

Grades K-12

Breaking Down Barriers to Science (Universal Design for Learning)

Identify and examine common barriers that present challenges for students with disabilities, at-risk students, and ELLs through the Universal Design for Learning (UDL) lens. Explore instructional strategies that support greater student access to the general curriculum (AGC) and analyze ways to bridge the gap to support success in science using brain-based strategies.

Cultivating a Climate of Creativity and Innovation in the Science Classroom

Make your classroom a place where creativity and innovation thrive. Engage students in all types of learning that produces and showcases work in multiple learning styles. Come to learn, explore, brainstorm, take a few risks, and make a plan to immediately open the doors of your classroom to ideas and practices that foster a climate that values and nurtures innovative thinking. It's time to take the leap!

Effective Questioning in the Science Classroom

Explore research-based questioning strategies designed to promote student engagement and higher-level thinking. Create a cognitive scaffold for questioning to involve students in critical thinking skills. Participants will design questions that correlate with the rigor levels outlined in the TEKS.

5-E Instructional Model for Science

Explore the 5-E Instructional Model through hands-on science activities that support the science TEKS for STAAR. Participants conclude this training by writing their own instructional lesson based on the 5-E Instructional Model.

Implementing Virtual Science Investigations

How can we provide opportunities for students to engage in science practices in a remote environment or in a socially-distanced classroom? Participate in a virtual science investigation, and explore different formats, tools, and resources that can be used to implement virtual science investigations with students.

Incorporating Interactive Notebooks in the Science Classroom*

Inject new life into your instruction with interactive notebooks. Discover ways to help students in a diverse classroom build literacy skills, background knowledge, and develop ownership of learning. Spark student discourse, teach concepts, and improve problem-solving skills. Identify best practices that provide ways for implementation, management, and assessment of interactive notebooks in a science classroom. Participants will receive a copy of *Gateways to Science Companion Guide: Interactive Notebooks* at this make-and-take session.

Integrating Computational Thinking in the K-12 Classroom

Discover what computational thinking is and how to integrate it into daily instruction to improve student engagement. Computational thinking is one of the top requested skills from employers and can be integrated into all subjects including computer science.

Literacy in Science: Reading Focus* (Half-day)

Do your students struggle when you ask them to read in your science classroom? Participate in research based literacy strategies designed to increase reading comprehension in the science classroom. Newly gained skills and strategies can make an immediate impact towards closing achievement gaps in classrooms on campuses requiring improvement. Participants will receive a copy of *Gateways to Science Companion Guide: Literacy Strategies*.

Literacy in Science: Writing Focus* (Half-day)

Do your students struggle when you ask them to write in your science classroom? Participate in engaging research based strategies designed to promote writing in the science classroom. Writing in science can be engaging and fun! Newly gained skills and strategies can make an immediate impact towards closing achievement gaps in classrooms on campuses requiring improvement. Participants will receive a copy of *Gateways to Science Companion Guide: Literacy Strategies*.

Grades K-12 (continued)

Literacy in Science*

Do your students struggle when you ask them to read or write in your science classroom? Participate in research based literacy strategies designed to promote reading and writing in the science classroom. Newly gained skills and strategies can make an immediate impact towards closing achievement gaps in classrooms on campuses requiring improvement. Participants will receive a copy of and digital access to *Gateways to Science Companion Guide: Literacy*.

Managing the Science Classroom

Experience effective classroom management strategies and behavior monitoring techniques to promote respectful, responsible, and safe behavior in the science classroom. Explore instructional strategies that enable the science instructor to effortlessly facilitate science instruction, motivate learners, foster student collaboration, and enhance the overall science classroom climate. Participants will discuss application and immediate implementation.

Strategies for English Language Learners

Explore research-based strategies to help English Language Learners understand concepts while supporting academic language development for all students. Participants will practice identifying the linguistic factors to be considered for making content accessible to English Language Learners. Strategies explored can be easily implemented into the classroom and yield student engagement opportunities in listening, speaking, reading, and writing about content area concepts. Acquired strategies would further enable participants to effectively facilitate inquiry science, motivate students and enhance the overall classroom climate.

