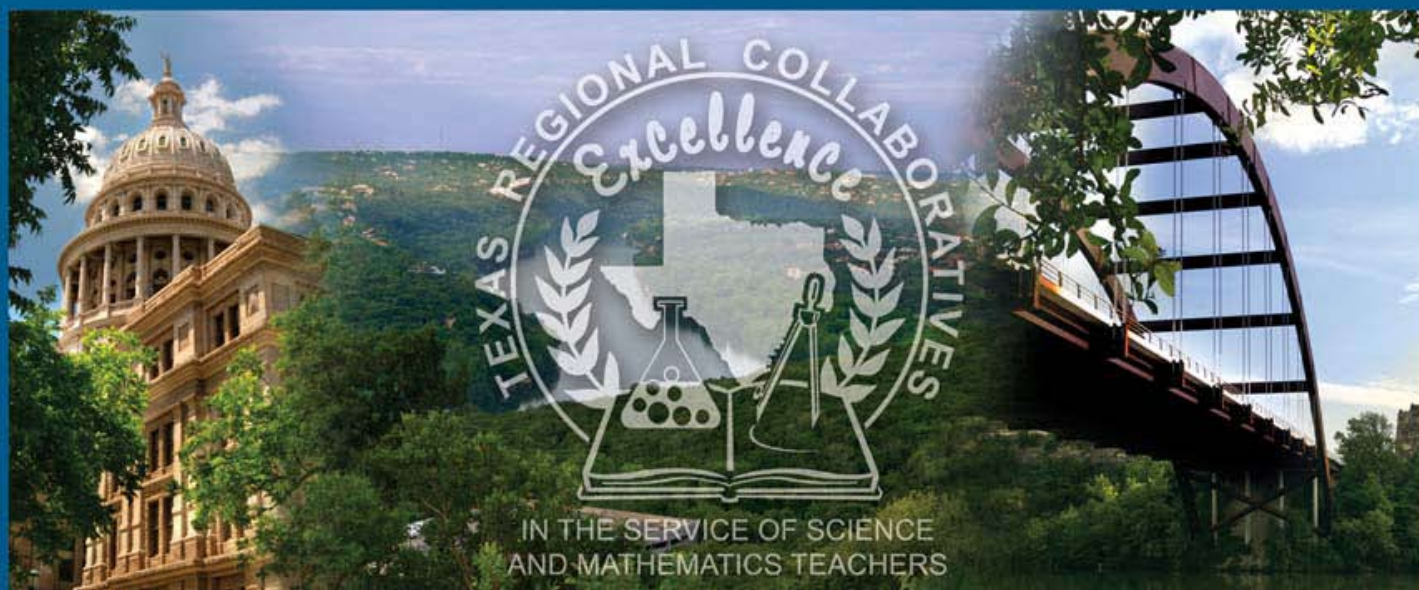


Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching

THIRTEENTH ANNUAL MEETING
June 27 - 29, 2007



ALIGNMENT, BALANCE, AND CONNECTIONS: The ABCs of the Texas Regional Collaboratives

Hilton Austin Airport Hotel
9515 New Airport Drive, Austin, Texas 78719
512-385-6767

WEDNESDAY, JUNE 27

| Time | Presentations/Activities | Room |
|-------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 9:00 - 11:30 a.m. | SET-UP Gallery Showcase | Ballroom Lobby <i>Lower Level</i> |
| 10:00 - 5:00 p.m. | REGISTRATION | Upper Lobby <i>Main Floor</i> |
| Noon - 2:00 p.m. | OPENING LUNCHEON and PROGRAM | Bergstrom Ballroom <i>Lower Level</i> |
| 2:30 - 4:30 p.m. | SESSION 1 | Level & Subject |
| | 1 Engineering for the Elementary Classroom Farmer/Crowe | Elementary <i>Engineering</i> |
| | 2 Elementary GLOBE Flusche | Elementary <i>Earth Science</i> |
| | 3 Interested in Teacher Training for Astronomy? Schneider/Smith | All Grade Levels <i>Physical Science</i> |
| | 4 HEADS UP: Exciting Students about Science and Health Science Careers Murray/Sessions | Middle/High School <i>Life Science</i> |
| | 5 Newton Energized! Presley | All Grade Levels <i>Physical Science</i> |
| | TRC/T-STEM Summit * Carol Fletcher | Project Directors & T-STEM partners |
| 6:00 - 7:00 p.m. | SHOWCASE & RECEPTION | Chennault, Del Valle Ballroom Lobby <i>Lower Level</i> |
| 7:00 p.m. | DINNER & PROGRAM | Bergstrom Ballroom <i>Lower Level</i> |

*TRC/T-STEM Summit Agenda

Wednesday, June 27, 2007
2:30 - 4:30 p.m.

