

# CSCOPE

Science 2nd Six Weeks 2008-2009

## E-Newsletter

### In this issue:

- \* The 5E Instructional Model
- \* Tips and Tools for Managing Cooperative Learning: Elevator Talk
- \* Using Key Understandings and Guiding Questions to Guide Instruction
- \* Using Performance Indicators to Assess Student Understanding
- \* Professional Development Opportunities and SPARCs Schedules

### Contact:

Jenna Shinnors  
CSCOPE  
Science Specialist

*This newsletter is written specifically for teachers and will include news and information to help you implement the CSCOPE curriculum. In it you will find tools for managing cooperative groups, explanations of CSCOPE documents, easy-to-implement and highly effective instructional strategies, along with a preview of the upcoming six weeks. We hope you enjoy this newsletter and find it useful and informative!*



### CSCOPE Doc Spot...The 5E Instructional Model

The 5E Instructional Model brings inquiry based learning to the forefront of classroom instruction. The 5E's are comprised of Engage, Explore, Explain, Elaborate, and Evaluate. The framework of the 5E stems from the constructivist theories of inquiry based learning. Student expectations are centered in problem solving, building on prior learning, and extending to real world connections. This is the model used in the CSCOPE lessons in all four content areas.

When you look at the 5E's in isolation, you can gain an understanding of the purpose behind these stages. The **engage** piece is more than just a typical warm-up in the sense that we are truly gaining valuable information such as tapping into prior knowledge to gain a sense of the

level of student understanding. The **engage** also provides an opportunity to peak student interests and excitement about the upcoming activities.

The next step is the **explore** phase. In this part of our lesson cycle, students are still in the abstract form of the lesson. Many times we have not given a name or definition to what they are learning. They are truly exploring through the learning concept(s). The midway point of a lesson is **explain** – where we put a name to what we are learning. This is still primarily student centered, as the teacher facilitates learning through questioning and helping provide

*(Continued on page 3)*



## Tips & Tools for Managing Cooperative Learning...Elevator Talk

You're on an elevator, someone famous walks in. The next thing you know, this person asks you to share something you've learned that is very important. How can you respond in the few seconds it takes to get to your destination?

This is **elevator talk**, a highly engaging cooperative learning strategy.

Elevator talk has a wide variety of instructional uses, from tapping into students' background knowledge, strengthening social skills, to assessing student comprehension. This is a quick and effective process that can be used at all age levels.

### **Elevator Talk 101**

Let's discuss the ground rules. Like any strategy introduced in our classrooms, elevator talk needs to be modeled before students practice. Allow time for setting student expectations and guidelines for success.

### **Guidelines for elevator talk:**

Students will partner up for this activity. Each student gets 30-60 seconds to share their ideas. This is the estimated amount of time to reach your floor.

When a student is not sharing, he/she is an active listener to their partner's ideas.

### **What do you say, and how do you say it?**

At first, students might seem overwhelmed at the prospect of trying to say so much in a short amount of time. Providing them with a specific topic to discuss, or posing a question will help them focus their ideas.

Sentence stems can also be used to help students organize their thoughts. It is important to allow wait time for students to generate their responses. If appropriate for the age group you teach, you may provide students time to write down their elevator talk before they share.

### **Four steps for a successful elevator talk**

Students should be able to answer these questions when planning their talk:

1. What is it?
2. Why is it important?
3. How can I share my ideas so others can understand and remember? (How can I share something that connects learning to real world experiences, a story, examples, etc.)
4. Less is not always more—Make sure that you cover enough so your partner can understand the concept or idea being shared.

For elementary students, steps one and two are very important. As students' gain understanding of the strategy, they can then begin to elaborate on their elevator talk by adding examples or stories.

### **Example of a Primary Elevator Talk:**

Discussion Topic: *How did you solve your problem? Share how you found your answer.*  
Elevator Talk: *I subtracted, because Tina had 5 cookies but she ate 2, so now there are 3 leftover. She has 3 cookies.*  
(*The other partner could have the same or a different story problem to share.*)

### **Example of an Intermediate Elevator Talk:**

Discussion Topic: *Name one of the three states of matter we discussed today, and what did you discover in our lab?*  
Elevator Talk Partner 1: *One of the three states of matter we learned about is a solid. I learned that a solid can change into a liquid. The ice cube we used started as a solid, but we added heat, so it then turned into a liquid.*  
Elevator Talk Partner 2: *Another state of matter we learned about is liquid. I learned that matter can change from one state to another.*

### **Example of a Secondary Elevator Talk:**

For secondary students, all four steps are incorporated. Students are encouraged to be concise in sharing the most important data in their delivery of information.