Teaching Academic Vocabulary in Science*

Engage your brain with instructional strategies that build multiple pathways to academic vocabulary words. Learn how dedicating time to teaching academic words helps students develop and increase comprehension while retaining and committing that knowledge to memory. Participants will receive a printed copy of and digital access to *Gateways to Science Companion Guide: Academic Vocabulary*.

Visual Literacy in Science

Did you know that an average of 70% of the items on STAAR require students to analyze graphics? Discover ways to support students as they navigate the world of charts, graphs, maps and infographics in science. Participants will analyze different types of graphics, including examples from STAAR released items, and implement strategies to guide all types of learners through the process of representing data in multiple ways. Provide your students with tools to solve problems, dissect unfamiliar information, and think like a scientist.

Grades K-5

Developing Scientific Explanations in Elementary Science

Discover instructional strategies to support science literacy and meaningful discourse in elementary science. Develop, write, and communicate scientific explanations as you explore a claim, evidence, and reasoning (CER) task. Learn how to evaluate scientific explanations during rebuttal (argumentation) and then how to create your own CER tasks.

STAAR Review to Go for Grade 4 Science*

STAAR Review to Go: Science for Grade 4 is a student-centered review resource that supports the Science TEKS taught in grade 4 and assessed on the grade 5 STAAR exam. Laying a strong foundation in science beginning in kindergarten is critical for student success. Entering fifth grade with a solid knowledge of science allows fifth grade teachers to dig deeper into the content and allows students to better master it. The grade 5 STAAR exam is cumulative and assesses supporting TEKS from both third and fourth grades.

For grade 4, teachers can use these activities to review, reteach, or spiral back to previously taught concepts. For grade 5, teachers can use these activities over 1-2 days or up to two weeks as review activities before the STAAR exam in science class. The activities can also be used as Saturday review sessions or during tutorials.

Explore portable science activities to review science concepts assessed on STAAR Science Grade 5. Participants will receive materials to create a set of review activities used in the session, a copy of *STAAR Review to Go: Science Grade 4* and a license for digital access.

STAAR Review to Go for Grade 5 Science (Volume 1)*

Explore portable science activities to review science concepts assessed on STAAR Science Grade 5. Participants will receive materials to create a set of review activities used in the session, a copy of *STAAR Review to Go: Science Grade 5 (Volume 1)*, and a license for digital access.

More STAAR Review to Go for Grade 5 Science (Volume 2)*

Explore portable science activities to review science concepts assessed on STAAR Science Grade 5. Participants will receive materials to create a set of review activities used in the session, a copy of *STAAR Review to Go: Science Grade 5 (Volume 2)*, and a license for digital access.

STAAR Review to Go for Grade 5 Science (Volumes 1 and 2)*

Explore portable science activities to review science concepts assessed on STAAR Science Grade 5. Participants will receive materials to create a set of review activities from each book; one copy each of *STAAR Review to Go for Grade 5 Science, Volumes 1 and 2*; and one license for digital access to each book.

STEMulating Design Challenges in Science*

Explore ways to implement TEKS-aligned design challenges in your science classroom. Experience using the engineering design process to address design challenges in order to support student growth and success in your classroom and beyond. Participants will receive a copy of *STEMulating Design Challenges in Science* as well as a license for digital access.

Supporting ALL Learners in Science

Experience and explore strategies designed to remove barriers and make science accessible for all. Practice using the Universal Design for Learning (UDL) framework to adjust and improve lessons to make science engaging, real, and relevant.

Grades 3-8

Detecting, Confronting, and Replacing Misconceptions in Science for Grades 3-8*

Explore how to detect misconceptions through warm ups and formative assessments. Confront misconceptions by creating cognitive dissonance with models and hands-on investigations. Then replace misconceptions by using movement, art, and vocabulary strategies. Participants will receive a printed copy of and digital access to *Warm Up to Science TEKS-Based Engagement Activities*.

Grades 3-12

Beginners, Enders & In-Betweeners in the Science Classroom

Science is an epic story and a great science lesson is a chapter that can keep kids on the edge of their seats. What can a science teacher do to make the story of science a best seller and memorable for years to come? Discover ways to begin the story by getting students' attention and setting them up to be successful. Learn strategies to wrap up a lesson to make it memorable and meaningful. Fill the in-between time with engaging activities, checks for understanding, and ways to make learning personal and purposeful. Participate in examples of research-based practices that support student learning throughout a lesson and take back ideas to immediately use in your classroom.