Welcome and Introductions

Dr. Kamil A. Jbeily, *Executive Director, TRC*

TRC Statewide Program Overview

Dr. Carol Fletcher, *Assistant Director/R&D Coordinator, TRC*

TRC/T-STEM Regional Dialogues

Regional Reports and Future Directions

T-STEM representatives will meet with TRC Project Directors and Instructional Team Members in each T-STEM region to share mutual goals, objectives and activities, and to brainstorm ways of collaboration and coordination for synergistic operation of both programs.

WEDNESDAY PRESENTATIONS DESCRIPTION

SESSION 1

1. Engineering for the Elementary Classroom

Cheryl Farmer, *The University of Texas at Austin/Kathleen Crowe, Pflugerville ISD*

Today's educators strive to make science, technology, engineering, and math education fun and exciting through the use of hands-on learning activities. Come explore how engineering design provides opportunities for teachers to deliver core content in new, exciting, and challenging ways. Be ready to roll up your sleeves and have fun!

2. Elementary GLOBE

Sara Flusche, *North Central Texas College Regional Collaborative*

Elementary GLOBE is designed to introduce K-4 students to the study of Earth System Science (ESS). Elementary GLOBE forms an instructional unit comprised of five modules that address ESS and interrelated subjects including weather, hydrology, phenology, and soils. Each Elementary GLOBE module contains a science based storybook, classroom learning activities that complement the science content covered in each book, and teacher's notes.

3. Interested in Teacher Training for Astronomy?

Art Schneider/Larry Smith, *ESC Region 16*

The 3 Rivers Foundation is building a 500-acre campus under the very dark skies in near West Texas to be used for teacher workshops, fieldtrips, and conferences. Experience fun, hands-on demonstrations that can be easily used in the classroom and learn about free or low cost workshop opportunities.

4. HEADS UP: Exciting Students about Science and Health Science Careers

Nancy G. Murray, Ph.D./Nathalie Sessions, *University of Texas Health Science Center at Houston*

This session will highlight the HEADS UP Advanced Genetics module which explores the exciting world of regenerative medicine. Topics include animal models, gene therapy, and stem cell therapy, plus ethical and policy-making considerations. Designed by field experts and teachers for pre-AP 8th graders and high school biology students, the module features award-winning videos with student and scientist role models, classroom activities, and more. Participants will be guided through an activity to gain better understanding of DNA components and leave with their own DNA keychain!

5. Newton Energized!

Lucinda Presley, *The Discovery Science Place*

Newton Energized! is based on current research that demonstrates the importance of learning that is student-centered, concept-based, and arts integrated. This workshop immerses participants in the concept of forces and motion. Learn to energize your forces and motion units with fun and higher-level thinking skills while stimulating effective learning! Based on curriculum proven to increase student learning and engagement, this hands-on workshop immerses participants in an integration of inquiry and the arts. This concept-based workshop also features strategies for integrating motion with other science disciplines in addition to math and language arts.

