshop, participants will be able to:

- Identify the organization, content, and teaching strategies of the lessons, including formative-assessment resources.
- Integrate the *Science Navigator*® lessons into daily lesson planning, including the use of required materials and supplies.
- Sequence the series to facilitate a deeper understanding of science.
- Incorporate both content and process skills at the appropriate grade level to facilitate a deeper understanding of science.

### TARGET AUDIENCE:

Educators, Science Specialists, District Science Supervisors, Intervention Specialists

**NUMBER OF PARTICIPANTS:** 30

ISBN: Grades 6–8: 115700

ISBN: Grades 9–11: 116471

## Science Navigator®: Job-Embedded Services

Pearson's three levels of job-embedded services offer the most effective way for schools and districts to build capacity. To learn more about Pearson's job-embedded services, visit [PearsonPD.com](http://PearsonPD.com).

Coaching and Modeling: ISBN: 117118

Lesson Study: ISBN: 117117

Consultative Services: ISBN: 117151

*Build capacity! Pair any Science Navigator® workshop with a day of consultative services.*

# Additional Science Professional Development

## Integrating the CCSS, STEM, and NGSS into the Science Classroom

**NUMBER OF DAYS:** 1

Examine the impact that the Common Core State Standards (CCSS) for English Language Arts (ELA), Science, Technology, Engineering, and Mathematics (STEM), and the Next Generation Science Standards (NGSS) have on classroom instruction. Participants explore best practices and develop a lesson plan that applies these practices. Each topic is explored for approximately two hours.

### OUTCOMES:

By the end of this workshop, participants will be able to:

- Explore the Science and Technical Subjects standards found within the CCSS for ELA.
- Examine STEM and its connection to college and careers.
- Identify how the NGSS will affect instructional practices.
- Evaluate how to adjust their current instruction to meet the CCSS for ELA, STEM expectations, and the rigor of the NGSS.

### TARGET AUDIENCE:

6–12 Educators

**NUMBER OF PARTICIPANTS:** 30

ISBN: Grades 6–8: 119620

ISBN: Grades 9–12: 119610

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This workshop is also available for online learning.  
Visit [PearsonPD.com](http://PearsonPD.com) for details on our online learning options.

## Integrating the CCSS, STEM, and NGSS into the Science Classroom: Live Online Course

**EQUIVALENT SEAT TIME:** 6 hours

**NUMBER OF PARTICIPANTS:** Up to 50

### COHORT PRICING

ISBN: Grades 6–8: Up to 15: 119611

ISBN: Grades 6–8: Up to 30: 119631

ISBN: Grades 6–8: Up to 50: 119602

ISBN: Grades 9–12: Up to 15: 119622

ISBN: Grades 9–12: Up to 30: 119612

ISBN: Grades 9–12: Up to 50: 119632

## Teaching with the CCSS, STEM, and NGSS in the Science Classroom: Self-Paced Course

**EQUIVALENT SEAT TIME:** 3 hours

### PER SEAT PRICING

ISBN: Grades 6–8: 119623

ISBN: Grades 9–12: 119613

## Inquiry-Based Science Training

**NUMBER OF DAYS:** 1

Learn how to use several different science resources to implement inquiry-based methods of teaching and learning in a flexible way. Participants begin the workshop by using NSF resources that focus on interactive learning. They discover the various types of inquiry and ways to implement inquiry-based activities within a traditional text. They work with one another to develop confidence with inquiry-based learning and its impacts on differentiation, student assessment, and state and national science standards.

### OUTCOMES:

By the end of the program, participants will be able to:

- Describe how inquiry-based learning is beneficial to the development of science concepts.
- Demonstrate how to incorporate inquiry-based science activities into a traditional science text.
- Explain how inquiry-based science activities address state and national science standards.
- Explain how to measure evidence of student learning in inquiry-based science.

### TARGET AUDIENCE:

K–8 Educators, Instructional Coaches, District Science Supervisors

**NUMBER OF PARTICIPANTS:** 30

ISBN: 1129271



## Are you teaching with Pearson's Project STEM?



Our hands-on professional development workshop provides useful strategies that will help you maximize your STEM instruction. Visit [PearsonPD.com](http://PearsonPD.com) for more information.

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## Pearson Online Professional Learning Services

**Effective. Flexible. Connected.**

Complement your face-to-face professional development with high-quality online services delivered in self-paced, live online, and fused online modalities. Perfect for time-crunched teachers. Choose your duration and get the results you want!

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