Break Out! Creating Digital Escape Games (Half day)

A good escape room challenges players to think critically and creatively while working together to solve puzzles within a time limit. Learn how to use free online tools to create digital escape games that challenge students to apply what they have learned and support the development of creativity, critical thinking, communication, and collaboration skills. Participants are encouraged to bring their own device to this technology-based session!

Break Out! Creating Escape Games for the Science Classroom (Full day)

Have you ever visited an escape room? A good escape room challenges participants to think creatively and critically while working together to decode clues and solve puzzles within a time limit. Learn how to bring the excitement of an escape game to your classroom! Challenge students to apply what they have learned and support the development of the 4 C's of STEM – creativity, critical thinking, communication, and collaboration. Attendees will participate in both physical and virtual science escape games and learn how to plan and manage their own classroom "breakout" activities.

Beyond Warm Ups and Exit Tickets: Literacy Embedded Formative Assessment in Science*

Explore purposefully paired formative assessment and debrief strategies that reveal student thinking while supporting literacy skills in science. Experience ways to leverage the Warm Up to Science TEKS-Based Engagement Activities resource (WUTS) with engaging strategies that promote academic conversations and support student achievement. In addition to receiving a copy of WUTS, participants will build and take away an interactive flip book of mix and match strategies to facilitate instructional planning.

Cooperative Learning in Science

Cooperative learning is essential to improving academic achievement and social-emotional learning (SEL) outcomes in the science classroom. In this interactive session, teachers will experience strategies to set up and manage groups while maintaining physical distance and avoid sharing materials. Teachers will walk away with practical strategies that they can use to keep everyone safe in the collaborative science classroom.

Integrating Instructional Technology in Science

Explore web-based and app-based tools that can be integrated into the science classroom. Interact with science content through technology, and learn how to use these tools to create interactive science lessons. Participants are encouraged to bring their own laptop or tablet.

Grades 3-12 (*continued*)

Interactive Folding Models in Science

Participants will learn various interactive folding models that will enhance interactive notebooking in the science classroom in addition to utilizing a hands-on approach with students to aid in the mastery of science concepts. Participants are provided with materials for this “make and take” session.

The Power of Language Objectives: Getting Our English Learners to Read, Write, Listen and Speak in the Secondary Science Classroom

Engage your English Learners with purposefully planned language objectives that ensure everyone is listening, writing, reading, and speaking. Learn how to identify and craft language objectives that maximize content comprehension. Explore institutional strategies and techniques that help ELs at all proficiency levels build and express their conceptual understanding while supporting academic language development for all students. Participants will walk away with newly acquired strategies on how to effectively develop and support new language contained within a science lesson.

Making Content Comprehensible for English Learners: Supporting Language Development in Science

Experience research-based content strategies designed to support a language rich environment in the science classroom. Join us as we build a tool box of linguistic accommodations that will help ELs at all proficiency levels understand science concepts while supporting academic language development for all students. Explored strategies will further enable participants to effectively facilitate inquiry science, motivate students, enhance the overall classroom climate and can easily be implemented the next day!

Rigorous by Design: Using Depth of Knowledge (DOK) for Instructional Planning in Science

Are your lessons aligned to the complexity of the TEKS? It might be time for an alignment. Apply Depth of Knowledge (DOK) analysis to instructional planning and design effective lessons that scaffold learning to TEKS mastery in science. Using DOK as a guide, we will write specific learning goals aligned with the depth and complexity of the TEKS and plan logically sequenced activities to reach those goals. Prior knowledge of Depth of Knowledge (DOK) leveling and TEKS deconstruction is recommended for this session.

Uncovering Cognitive Complexity: Using Depth of Knowledge (DOK) to Deconstruct and Understand the Science TEKS

Have you ever wished for a secret TEKS decoder ring? Explore a method that can unlock what students really need to know and be able to do, and help establish student rigor levels. Build capacity in assigning DOK levels and deconstructing the standards as we analyze and interpret cognitive complexity of learning objectives, activities, and test items. Newly acquired skills will help you better align curriculum, instruction, and assessment to the rigor of the TEKS. This session provides recommended background knowledge for Rigorous Design: Using Depth of Knowledge (DOK) for Instructional Planning in Science.