OPENING LUNCHEON PROGRAM

Introduction

Dr. Kamil A. Jbeily

Executive Director

Texas Regional Collaboratives

Greetings and Remarks

Texas Education Agency

Gina S. Day

Director of Student Support Initiatives

Texas Education Agency

State of Science Education in Texas

Chris Castillo-Comer

Director of Science

Texas Education Agency

Cyndi Louden

Science Assessment Manager

Texas Education Agency

Communities Foundation of Texas

Anne McClellan

Program Officer

T-STEM Academies

Micah Sagebiel

Assistant Program Officer

T-STEM Centers

Distinguished Teaching and Mentoring Awards

THURSDAY, JUNE 28 - MORNING

| Time | Presentations/Activities | | Room |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 6:30 - 7:45 a.m. | BREAKFAST | | Atrium <i>Main Floor</i> |
| 8:00 - 9:00 a.m. | GENERAL SESSION | | |
| | Transferring Student Knowledge from 3-D Learning to 2-D Performance Barbara ten Brink - <i>See page 12 for details</i> | | Bergstrom Ballroom <i>Lower Level</i> |
| 9:10 - 10:10 a.m. | SESSION 2 | Level & Subject | |
| | 1 | The Air-O-Dynamics Curriculum Wall | Middle School <i>General Science</i> Del Valle <i>Lower Level</i> |
| | 2 | Get Your Game On Fender/Parker | Elementary <i>General Science</i> Chennault <i>Lower level</i> |
| | 3 | Simple Connections M. McClure | Elementary <i>Physical Science</i> Longhorn <i>Main Floor</i> |
| | 4 | Wonderful World of Plants Steenport/Laurie | Elementary <i>Life Science</i> Wildflower <i>Main Floor</i> |
| | 5 | Measuring the Temperature of the Sun C. Long | Middle School <i>Physical Science</i> Violet Crown I <i>Main Floor</i> |
| | 6 | Science Makes History: The Archaic Indians of the Lower Pecos Walters/Walters | All Grade Levels <i>General Science</i> Violet Crown II <i>Main Floor</i> |
| | 7 | Cousin Who? Cousin All! Butcher | Middle School <i>Physical Science</i> Red Bud <i>Main Floor</i> |
| | 8 | How to Make Your Local Science Fair a Success Bordner/King | All Grade Levels <i>General Science</i> Lantana <i>Main Floor</i> |
| 10:10 - 10:30 a.m. | BREAK | | |
| 10:30 - 11:30 a.m. | SESSION 3 | Level & Subject | |
| | 1 | Science Journaling: Mastering Science Concepts Using Reflective Writing McLelland/Heine | Elementary <i>General Science</i> Del Valle <i>Lower Level</i> |
| | 2 | Station Mania: Balancing the Content Paramoure/Rychel | Middle School <i>General Science</i> Chennault <i>Lower level</i> |
| | 3 | Making Connections Between Science and "Real Life" Phillips/King/Quick | All Grade Levels <i>General Science</i> Longhorn <i>Main Floor</i> |
| | 4 | Roy G. Biv: The Keeper of the Rainbow Yarger | Elementary <i>Physical Science</i> Wildflower <i>Main Floor</i> |
| | 5 | Science Field Day Clapp | Elementary <i>General Science</i> Violet Crown I <i>Main Floor</i> |
| | 6 | Making Connections with Environmental Science Carson | Middle School <i>Life Science</i> Violet Crown II <i>Main Floor</i> |
| | 7 | Who Stole the Grand Champion Roses? Dyer/Garza | All Grade Levels <i>Earth Science</i> Red Bud <i>Main Floor</i> |
| | 8 | The Tongue Twister Experiments Densmore/Duckett | All Grade Levels <i>General Science</i> Lantana <i>Main Floor</i> |
| Noon - 1:00 p.m. | LUNCH | | Atrium <i>Main Floor</i> |

THURSDAY MORNING PRESENTATIONS DESCRIPTION

SESSION 2

1. The Air-O-Dynamics Curriculum

Sally Wall, Clear Creek ISD

Air quality has been a hot topic for many years. Come and get lab activities that you can integrate into your curriculum all year to address the issues involved in this complex topic. These integrated science activities cover life sciences, earth sciences, and chemistry.

2. Get Your Game On

Robyn Fender/Jana Beth Parker, Lytle ISD

Finally – a way to utilize those game pieces you’ve been saving for a rainy day! Play and learn games and activities to reinforce TEKS/TAKS concepts for elementary science. Experience “Connect Four Food Chain,” “Don’t Break the Ice – Science Safety,” and more. Masters to recreate the games at home will be provided.

3. Simple Connections

Mike McClure, Blanco ISD

Come learn about the investigation that stumped some graduating college electrical engineer students. We will investigate several different electrical connections (circuits) using various batteries, bulbs, and wires and then draw, in our “journals,” the connections they make to better understand circuits.

