

West Texas A&M University

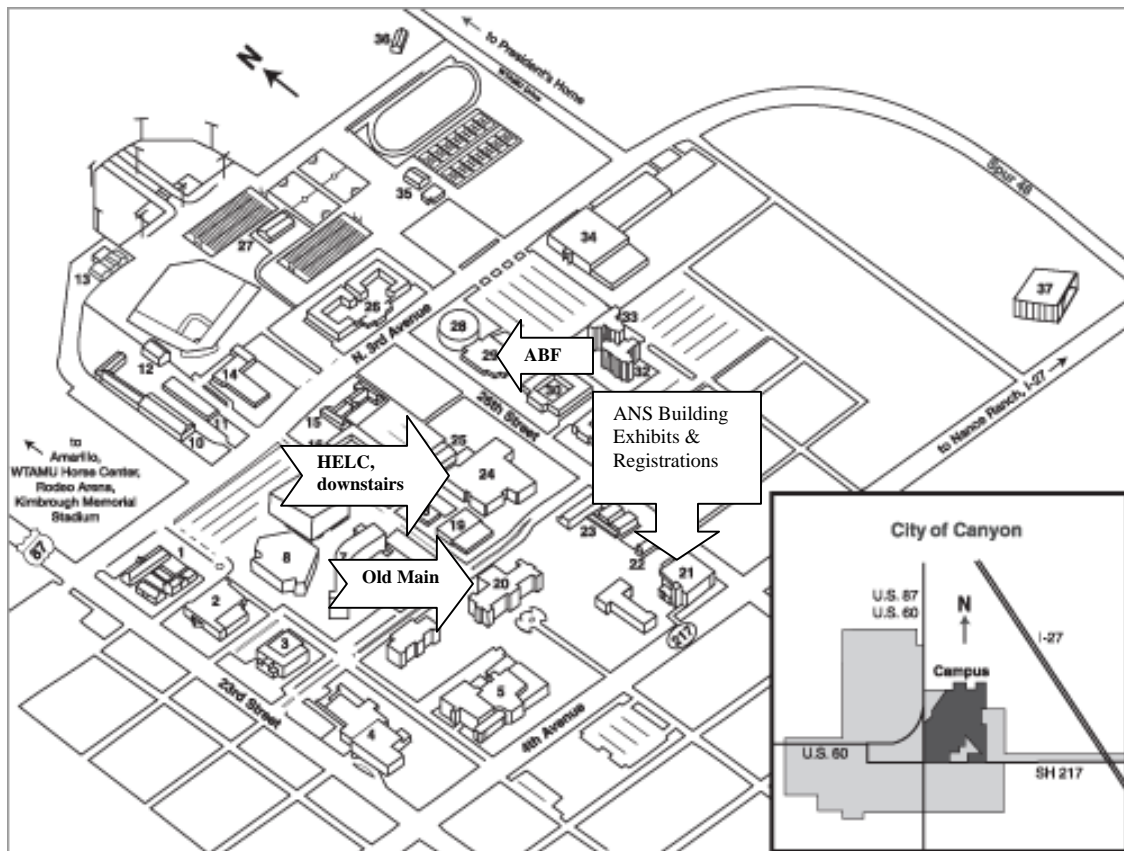
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PROFESSIONAL DEVELOPMENT HOURS

In order to receive a Professional Development Certificate, turn in a completed evaluation form to the Registration Table at 3:00 pm in the Agriculture/Natural Science (ANS) Building.

At each session you will be given a number to write on the evaluation form that indicates your attendance at that session.



Conference Locations

- | | |
|----------------------------------|---|
| Registration and Exhibits | # 21 Agriculture and Natural Sciences Building (ANS) |
| Sessions | # 20 Old Main Administration Building (OM)
21 Agriculture and Natural Sciences Building (ANS)
24 Hastings Electronic Learning Center (HELC) <i>located in the basement of the Cornette Library; enter through the south or east library doors.</i> |
| Lunch | # 29 Alumni Banquet Facility (ABF) |

CONFERENCE SPONSORS

**West Texas A&M University
Region XVI Education Service Center**

CONFERENCE ORGANIZERS

**Ashley Campbell (co-chair).....West Texas A&M University
Robin Capt (co-chair).....West Texas A&M University
Treasure Brasher.....West Texas A&M University
Mary Jane Cruz.....West Texas A&M University
Emily Hunt.....West Texas A&M University
Matt Jackson.....West Texas A&M University
Pamela Lockwood-Cooke.....West Texas A&M University
Bonnie Pendleton.....West Texas A&M University
Lola Henning.....Region XVI Education Service Center
Susan Smith.....Region XVI Education Service Center**

SPECIAL THANKS TO:

**Region XVI Education Service Center for providing the
Professional Development Certificates**

CONFERENCE EXHIBITORS

(TO BE ANNOUNCED)

SESSION ONE
9:00 AM – 10:00 AM

MATH 3-10 OM 214	Stan Hartzler & Sheila Hartzler <u>Origami and Applications</u> An activity session that introduces teachers to the water bomb, jumping frog, boat, space shuttle, cootie catcher, etc., and uses in data collection, and measurement relationships.
MATH 2-12 OM 204	Scott Lyons <u>The Ultimate Differentiated Math Class</u> Using web-based technology to quickly and accurately assess, differentiate, and prescribe an individualized mathematics education program for every student.
MATH 2-6 OM 213	Tamara Zinser <u>Graphic Organizers for the Math Classroom</u> Explores ways of using graphic organizers commonly used in the reading classroom to develop and connect math vocabulary concepts.
MATH/SCIENCE K-8 ANS 218	Caryn A. Borchardt <u>Project Wet - Water Education & Conservation</u> Hands-on activities teachers can use to teach the water cycle, Earth's water make-up & statistics, conservation & what a wetland is.
MATH/SCIENCE K-12 ANS 201	Sarah Draper <u>Graphiti!</u> Have students build an understanding of graphing through engaging investigations where students utilize resources to decide graphing formats that best align with data derived in a variety of multidisciplinary science activities.
MATH/SCIENCE K-12 ANS 306	Nabarun Ghosh <u>Biotechnology and Human Society</u> The presentation will cover the application of biotechnology to the human society and its' effect.
MATH/SCIENCE 3-7 ANS 303	Mike McGlone <u>Modeling the Solar System</u> Create scale models of the solar system and planet systems using math and science, plus take a mathematical journey through the planets.
MATH/SCIENCE PreK-5 HELC 22	Susan G. Smith <u>Drug and Violence Education Prevention for PreK-5</u> Science and Math TEKS aligned lesson which can be infused into any existing curriculum. Sample Lesson provided.

Session One 9:00-10:00 AM continued...

**SCIENCE
1-5
ANS 205**

Elise Adamson
Scout Science
Activities linked to Cub Scout requirements, to foster community interest in Science. Topics include Newton's Laws, air pressure, geology, astronomy and "magic tricks." Hands-on make and take.

**SCIENCE
K-12
ANS 207**

Joel Blasingame
Protecting Your Students and Yourself
Reduce the risk of laboratory accidents and limit your legal liability in the classroom. Gain knowledge of classroom safety tools and the safety standards necessary to be safety compliant.

**SCIENCE
9-12
ANS 214**

Patrice Fay
Fusion and Development of Stars
Using demonstrations, students explore the concept of nuclear fusion within stars, and discover how this process defines the way stars develop and evolve.

**SCIENCE
K-12
ANS 304**

Arthur Schneider
Science/Astronomy - Outreach in Texas Panhandle
Preview of the "Outreach Program" - including hands-on activities, handouts, Powerpoint presentation & solar telescope viewing.

SESSION TWO
10:15 -11:15 AM

- | | |
|---|--|
| MATH
5-8
OM 415 | Teri Bingham
<u>Who owns the Pig? Solving Logic Problems</u>
Effective strategies to teach logic problems using matrices. If Sam lives next door to Paul and Paul drives a yellow car, who owns the pet pig? |
| MATH
6-8
OM 203 | Iris Folger
<u>Math Counts: Problem-Solving for the Classroom or Competition</u>
MathCounts program overview and strategies for problem-solving in class or competition. Participants will receive handbook with over 100 problems. |
| MATH
9-12
OM 214 | Stan Hartzler & Sheila Hartzler
<u>Incremental Geometry Worksheets with Construction, Proof and TEKS</u>
Innovators Rhoad and Saxon marginalized construction but used ongoing review advantageously. The speaker advocates construction from the start of secondary geometry, effective coaching for proof, and ongoing review. |
| MATH
2-12
OM 204 | Scott Lyons
<u>The Ultimate Differentiated Math Class</u>
Using web-based technology to quickly and accurately assess, differentiate, and prescribe an individualized mathematics education program for every student. |
| MATH
3-5
OM 207 | Sandra White
<u>Multiplication Made Easy</u>
Learn fun activities from a master teacher. Magic mind manipulation such as: Trick of 9's Hand Jive or the Over Easy Dozen helps to master multiplication facts forever. |
| MATH
2-6
OM 213 | Tamara Zinser
<u>Using Cooperative Groups in the Math Classroom</u>
Provides a way for students to learn from each other. Student will be individually accountable while sharing responsibility. |
| MATH/SCIENCE
K-8
ANS 218 | Caryn A. Borchardt
<u>Project Wet - Water Education & Conservation</u>
Hands-on activities teachers can use to teach the water cycle, Earths water make-up & statistics, conservation & what a wetland is. |

Session Two 10:15-11:15 AM continued...