Support Your Students with Supplemental Aids – Classroom Edition (*can include science and/or math*)

Curious about how to support memory retrieval for ALL of your students? Wondering how to provide these supports in compliance with TEA policies? Come explore memory supports, which are instructional tools that can be transformed into allowable supplemental aids and assist eligible students in recalling information on STAAR. Consider how a progression of faded supports over time builds agency, voice, and independence for your students. Teachers will collaborate and build their own examples of supplemental aids through a series of faded supports.

Grades 6-8

STAAR Review to Go for Science Grade 8 (Volume 1)*

Explore portable science activities to review science concepts assessed on STAAR Science Grade 8. Participants will receive materials to create a set of review activities used in the session, a copy of STAAR Review to Go: Science Grade 8 (Volume 1), and a license for digital access.

More STAAR Review to Go for Grade 8 Science (Volume 2)*

Explore portable science activities to review science concepts assessed on STAAR Science Grade 8. Participants will receive materials to create a set of review activities used in the session, a copy of STAAR Review to Go: Science Grade 8 (Volume 2), and a license for digital access.

STAAR Review to Go for Grade 8 Science (Volumes 1 and 2)*

Explore portable science activities to review science concepts assessed on STAAR Science Grade 8. Participants will receive materials to create a set of review activities used in the session, one copy each of STAAR Review to Go for Science Grade 8, Volumes 1 and 2, and a license for digital access to each book.

STAAR Review to Go for Grade 8 Science (Volumes 1 and 2) in a Virtual Environment*

Virtually explore science activities to review science concepts assessed on STAAR Grade 8 Science. Participants will receive one copy each of STAAR Review to Go: Science, Grade 8 Volumes 1 and 2, activities in these books can be converted to work in a virtual environment.

STEMulating Design Challenges in Science, Grades 6-8* (Coming soon!)

Explore ways to implement TEKS-aligned design challenges in a middle school science classroom. Experience using the engineering design process to address design challenges that support student growth and success in the classroom and beyond. Participants will receive a copy of STEMulating Design Challenges in Science, Grades 6-8 as well as a license for digital access.

Supporting Struggling Learners in Middle School Science

Middle schoolers have a short attention span but are intensely curious. They may be logical one minute and emotional the next. Experience and learn strategies to reach even the most resistant middle school learner with proven practices to remove barriers and make science accessible to all. Practice using the Universal Design for Learning (UDL) framework to adjust and improve lessons to make science engaging, real, and relevant not just for today for the future. Incorporate the English Language Learning Proficiencies (ELPS) seamlessly to support kids who are learning science content as well as English. It's all about the experience, so make it a great one.

Grades 6-12

Developing Scientific Explanations in Secondary Science

Discover instructional strategies to support science literacy and meaningful discourse in secondary science classes. Explore a Claim, Evidence, and Reasoning (CER) task to develop and write scientific explanations, and communicate and evaluate scientific explanations during rebuttal (argumentation). Learn how to develop your own CER tasks.

Do Your Science Students Speak Mathematics?

Explore ways to help students acquire mathematical academic language and reasoning skills in science. Experience and practice selected mathematical language routines developed by Understanding Language/SCALE at Stanford University. Embedded practice and immediate feedback within a science context will prepare participants for seamless implementation of the routines into current instructional plans.

Increasing Inquiry in Secondary Science

Experience an approach to learning science that provides opportunities to explore the natural world in a way that allows students to ask questions and discover new understandings. Participants will examine levels of scientific inquiry, as well as ways to transition from traditional science instruction to inquiry-based learning.

Grades 9-12

Detecting, Confronting, and Replacing Misconceptions in Science for Grades 9-12

Explore how to detect misconceptions through various types of formative assessments. Create cognitive dissonance to confront misconceptions with models and hands-on investigations. Replace those misconceptions by building conceptual understanding using movement, art, and student discourse.

Planning and Teaching Biology with E's

Experience two *Teaching Biology with E's* lessons, followed by dedicated time to plan implementation of the 5E lessons in your classroom with your students. Leave this session with aligned lesson plans that will include daily objectives written as measurable student outputs, time stamps for activities, as well as daily formative assessments. Let's learn and plan together! Registration includes digital access to featured lessons.