4. Wonderful World of Plants

Nathan Steenport, Pflugerville ISD/Christine Laurie, Texas State University Student

This session focuses on authentic, engaging learning opportunities for students to show through creative arts an understanding of plant needs. Emphasis will be placed on active learning and conceptual understanding as participants complete three fun, hands-on lessons about plants aligned to the TEKS.

5. Measuring the Temperature of the Sun

Christopher Long, Garland ISD

This hands on lab activity, paired with an Excel® Spreadsheet will allow participants to accurately measure the surface temperature of the sun using only a Styrofoam cup, a meter stick, beaker, and thermometer. Probeware could be used but certainly isn’t required.

6. Science Makes History: The Archaic Indians of the Lower Pecos

Scott Walters/Cassandra Walters, Gustine ISD

Enter the world of ancient Texans to discover how the history of these ancient people is revealed through modern science. Learn how their artifacts, art, and way of life can be used across the curriculum to generate high student interest while improving academic performance. Participants will receive a 5E archaic artifact activity.

7. Cousin Who? Cousin A!

Marcia Butcher, Wharton ISD

Want to teach your students to understand the organization of family relationships in the Periodic Table? This activity encourages use of logic to identify the “missing cousin” based on his or her position relative to other family members. The skills learned can also be applied to find other patterns and trends in the Periodic Table.

8. How to Make Your Local Science Fair a Success

Kelly Bordner/Angie King, Robinson ISD

Participants will be provided with information and resources to help prepare for a successful and less overwhelming local science fair. Examples of books, science fair forms, judge’s sheets, prizes, web sites, and other resources will be given. Handouts will be provided.

SESSION 3

1. Science Journaling: Mastering Science Concepts Using Reflective Writing

Patty McLelland/Lara Heine, ACC Regional Collaborative

Explore how journaling gets students to write about inquiry-based science experiences, transferring “3D to 2D” knowledge in an authentic way that allows them to reflect and internalize concepts. Participants will walk away with various ways to engage their students in journaling.

2. Station Mania: Balancing the Content

Stef Paramoure/Ron Rychel, Comal ISD

Station Mania is a strategy to create a balanced classroom plan in which the hands-on, minds-on practice of science process skills are incorporated all year long. Learn how to use mini-science stations to boost student achievement through mastery and test resiliency and to combat the “out of sight, out of mind” mentality!

3. Making Connections Between Science and “Real Life”

Suzanne Phillips, Belton ISD/Angie King, Robinson ISD/Carey Quick, Salado ISD

“If it is not relevant, we don’t remember.” Strategies that work best with today’s students include the use of student journals as a means of creating ownership and commitment in the student. Examine ways to make science meaningful through the use of a personal science journal and/or science scrapbooks.

4. Roy G. Biv: The Keeper of the Rainbow

Debbie Yarger, Fort Worth ISD

Come and see the beauty of the rainbow as Roy G. Biv tells his story of the rainbow. An easy way to teach the color spectrum to elementary students.

5. Science Field Day

Jennifer Clapp, Abilene ISD

How can you fit together multiple science concepts, hands-on activities, and student discussion while teaching across the curriculum? Have a Science Field Day!

6. Making Connections with Environmental Science

Sheri Carson, Pittsburg ISD

See how our middle school has enhanced its science program by using environmental science as an elective class. Cornell’s *Classroom Feeder Watch*, Texas Parks and Wildlife’s *Amphibian Watch*, *Project Greenhouse*, *Junior Master Gardener*, *Square Foot Gardening*, and soon-to-be implemented GLOBE are all components of this unique class.

7. Who Stole the Grand Champion Roses?

Jean Dyer/Audrie Garza, La Joya ISD

Participants will work in cooperative groups, use scientific process skills to test chemical and physical characteristics of soil samples, investigate careers that are linked to soil, and gain experience searching for useful information in the Internet, and make and test predictions—all while solving a crime!

8. The Tongue Twister Experiments

Don Densmore/Jayme Duckett, Waco ISD

The Tongue Twister Experiments presents a strategy to improve student success in Objective 1 and critical thinking skills, K-12. The teacher edition and student workbook will be used to present, in a hands-on setting, how tongue twisters can be used to energize students to get excited about experimentation.