- MATH/SCIENCE** **Lola Henning**
2-5 Engineering is Elementary: Leif Catches the Wind
ANS 301 **Come explore the joy of engineering through a wind catcher: a sail. Learn how simple it is to incorporate engineering into your curriculum. Participants will design and compete in a sailing race. This activity is best for upper elementary but may be adaptable for some of the lower grades.**
- MATH/SCIENCE** **Mike McGlone**
3-7 Modeling the Solar System
ANS 303 **Create scale models of the solar system and planet systems using math and science, plus take a mathematical journey through the planets.**
- MATH/SCIENCE** **Gary Nicholson**
K-12 Enabling 21st Century Science Education
ANS 101 **Deliver authentic 21st Century science experiences by combining standards-based content and relevant professional development with innovations in modern, electronic measurement.**
- MATH/SCIENCE** **Susan G. Smith**
6-12 Drug and Violence Education Prevention for Secondary 6-12
HELC 22 **Science and Math TEKS aligned lesson which can be infused into any existing curriculum. Sample Lesson provided.**
- MATH/SCIENCE** **Kat Woodring**
8-12 Race into Physics with the CPO Energy Car
ANS 113 **Explore the concepts of velocity, acceleration, and more with this exciting equipment.**
- SCIENCE** **Patrice Fay**
9-12 Fusion and Development of Stars
ANS 214 **Using demonstrations, students explore the concept of nuclear fusion within stars, and discover how this process defines the way stars develop and evolve.**
- SCIENCE** **Oralia Gil**
10-12 A Natural Approach to Chemistry
ANS 208 **Take a fresh look at how chemistry is used today, in and out of the laboratory. Experiments have been developed that allow students to do real, quantitative chemistry with a new complete learning system consisting of a textbook, a full-color lab manual, and an equipment package.**
- SCIENCE** **Clay Robinson**
5-8 Weathering and The Erosion Shuffle
ANS 216

Session Two 10:15-11:15 AM continued...

SCIENCE

K-12

ANS 304

Arthur Schneider

Science/Astronomy - Outreach in Texas Panhandle

Preview of the "Outreach Program" - including hands-on activities, handouts, Powerpoint presentation & solar telescope viewing.

SCIENCE

K-12

ANS 207

Gerald E. Schultz

Learning to Know Texas Fossils

Participants will learn how to recognize and identify common Texas fossils-both invertebrate and local vertebrate.

SESSION THREE
11:30 AM – 1:45 PM

For teachers of Science:

Session Three A 11:30-12:30
Lunch/Exhibits 12:45-1:45

For teachers of Math:

Lunch/Exhibits 11:30-12:30
Session Three B 12:45-1:45

SESSION THREE A – SCIENCE
11:30-12:30

- MATH/SCIENCE** **Caryn A Borchardt**
K-8 Project Wet - Water Education & Conservation
ANS 218 **Hands-on activities teachers can use to teach the water cycle, Earth's water make-up & statistics, conservation & what a wetland is.**
- SCIENCE** **Joel Blasingame**
9-12 Maximize Lab Time with Technology
ANS 214 **Extend the horizons of data acquisition and analysis beyond the confines of conventional classroom instruction, to create exciting new educational opportunities using this new sensor system.**
- SCIENCE** **Oralia Gil**
6-8 Energy Education Strategies from SEPUP
ANS 208 **Having trouble teaching your students the difference between conservation of energy and energy conservation? Explore some new approaches to teaching energy concepts from the new ISSUES and PHYSICAL SCIENCE program.**
- SCIENCE** **Robyn Green & Lauryn Priddy**
11-12 I Love Me! Anatomy and Physiology as a Fourth-Year Science Course
ANS 304 **Appeal to teenagers' interest in themselves and offer A&P as a fourth-year science course. Come learn strategies and examples at this session to make A&P more than the boring "sit and get" course of the past.**
- SCIENCE** **Mike McGlone**
2-7 Getting Dirty on Mars
ANS 303 **Soils provide a great opportunity to teach about matter. NASA's Mars Phoenix lander tested samples of martian soil and your students can model this activity in the classroom.**

Session Three A 11:30-12:30 PM continued...

SCIENCE
5-8
ANS 216

Clay Robinson
Weathering and The Erosion Shuffle

SCIENCE
K-12
ANS 207

Gerald E. Schultz
Learning to Know Texas Fossils
Participants will learn how to recognize and identify common Texas fossils-both invertebrate and local vertebrate

SCIENCE
4-8
ANS 205

Walter G. Smith
Engaging Upper Elementary and Middle School Students in International Science Inquiry
Involve your 4th to 8th graders (or your science club or gifted students) in standards-based, international, free inquiry science through the MOON Project. Participation requires only eyes and Internet access.