Ready? Set? Go Teach Biology with E's!

Are you spending hours on end pulling from various resources to plan biology instruction? Come experience, and then practice delivering *Teaching Biology with E's* lessons intentionally designed to help support learner variability at the rigor of the TEKS! Build instructional capacity and confidence in a supportive environment using ready-to-use, student-centered, 5-E lessons from our lesson series. Registration includes digital access to all ten 5-E lessons. (*Note: this training is customizable and featured lesson can be chosen by district*)

STAAR Review to Go for Biology (Volume 1)*

Explore portable science activities to review science concepts assessed on STAAR Biology. Participants will receive materials to create a set of review activities used in the session, a copy of STAAR Review to Go: Biology (Volume 1), and a license for digital access.

STAAR Review to Go for Biology (Volume 2)*

Explore portable science activities to review science concepts assessed on STAAR Biology. Participants will receive materials to create a set of review activities used in the session, a copy of STAAR Review to Go: Biology (Volume 2), and a license for digital access.

STAAR Review to Go for Biology (Volumes 1 and 2)*

Explore portable science activities to review science concepts assessed on STAAR Biology. Participants will receive materials to create a set of review activities used in the session; one copy each of STAAR Review to Go Biology, Volumes 1 and 2; and one license for digital access to each book.

STEMulating Design Challenges in Science, Grades 9-12*

Explore ways to implement TEKS-aligned design challenges in a high school science and CTE classroom. Experience using the engineering design process to address design challenges that support student growth and success in the classroom and beyond. Participants will receive a copy of *STEMulating Design Challenges in Science, Grades 9-12*, as well as a license for digital access.

Science Leadership

A Roadmap to Rigorous Assessments in Science (Two-day)

Learn how to create quality assessments that align to the rigor of the science TEKS. Discover components of high quality assessments, including blueprint development, test format, and assessment reliability and validity. Examine characteristics of high quality assessment items, including effective question stems and distractors. On Day 2, participants will apply new knowledge and skills to review, revise, and create assessment items.

Change Management in Science

Participants will learn research-based, strategic approaches in planning for leading and supporting staff when change is necessary and difficult. Science leaders that lead new initiatives, begin new programs or simply change current thinking will experience specific change management strategies that can be immediately implemented.

Curriculum Mapping in Science (Two-day)

Learn how to guide curriculum teams in the development of scope and sequence documents that inform and pace instruction. Gain a deeper understanding of the Texas Essential Knowledge and Skills (TEKS) and how to effectively align curriculum, instruction, and assessment.

Data-based Decision Making for Instructional Coaches

What works when it comes to collecting and utilizing classroom data to facilitate improvements in instruction and student learning? Explore the types of data and data collection methods that will help you set goals and monitor student progress. Data will include student time on-task, teacher versus student talk, instructional versus non-instructional time, and interactions.

Instructional Coaching: Effective Practices that Support a Language Rich Environment

Support language development through instructional coaching. Strengthen instructional practices of teachers of English Learners. This session is designed to help instructional leaders coach around crafting opportunities for students to meaningfully engage with content in listening, speaking, reading, writing, and thinking. Build your coach's playbook on supporting teachers to maximize teaching time and effort by creating well-designed instruction and using high leverage asset-based strategies that will change student outcomes while building and sustaining a language rich environment.

Instructional Coaching to Foster Teacher Success (Two-day)

Examine research and explore strategies to better understand the characteristics of an effective instructional coach. Learn strategies designed to build collaborative relationships, facilitate professional learning, foster growth and promote reflective thinking through instructional coaching.

Keeping the End in Mind: Mapping Rigorous Instruction for All

Enhance classroom instruction by applying backward design and the 5E Instructional Model. Plan instruction that connects science concepts and processes while making learning accessible to all students. Explore lesson planning strategies that facilitate the development of conceptual understanding and address the Texas Essential Knowledge and Skills (TEKS) at the appropriate level of rigor.