THURSDAY, JUNE 28 - AFTERNOON

| Time | Presentations/Activities | | Room |
|------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1:40 - 2:40 p.m. | SESSION 4 | | Level & Subject |
| | 1 | Tough to Teach TEKS Dominey/Thompson | Elementary <i>General Science</i> Del Valle <i>Lower Level</i> |
| | 2 | Eggs, Eggs, and More Eggs Phillips | Elementary <i>Life Science</i> Chennault <i>Lower level</i> |
| | 3 | Project WILD - Elementary Alexander/Love | Elementary <i>General Science</i> Longhorn <i>Main Floor</i> |
| | 4 | Living / Non-Living Tristan | Elementary <i>Life Science</i> Wildflower <i>Main Floor</i> |
| | 5 | Turn Favorite Activities into 5E Inquiry Decuir | Middle School <i>General Science</i> Violet Crown I <i>Main Floor</i> |
| | 6 | Journaling Through the Amazon B. Long | All Grade Levels <i>Life Science</i> Violet Crown II <i>Main Floor</i> |
| | 7 | Hands on Technology in the Classroom for All Roberts | Middle/High School <i>Physical Science</i> Red Bud <i>Main Floor</i> |
| | 8 | The ABCs of Podcasting - Experience the Power of Multimedia Education! Mitchell/Paramoure | All Grade Levels <i>Technology</i> Lantana <i>Main Floor</i> |
| 2:40 - 3:00 p.m. | BREAK | | |
| 3:00 - 4:00 p.m. | SESSION 5 | | Level & Subject |
| | 1 | Rock Your World Tiscareno/Martinez | Elementary <i>Earth Science</i> Del Valle <i>Lower Level</i> |
| | 2 | Fat Science!!! Maximizing Science Time in the Elementary Classroom Rose/L. McClure/Dodd/Mikeska | Elementary <i>General Science</i> Chennault <i>Lower level</i> |
| | 3 | Project Director Forum Fletcher | Project Directors & ITMs* Longhorn <i>Main Floor</i> |
| | 4 | Love That Lava Lamp! A Focus on Physical Properties: DPS Youts | Middle School <i>Physical Science</i> Wildflower <i>Main Floor</i> |
| | 5 | Bluebonnets Chaitanya/Mukerji | All Grade Levels <i>Life Science</i> Violet Crown I <i>Main Floor</i> |
| | 6 | Science Expo Guerra | Elementary <i>General Science</i> Violet Crown II <i>Main Floor</i> |
| | 7 | The ABCs of Science Manipulatives Ellis/Knapp | Middle School <i>Life Science</i> Red Bud <i>Main Floor</i> |
| | 8 | Science Literacy for the 21st Century Saenz/Smith-Chavira | Middle/High School <i>General Science</i> Lantana <i>Main Floor</i> |
| 4:30 p.m. | EVENING ON YOUR OWN <i>Details on Page 14 & 15</i> | | |

*ITMs: Instructional Team Members

THURSDAY AFTERNOON PRESENTATIONS DESCRIPTION

SESSION 4

1. Tough to Teach TEKS

**Wallace Dominey, Rice University Regional Collaborative/
CJ Thompson, Houston ISD**

Teacher Interns who spent one full day each week training in the Rice University/Houston ISD Elementary Model Science Lab and Rice Lab staff will present lessons used to teach several of the more difficult science TEKS concepts. Three lessons will be presented; each lesson will be aligned to one of the three content TAKS objectives.

2. Eggs, Eggs, and More Eggs

Amy K. Phillips, Clear Creek ISD

A fun, eggsciting way to work with eggs! Teachers will learn about different animals that hatch from eggs as well as making connections to food chains using the GEMS Guide Eggs, Eggs, Everywhere. Teacher will also use plastic eggs to identify mystery items.

3. Project WILD - Elementary

Martha Alexander, Region 18 Collab./Sandra Love, Midland ISD

Project WILD is a K-12 interdisciplinary environmental and conservation education program emphasizing awareness, appreciation, and understanding of wildlife and natural resources. It has been correlated to the TEKS and TAKS. Project WILD is sponsored by Texas Parks and Wildlife Department.

4. Living / Non-Living

Claudia Tristan, Socorro ISD

Classifying living things as animals or plants and classifying non-living things as solids, liquids, or gases.