SCIENCE
8-12
ANS 113

Kat Woodring
Crazy Traits and Adaptations: Genetics for ALL
Participants will build one of a kind creatures to explore the role that change plays in heredity.

SESSION THREE B – MATH
12:45-1:45

MATH
K-8
OM 213

Jesus Cital
Using Math-Whizz to Increase Student Learning
This session will introduce participants to the newest and most advanced online math tutor. Math-Whizz uses artificial intelligence combined with fun animation and games to teach and tutor students in math.

MATH
K-12
OM 214

Stan Hartzler & Sheila Hartzler
Game, Stunt, and Task for Student Generation of Hypotheses and Experiments in Science and Mathematics
The Game of Imitation, the Magazine Identification Stunt, and the Wason 2-4-6 Task are among several ideas offered to help acclimate students to enjoying investigation.

MATH
K-5
ANS 101

Richard Rose
Blue Ribbon Websites in Elementary
A look at math Websites chosen by the International Society for Technology in Education (ISTE) as exemplary. Also, what makes a great web site and how to find them.

MATH
7-12
OM 415

Cathleen Tutt
Microsoft Office PLUS Graphing Calculators
In todays world of technology, we need to incorporate graphing calculator with the computer to increase students grasp retention and deeper understanding of the mathematical concepts taught.

MATH
3-6
OM 207

Sandra White
Fractions Without Distraction
Learn to eliminate "Fraction Phobia" by using mnemonic devices, number lines, tortillas and more. See fun, effective research-based activities and unique teaching tools for differentiated instruction.

SESSION FOUR
2:00-3:00 PM

- | | |
|--|--|
| MATH
K-8
OM 213 | Jesus Cital
<u>Using Math-Whizz to Increase Student Learning</u>
This session will introduce participants to the newest and most advanced online math tutor. Math-Whizz uses artificial intelligence combined with fun animation and games to teach and tutor students in math. |
| MATH
K-12
OM 214 | Stan Hartzler & Sheila Hartzler
<u>Connections Across the Grades</u>
Examples of how topics in mathematics can be related within and across lessons, units, courses, and disciplines in delightful, memorable, and useful ways. Extensive handout. |
| MATH
3-6
OM 207 | Sandra White
<u>Fractions Without Distraction</u>
Learn to eliminate "Fraction Phobia" by using mnemonic devices, number lines, tortillas and more. See fun, effective research-based activities and unique teaching tools for differentiated instruction. |
| MATH/SCIENCE
K-8
ANS 218 | Caryn A Borchardt
<u>Project Wet - Water Education & Conservation</u>
Hands-on activities teachers can use to teach the water cycle, Earth's water make-up & statistics, conservation & what a wetland is. |
| MATH/SCIENCE
3-12
ANS 303 | Mike McGlone
<u>Marsbound - Design a Mission</u>
Learn problem solving skills, use simple math, and learn how mission planners have to use math, science, and communications skills to plan a mission to the red planet. |
| SCIENCE
6-8
ANS 102 | Gary Bigham
<u>Soil Textures- A Study of the Earth's Outermost</u>
Actively engage students in a study of the Earth's outermost layer, the soil, by classifying soil textures and articulating their relationships to weathering, erosion, resource conservation, and ecosystem development. |
| SCIENCE
9-12
ANS 113 | Treasure Brasher
<u>What's in a Name?</u>
A straight-forward way to use the Periodic Chart and some simple rules to name inorganic compounds. |

Session Four 2:00-3:00 PM continued...

**SCIENCE
K-6
ANS 201**

**D.J. Harris, Kisaundra Harris, Cammy Logan, Teresa Railsback,
Lora Richardson, Rachel Sanders, and Ashley Campbell**

Teaching with Butterflies and Wildscapes

Join us to learn more about teaching with butterflies and creating wildscapes at your school or home. Presenters will share highlights from the Monarch Teacher Network workshop. This session includes a walking field trip to a wildscape at a nearby home. Limited to the first 25 participants.

**SCIENCE
11-12
ANS 304**

Robyn Green & Lauryn Priddy

I Love Me! Anatomy and Physiology as a Fourth-Year Science Course

Appeal to teenagers' interest in themselves and offer A&P as a fourth-year science course. Come learn strategies and examples at this session to make A&P more than the boring "sit and get" course of the past.

**SCIENCE
6-12
ANS 101**

Richard Rose

Blue Ribbon Websites in Secondary Science

A look at science Websites chosen by the International Society for Technology in Education (ISTE) as exemplary. Also, what makes a great Web site and how to find them.