Leading Data-Driven PLCs

Take data-driven instruction from theory to action with Prioritized Lever 5: Effective Instruction from the Effective Schools Framework (ESF). Learn how to disaggregate data, identify student misconceptions, and create reteach action plans to ensure student mastery. This framework can be applied cross-curricularly, focuses on looking at student work to inform instruction and addresses misconceptions revealed during analysis. Participants will leave with a protocol for facilitating weekly data meetings and a copy of *Leverage Leadership 2.0* by Paul Bambrick-Santoyo.

Science Leadership (*Continued*)

Leading Science: How to Recognize and Support Great Science Instruction

Yes, you can be an amazing science administrator whether you taught science for years or never taught science a day in your life. So what does quality science instruction look like? How can we set the stage and remove barriers to allow it to happen on a daily basis in the classrooms on our campus? Join us to dissect a lesson and highlight best practices that are the hallmarks of deep and engaging science instruction. Discuss ways to assist teachers in implementing labs and safe lab practices. Share strategies for diving into conversations with science teachers as they work on the daily path of developing scientifically literate students.

Making Every English Learner Successful in Science, Support for Administrators

Come join us as we take a deep dive into what providing linguistically accommodated instruction for ELs looks like in science. Participants will explore and discuss highly effective sheltered instruction components that support the language development for ELs at all four levels of English Language proficiency. Administrators will walk away with a variety of tools to support teachers and assess quality instruction for ELs.

Start Strong in Science: Instructional Coaches (Two-day)

This two-day workshop targets science leaders and instructional coaches. Day one is focused on examining effective practices and procedures of instructional coaching. Day two will address data-based instructional coaching, to include how to collect data and have critical coaching conversations. Fee includes two books to add to your instructional library: *Building Teachers Capacity for Success* – Pete Hall, and *Teach Like a Champion* – Doug Lemov.

One-Hour Workshops

Creativity in Science (K-12)

Unleash the creativity in all students by incorporating multiple learning styles that involve the whole brain. Be ready to explore and brainstorm how to apply strategies that include motion, rhythm, writing, visuals, and more. By venturing outside our comfort zones, we can show students how to do the same while also proving that's when we learn the most!

Did They Get It? Formatively Assessing Students Online (Grades 3-12)

How do you assess students online? Come join us to get some quick tips and tricks on how to embed formative assessment techniques into your online lessons.

Formative Assessment Make-N-Take (Grades 4-12) (*Targeted sessions may include Odd One Out, Justified List, Settle the Argument, OR Justified True/False*)

What makes an effective item of this type? How does it prepare students for the future of STAAR? Dissect content exemplars and discover the secrets of writing formative assessment items that increase rigor and reveal student thinking. Attend this session for a template and tutorial on creating an item you can use an upcoming face to face or virtual lesson.

More than Just Turn and Talk: Getting ELs to Talk in Online Environments (Grades 3-12)

Looking to fill your tool box with ways to foster student interactions in online environments? Come join us for ways to enhance your online lessons with tips and techniques that will not only get your ELs, but all your students talking.

Virtual Interactive Word Walls (Grades 3-12)

Have you been wondering how to create an interactive word wall virtually? Come join us as we take a dive into creating interactive word walls online that provide students a meaningful way to interact with new vocabulary terms.

Virtual Vocabulary Strategies (K-12)

Explore how to teach vocabulary in a virtual or hybrid setting. We will practice three specific strategies that will include your introverts, extroverts, artists, actors, actresses, and singers. The goal is to make the greatest impact for building brain pathways for quick memory retrieval.

*Accompanying product purchase is a required addition to contracted workshop time.

March 10, 2021

Region 4 Science Professional Learning Menu Details

Love Kids.
Love Science.