5. Turn Favorite Activities into 5E Inquiry

Sue Ann DeCuir, Pflugerville ISD

Learn how to redesign a science activity or demonstration into a complete 5E inquiry that creates connections for students and supports English Language Learners. Workshop content includes use of digital cameras, Guided Language Acquisition Design strategies, and the new KLEW chart.

6. Journaling Through the Amazon

Bea Long, Houston ISD

Go on a virtual field trip through the Amazon and learn about the flora and fauna that was observed on trip that was offered through the EIH/UHCL Collaborative. Get a first-hand account of the flooded rain forest and receive a complimentary CD that contains the presentation. Learn how to get your students excited about journaling.

7. Hands on Technology in the Classroom for All

Jim Roberts, University of North Texas Regional Collaborative

We will show how to measure, balance, and connect data through the use of graphing calculators and computers to make sense of graphing as maps. This demonstration will address the issue of collecting data with different kind of probes, inputting the data, and the meaning of such data.

8. The ABCs of Podcasting - Experience the Power of Multimedia Education!

Keith Mitchell, TRC/Stef Paramoure, Comal ISD

What is a podcast? How could it help in my science class? What equipment do I need? Is this another technology fad? How will it help my students? Is it hard? Where do I start? This session will introduce the ABCs of podcasting. A – Amazing and Accessible. B – Broad and Breathtaking. C – Content that is Connected.

SESSION 5

1. Rock Your World

Angie Tiscareno/Yolanda Martinez, Ysleta ISD

Participants will use the 5E model to lead into the discovery of Earth science.

2. Fat Science!!! Maximizing Science Time in the Elementary Classroom

Thelma Rose, Linda McClure, Marcia Dodd, Michelle Mikeska, Rogers ISD

With all the wonderful things you are doing in your classroom each day, do you find that your science instruction time is limited? Learn how some Rogers Elementary School teachers make science instruction time “fatter” by incorporating it into many different subject areas throughout the day and the week.

3. Project Director Forum

Carol Fletcher, TRC

Project Directors and ITMs will discuss the challenges and successes they have experienced over the past project year. All Project Directors and ITMs are invited to participate.

4. Love That Lava Lamp! A Focus on Physical Properties: DPS

Samantha Youts, Clear Creek ISD

This workshop will introduce/reinforce the physical properties of density, polarity, and solubility (DPS). The presentation is targeted for IPC or 8th Grade and provides participants with an uncomplicated approach to teaching the physical properties of matter and an opportunity to create their own lava lamps, without the lava or the lamp!

5. Bluebonnets

Sujata M. Chaitanya/Kakoli Mukerji, North Forest ISD

Receive information that will educate your students about the environmental necessity, economic values, and natural beauty of bluebonnets.

6. Science Expo

Martha C. Guerra, Socorro ISD

A great way to enhance science inquiry is through a Science Expo. It is an excellent way for children to conduct science inquiry and share their findings with their peers and other children at different grade levels.

7. The ABCs of Science Manipulatives

Susan Ellis, Little Cypress ISD/Jennie Knapp, Mauriceville ISD

This will be a make and take session. Presentations will include manipulatives for punnett squares, circulation of the heart, frog dissection, and much more.

8. Science Literacy for the 21st Century

Laura Saenz/Terri Smith-Chavira, Region 3 Collaborative

This workshop will focus on high school science TAKS objectives 2 and 4 as the model for implementing “best practices” in reading and science. Learn how to create a regional reading and science network in your area.