(Continued on page 3)

## **Elevator Talk** (Continued from Page 2)

Discussion Topic: *Tell me about some of the research you are conducting.*

Elevator Response: *Have you ever wondered why certain plants taste really bitter? It's because they produce bitter compounds to protect their leaves from being eaten. This explains why certain plants are eaten more than others.*

After students have shared, they can trade partners and continue this process. It is also appropriate for a whole class discussion to take

place to talk about ideas presented and material learned through this strategy.

Once students have the guidelines established and have practiced, this is a quick, and easy strategy for all learners.

Secondary example adapted from: Carolyn Gale, Stanford University, Center for Teaching and Learning.

Other resources:  
Garry Duncan, "How to make your 'elevator talk' a floor above the rest." *Denver Business Journal*, Feb. 11, 2005.

---

## **5E Instructional Model** (Continued from page 1)

explanation. **Elaborate** is where the upper levels of Bloom's Taxonomy flourish, with activities that encourage students to extend their knowledge to new ideas and bridging our classroom to experience real world applications. The final piece in the 5E learning cycle is **evaluate**. Students use connections to their learning through generating products such as graphic organizers, models, and journal entries. At this stage all the pieces of the 5E come together to complete the unit's cycle of learning.

In the CSCOPE units, the 5E model is the framework for the lessons. Each lesson has an extended duration that generally lasts several days. The 5E's do not always cycle in order. Often you will see lessons that provide opportunities to reexamine a part of the instructional model for students to gain a better understanding of the concept being taught.

"**Tell me** and I'll forget; **show me** and I may remember; **involve me** and I'll understand" - Chinese proverb, Confucius

---

## **Professional Development Opportunities: English Language Learners**

### **Strategies for Teaching English Learners**

Tuesday, September 30, 2008

FA0813161

Participants will be introduced to general strategies for working with English learners and will receive a copy of the book *Fifty Strategies for Teaching English Language Learners*.

### **Sheltered Instruction: Support for English Learners**

October 16 and 17, 2008

FA0812641

Participants will explore hands-on strategies for sheltering instruction in the content areas including welcoming English learners, constructing a language rich, interactive classroom, incorporating ELPS and differentiating instruction for English learners.

### **English Language Learner Institute**

Wednesday, November 5

Dr. Kate Kinsella will highlight strategies to boost academic language development in classrooms grades 3-12. Participants will receive a CD that includes toolkit activities explored in the institute.

## Using Key Understandings and Guiding Questions to Guide Instruction

Facts multiply and change over time, making it impossible to teach students every “thing” they need to know by the time they graduate! Fortunately, it is not our responsibility to teach students all of the facts, but to teach them how to think and to become life-long learners.

Using concepts as organizers for our instruction (rather than facts) allows us to prioritize our instruction. Concepts are timeless and can be applied across content areas. What are the benefits of concept-based instruction? This type of instruction

- Stimulates higher level thinking, which causes students to rise above the fact base to gain understanding.

- Engages the personal intellect and emotions of the students, which then increases motivation for learning.

- Teaches students how to see patterns and connections between facts and ideas within and across content areas.

- Provides relevant focus for content study.

- Facilitates the transfer of knowledge.

- Meets different ability levels.

- Creates a brain schema for processing new information.

- Develops English language fluency (Erickson, 2002).

Furthermore, research shows that rich, significant curriculum aimed at meaning and understanding allows “low performers” to increase their grasp of advanced skills at least as much as their higher-achieving peers. Research also reveals that nations with higher test scores use teaching and learning strategies that promote understanding rather than “coverage” and rote learning (Tomlinson & McTighe, 2006).

The Instructional Focus Documents are organized around timeless concepts which are driven by Key Understandings and Guiding Questions. Teachers use the Instructional Focus Documents to anchor and plan instruction, keeping content standards, desired understandings, and questions constant regardless of the student’s background. Teachers can post these Key Understandings and Guiding Questions in the classroom and refer to them throughout instruction, keeping instruction goal focused. Academic achievement scores in classrooms in which clear learning goals are set is 21% higher than the achievement in classrooms in which they are not (Marzano, 2003).

Because guiding questions are open-ended, they are differentiated by design; students entering the curriculum at varying levels of understanding respond according to their understanding. Effective teachers use Key Understandings and Guiding Questions to

- focus student attention to critical elements and encourage abstraction of principles,

- lead students to remember relevant knowledge,

- create opportunities to observe similarities and differences across diverse events/contexts, and to

- assist students in recognizing major themes, generalizable features, and strategies rather than specific solutions (Bransford, 2000).

Big-idea questions signal that education is not just about coming up with “the answer” but about learning how to learn. The following table lists some practical ways to use Key Understandings and Guiding Questions to guide your instruction.