Region 4 Science Professional Learning Menu Details		Workshop Length			Grade Level				Audience			Topic(s) Addressed*							
		Half-day	One-day	Two-day	Many of these workshops can be tailored to a specific grade level or grade band upon request.				Teachers	Coaches, Coordinators	Administrators	Content	Culture and Climate	Curriculum Planning	EL Support	Instructional Strategies	Literacy	STEM	Universal Design (UDL)
					K-2	3-5	6-8	9-12											
Best Practices	Beginners, Enders, and In-Betweeners in the Science Classroom	•	•			•	•	•	•	•	•		•			•			
	Breaking Down Barriers to Science (Universal Design for Learning)		•		•	•	•	•	•	•	•		•			•			
	Cooperative Learning in Science	•	•			•	•	•	•	•	•		•			•			
	Cultivating a Climate of Creativity and Innovation in the Science Classroom		•		•	•	•	•	•	•	•		•			•			
	Developing Scientific Explanations in Science		•		•	•	•	•	•	•	•					•	•		
	Effective Questioning in the Science Classroom	•	•		•	•	•	•	•	•	•		•			•			
	Implementing Virtual Science Investigations	•	•		•	•	•	•	•	•	•					•			
	Increasing Inquiry in Secondary Science	•	•				•	•	•	•	•		•			•			
	Interactive Folding Models in Science	•	•			•	•	•	•	•	•		•			•			
	Managing the Science Classroom		•		•	•	•	•	•	•	•		•			•			
	Supporting ALL Learners in Science	•	•		•	•				•	•	•				•			•
	Supporting Struggling Learners in Middle School Science		•				•			•	•	•			•				•
5-E Instructional Model for Science	•	•		•	•	•	•	•	•	•			•		•				

***Topic(s) Addressed Defined:** While most of our professional learning sessions address several topics, we chose to highlight topics with a more dedicated focus.

Content:
Focus on concepts and deepening knowledge base

Culture and Climate:
Focus on constructing a safe, productive learning environment

Curriculum Planning:
Focus on TEKS deconstruction including changes, labeling, and rigor

EL Support:
Focus on specific issues and strategies for English Learners

Instructional Strategies:
Focus on ways to effectively engage and teach students

Literacy:
Focus on aspects of literacy including reading, writing, speaking, and/or listening

STEM:
Focus on innovation and creating problem solving

Universal Design for Learning:
Focus on accessible learning for all

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English Learners	Making Content Comprehensible for English Learners: Supporting Language Development in Science	•	•			•	•	•	•	•	•				•	•			
	The Power of Language Objectives: Getting Our English Learners to Read, Write, Listen, and Speak	•	•			•	•	•	•	•	•				•	•			
	Strategies for English Language Learners	•	•		•	•	•	•	•	•	•				•	•			
Interdisciplinary Connections	Break Out! Creating Escape Games for the Science Classroom	•	•			•	•	•	•	•	•					•		•	
	Do Your Science Students Speak Mathematics?	•					•	•	•	•	•			•		•			
	Integrating Computational Thinking in the K-12 Classroom	•	•			•	•	•	•	•	•					•			
	Integrating Instructional Technology in Science	•	•			•	•	•	•	•	•					•			
	Support Your Students with Supplemental Aids – Classroom Edition	•				•	•	•	•	•	•			•		•			
	Visual Literacy in Science	•	•		•	•	•	•	•	•	•					•	•		

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Leadership and Coaching	A Roadmap to Rigorous Assessments in Science		•	•	•	•	•	•	•	•	•			•		•			
	Change Management in Science		•	•	•	•	•	•		•	•		•	•					
	Curriculum Mapping in Science			•	•	•	•	•		•	•			•		•			
	Data-based Decision Making for Instructional Coaches	•	•		•	•	•	•		•	•		•			•			
	Instructional Coaching: Effective Practices that Support a Language Rich Environment	•	•		•	•	•	•		•	•				•	•			
	Instructional Coaching to Foster Teacher Success			•	•	•	•	•		•	•		•	•					
	Keeping the End in Mind: Rigorous Instruction for All		•		•	•	•	•		•	•			•		•			
	Leading Data-Driven PLCs		•		•	•	•	•		•	•			•					
	Leading Science: How to Recognize and Support Great Science Instruction	•	•			•	•	•			•	•		•		•			
	Making Every English Learner Successful in Science, Support for Administrators	•	•		•	•	•	•		•	•				•	•			
	Start Strong in Science: Instructional Coaches			•	•	•	•	•		•	•		•			•			
	Rigorous by Design: Using Depth of Knowledge (DOK) for Instructional Planning in Science		•			•	•	•		•	•			•		•			
	Uncovering Cognitive Complexity: Using Depth of Knowledge (DOK) to Deconstruct and Understand the Science TEKS		•			•	•	•		•	•			•					

*Topic(s) Addressed Defined: While most of our professional learning sessions address several topics, we chose to highlight topics with a more dedicated focus.