FRIDAY, JUNE 29

| Time | Presentations/Activities | | Room |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 6:30 - 7:45 a.m. | BREAKFAST | | Atrium <i>Main Floor</i> |
| 8:00 - 9:00 a.m. | GENERAL SESSION | | |
| | Whyville – A Case Study in Virtual Educational Worlds and Career Exploration for High-Tech Industries Cliff Zintgraff - <i>See page 12 for details</i> | | Bergstrom Ballroom <i>Lower Level</i> |
| 9:10 - 10:10 a.m. | SESSION 6 | | Level & Subject |
| | 1 | Making Connections Using Critters Jordan-Kaszuba | Elementary <i>Life Science</i> Del Valle <i>Lower Level</i> |
| | 2 | To the Moon, Mars, and Beyond – Let’s Have Fun!! Graham/Stuart/DuMar | Elementary <i>Earth Science</i> Chennault <i>Lower level</i> |
| | 3 | Project WILD - Middle/High School Alexander/Love | Middle/High School <i>Life Science</i> Longhorn <i>Main Floor</i> |
| | 4 | Region 11 Collaborative – Impact on Cleburne High School Sloan/Jenkins | All Grade Levels <i>General Science</i> Wildflower <i>Main Floor</i> |
| | 5 | Not Your Typical Classroom Holiday! Hagood/Von Hoene | Elementary <i>General Science</i> Violet Crown I <i>Main Floor</i> |
| | 6 | EAA- Experimental Aircraft Association Craver | All Grade Levels <i>Physical Science</i> Violet Crown II <i>Main Floor</i> |
| | 7 | Raised Coral Reefs: Using Geochemical Data to Determine Tectonic Uplift Ellins | Middle School <i>General Science</i> Red Bud <i>Main Floor</i> |
| | 8 | Connecting with ELL Hispanic Students Using the Student-centered Sheltered Instruction Approach Model (SSIA™). Guevara | All Grade Levels <i>General Science</i> Lantana <i>Main Floor</i> |
| 10:10 - 10:30 a.m. | BREAK | | |
| 10:30 - 11:30 a.m. | SESSION 7 | | Level & Subject |
| | 1 | Connecting Our Campus Through Science East/Devoe | Elementary <i>General Science</i> Del Valle <i>Lower Level</i> |
| | 2 | Be Resourceful...Go Natural! Rutherford/Miller | All Grade Levels <i>Earth Science</i> Chennault <i>Lower level</i> |
| | 3 | Evolution, the Disconnect – What Me Worry? M. McClure/Beckendorf | All Grade Levels <i>Life Science</i> Longhorn <i>Main Floor</i> |
| | 4 | Ecology Activities for Everyone Anderson/Mosher | All Grade Levels <i>Life Science</i> Wildflower <i>Main Floor</i> |
| | 5 | Ten Tips to Tweak Any Lesson Towards Inquiry Barlow | Elementary <i>General Science</i> Violet Crown I <i>Main Floor</i> |
| | 6 | Rigor, Relevance, and Relationships Neill | Middle School <i>General Science</i> Violet Crown II <i>Main Floor</i> |
| | 7 | Classroom “Critters” Williams | Elementary <i>General Science</i> Red Bud <i>Main Floor</i> |
| | 8 | Podcast Connections: Multimedia Science Paramoure | Middle School <i>General Science</i> Lantana <i>Main Floor</i> |
| Noon - 2:30 p.m. | LUNCH Awards and prizes!!! | | Bergstrom Ballroom <i>Lower Level</i> |

FRIDAY PRESENTATIONS DESCRIPTION

SESSION 6

1. Making Connections Using Critters

Jennifer Jordan-Kaszuba, Region 13 Collaborative

Using critters to help students make connections will engage their minds and imaginations in the science classroom. This session will introduce you to some easily-cared-for critters that can be used throughout the curriculum.

2. To the Moon, Mars, and Beyond – Let’s Have Fun!!

Christine Graham/Wanda Stuart/Patricia DuMar, Bryan ISD

Hands-on and interactive! Experience human sun webs, planetary Venn diagrams, and stellar songs. TEKS are the focus. Adjust and integrate into your curriculum. Make and takes, yummy models, & investigations.

3. Project WILD - Middle/High School

Martha Alexander, Region 18 Collab./Sandra Love, Midland ISD

Project WILD is a K-12 interdisciplinary environmental and conservation education program emphasizing awareness, appreciation, and understanding of wildlife and natural resources. It has been correlated to the TEKS and TAKS. Project WILD is sponsored by Texas Parks and Wildlife Department.

4. Region 11 Collaborative – Impact on Cleburne High School

Marcia Sloan/Carol Jenkins, Cleburne ISD

The principal and two STMs from Cleburne High School present an overview of the Region 11 Science Collaborative, its impact on teacher training, and student and teacher performance in the classroom. Participants will take part in a hands-on Inquiry Institute activity from the Exploratorium, which can be used for teacher training and in the classroom.

5. Not Your Typical Classroom Holiday!

Glinda Hagood, Frenship ISD/Sammie Von Hoene, Texas Tech Univ.

Come experience holidays in a new and exciting way in the classroom through science using intriguing experiments that are easy to prepare, TEKS inspired, and exciting for your kids! Each of these lessons can be connected to other content areas such literature, math, social studies, and health.

6. EAA- Experimental Aircraft Association

Emmette Craver, Region 12 TRC Partner

This presentation will detail some of the low cost or no cost aerospace/flight sources for teachers to obtain to use in their classroom. We will demo activities that are great motivators in the classroom.

7. Raised Coral Reefs: Using Geochemical Data to Determine Tectonic Uplift

Kathy Ellins, UT Institute for Geophysics

Uplifted coral reefs provide evidence of tectonic uplift where several plate boundaries meet. Experience an activity that asks learners to combine radiocarbon dates corresponding to the time when the reefs were uplifted with their current elevation and calculate rates of tectonic uplift for 30 sampling locations. Finally develop a conceptual model to explain the pattern of uplift for the last 10,000 years.

8. Connecting with ELL Hispanic Students Using the Student-centered Sheltered Instruction Approach Model (SSIA™).

Eduardo Guevara, Houston ISD

To meet the needs of our ELL Hispanic students, best teaching practices must be combined with parental involvement. This SSIA™ approach recognizes diversity and promotes experiential hands-on, inquiry-based, cooperative learning focused in high order thinking coupled with parental involvement. Handouts provided.

SESSION 7

1. Connecting Our Campus Through Science

Renee East/Genny Devoe, Amarillo ISD

Learn about our whole campus science/literacy connections using Inquiry Science and the 5E model. Training provides our teachers with ready-to-go science kits that include literature connections. Student-generated technology and science products will be exhibited and financial and administrative support ideas will be discussed.

2. Be Resourceful...Go Natural!

Amy Rutherford, Region 15 Collab./Howard Miller, San Angelo ISD

Be Resourceful...Go Natural! will focus on alignment of Earth science objectives in grades K-8 with TEKS addressing natural resources, then connect to IPC and Biology with environmental issues that impact energy sources. Participants will receive a CD of all materials presented.

3. Evolution, the Disconnect – What Me Worry?

Mike McClure/Kirk Beckendorf, Blanco ISD

Participate in a FOSS Models and Design activity and view a video clip from *The Howard Hughes Holiday Lecture Series on Evolution* to appreciate that good science is built on good models and that we should never feel intimidated to teach evolution.

4. Ecology Activities for Everyone

Sarah Joy Anderson, Frenship ISD/Cheryl Mosher, Lubbock ISD

This presentation will provide hands-on activities for teachers of varied grade levels to enhance vertical alignment of content concerning the ecological role of living things and the evolutionary adaptations that allow organisms to flourish. Interdisciplinary connections will be addressed. GLOBE processes and technology are incorporated into the activities.

5. Ten Tips to Tweak Any Lesson Towards Inquiry

Ann Barlow, Round Rock ISD

Inquiry is not a four-letter word! Learn 10 tips that can be used to move traditional lessons toward inquiry. The content of this session is heavily influenced by Marzano’s *Classroom Instruction that Works*, and includes authentic examples of how learning changes when inquiry strategies are implemented.

6. Rigor, Relevance, and Relationships

Rebecca Neill, Aldine ISD

Learn how to deliver science instruction through hands-on activities using strategies that address multi-modalities of today’s learner styles. “Rigor, Relevance, and Relationships” uses familiar knowledge while encouraging the application of that knowledge to help make explicit the relevance of learning to the real world.

7. Classroom “Critters”

Jo Williams, Round Rock ISD

Teachers will experience a hands-on lesson that can be used as a performance assessment for an adaptation/camouflage unit. Using what they have learned about adaptation and camouflage students create a classroom “critter.” Targeted grades are 4 and 5, but could be adapted to fit grades 6 and 7.

8. Podcast Connections: Multimedia Science

Stef Paramoure, Comal ISD

Podcast authoring is a unique bridge to capitalize on the digital age in creating a solid learning experience that immerses students in multimedia production. This workshop will focus on connecting podcasts to science remediation using student lesson templates, organizational set-up, pre/post assessments, and resources.