Content: Focus on concepts and deepening knowledge base	Culture and Climate: Focus on constructing a safe, productive learning environment	Curriculum Planning: Focus on TEKS deconstruction including changes, labeling, and rigor	EL Support: Focus on specific issues and strategies for English Learners	Instructional Strategies: Focus on ways to effectively engage and teach students	Literacy: Focus on aspects of literacy including reading, writing, speaking, and/or listening	STEM: Focus on innovation and creating problem solving	Universal Design for Learning: Focus on accessible learning for all
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Region 4 Science Professional Learning Menu Details

Love Kids.
Love Science.



Region 4 Science Professional Learning Menu Details		Workshop Length			Grade Level				Audience			Topic(s) Addressed*														
		Half-day	One-day	Two-day	<i>Many of these workshops can be tailored to a specific grade level or grade band upon request.</i>				Teachers	Coaches, Coordinators	Administrators	Content	Culture and Climate	Curriculum Planning	EL Support	Instructional Strategies	Literacy	STEM	Universal Design (UDL)							
					K-2	3-5	6-8	9-12																		
Product Resource Support	Beyond Warm Ups and Exit Tickets: Literacy Embedded Formative Assessment in Science	•	•			•	•	•		•	•	•					•									
	Detecting, Confronting, and Replacing Misconceptions in Science	•	•				•	•	•		•	•	•					•								
	Incorporating Interactive Notebooks in the Science Classroom	•	•			•	•	•	•		•	•						•	•							
	Literacy in Science: Reading Focus	•				•	•	•	•		•	•						•	•							
	Literacy in Science: Writing Focus	•				•	•	•	•		•	•						•	•							
	Literacy in the Classroom		•			•	•	•	•		•	•						•	•							
	More STAAR Review to Go (Volume 2)		•				•	•	•		•	•						•								
	Planning & Teaching Biology with E's		•						•		•	•						•								
	Ready? Set? Go Teach Biology with E's!		•						•		•	•						•								
	STAAR Review to Go (Volume 1)		•				•	•	•		•	•						•								
	STEMulating Design Challenges in Science			•		•	•	•	•		•	•						•						•		
	Teaching Academic Vocabulary in Science	•	•			•	•	•	•		•	•						•								

***Topic(s) Addressed Defined:** While most of our professional learning sessions address several topics, we chose to highlight topics with a more dedicated focus.

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|--|---|---|---|---|--|---|--|
| Content:
<i>Focus on concepts and deepening knowledge base</i> | Culture and Climate:
<i>Focus on constructing a safe, productive learning environment</i> | Curriculum Planning:
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|--|---|---|---|---|--|---|--|

<p>Love Kids. Love Science.</p> 		Workshop Length	Grade Level				Audience			Topic(s) Addressed*							
		One Hour	<p>Many of these workshops can be tailored to a specific grade level or grade band upon request.</p>				Teachers	Coaches, Coordinators	Administrators	Content	Culture and Climate	Curriculum Planning	EL Support	Instructional Strategies	Literacy	STEM	Universal Design (UDL)
			K-2	3-5	6-8	9-12											
One-Hour Workshops	Creativity in Science	•	•	•	•	•	•			•			•				
	Formative Assessment Make-N-Take	•		•	•	•	•	•					•				
	More than Just Turn and Talk: Getting ELs to Talk in Online Environments	•		•	•	•	•	•				•	•				
	Virtual Interactive Word Walls	•		•	•	•	•	•					•				
	Virtual Vocabulary Strategies	•	•	•	•	•	•	•					•				

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<p>Content: Focus on concepts and deepening knowledge base</p>	<p>Culture and Climate: Focus on constructing a safe, productive learning environment</p>	<p>Curriculum Planning: Focus on TEKS deconstruction including changes, labeling, and rigor</p>	<p>EL Support: Focus on specific issues and strategies for English Learners</p>	<p>Instructional Strategies: Focus on ways to effectively engage and teach students</p>	<p>Literacy: Focus on aspects of literacy including reading, writing, speaking, and/or listening</p>	<p>STEM: Focus on innovation and creating problem solving</p>	<p>Universal Design for Learning: Focus on accessible learning for all</p>
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