*(Continued on page 5)*

**Using Key Understandings and Guiding Questions** (Continued from page 4)

	Key Understandings	Guiding Questions
Post in the classroom	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Put in parent newsletters	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Put on syllabi, Teacher Web	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use as basis for test questions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use as journal, essay and other writing prompts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use as formative assessment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use to review the unit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use during cooperative learning to promote dialogue		<input checked="" type="checkbox"/>
Ask students to create questions based on the Key Understandings	<input checked="" type="checkbox"/>	
Use as a starter for a mind map	<input checked="" type="checkbox"/>	
Ask students to create key understandings based on the Guiding Questions		<input checked="" type="checkbox"/>
Use as ticket out the door prompt		<input checked="" type="checkbox"/>
Use as simultaneous round table prompt.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Bransford, J. D. (Ed.). (2000). *How people learn: Brain, mind, experience and school* (Expanded Edition) Washington, DC: National Academy Press.

Erickson, H. L. (2002). *Concept Based Curriculum and Instruction*, Thousand Oaks, CA: Corwin Press.

Marzano, R. J. (2003). *What works in schools: Translating research into action*.

Alexandria, VA: Association for Supervision and Curriculum Development.

Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design: Connecting content and kids*. Alexandria, VA:

Association for Supervision and Curriculum Development.



# Using Performance Indicators to Assess Student Understanding

## What are the performance indicators

**(PIs)?** PIs are a combination of the content TEKS and process TEKS which are combined with a product. If students accomplish the performance indicator, then they demonstrate mastery of the TEKS.

**Where are they located?** PIs are located in two places. All the PIs for the unit are in the IFD. Then the PIs for each lesson are repeated in the lesson. Additionally the Evaluate portion of the lesson should mirror the PIs and all activities of the lesson should lead to that understanding.

## How can you use the Performance Indicators?

- Design the activities of the lesson so that all parts of the PI are taught. Design the Elaborate portion of the lesson so that learning is applied to new situations.
- Plan vocabulary instruction based on the needs of the PI. What academic and content-specific vocabulary will students need to know in order to read and comprehend TAKS problems? What words will they need to use to discuss the content? What content words are completely new to students? What words trip up ELL students?
- Introduce the unit or lesson with the performance indicator. Have students discuss what it could mean or explore a problem that will be solved by the end of the unit. How far

can your students get on the problem? Continually revisit the problem throughout the lesson. Are they making progress in solving it?

- Include on your website or on a syllabus so parents will know what is expected of their child by the end of the unit. The parent does not have to be able to do the PI to ask questions of their child. You could even suggest appropriate questions for the unit—possibly the guiding questions.
- Use as a pretest to determine differentiation needs. If your students can perform the PI before the unit begins, they probably need to have significant extensions embedded into the lesson or may be able to skip it altogether.
- Post the PI in the classroom. As the skills or information is taught, refer to the PI to show how close the class is getting to the goal.
- Create a teacher-made test using the parts of the performance indicator. If your test covers all the parts of the PI, then it probably assesses the TEKS well.
- Compare the teacher-made test results and the PI with student performance. What parts of the PI does the student still need to work on? How can this be addressed in the new unit?
- Use the PI as an open-ended test, instead of giving an objective or multiple choice test. Create a specific rubric to assess understanding or use the rubric provided in the lesson, if applicable.

---

## Professional Development Opportunities: Early Childhood

Region XIII Early Childhood Specialists are teaming up to offer a year-long strand of interactive, practical workshops to build your content knowledge in science, social studies, math, and literacy learning. When you sign up for 3 of these workshops, receive a 50% discount on your 3rd workshop! These workshops target PPCD, Pre-K, and Kindergarten

**CIRCLE Language and Literacy** (2-day training)  
Oct. 2 & 23, 2008 FA0813176

**Social Studies for Young Children**  
Nov. 17, 2008 FA0813299

**Getting the Most from Your Learning Centers**  
Dec. 3, 2008 FA0813185

**Math Concepts throughout the Day**  
Jan 29, 2009 SP0913298

**Ensenar en Espanol—Resources and Strategies for Bilingual Classrooms**  
Feb. 11, 2009 SP0913190

**Building a Reader through Early Language Development**  
March 26, 2009 SP0913184

**How to Include Science in Your Day**  
Apr. 15, 2009 SP0913195

# Information on T-STEM

Transformation 2013 is a collaborative effort between Education Service Centers Region 20 and Region XIII and their partners. The mission of the center is to provide the highest quality professional development, curriculum, instructional materials, and outreach programs emphasizing hands-on, problem-based learning to create superior science, technology, engineering, and math (STEM) students.

Innovative classroom instruction challenges students to innovate, investigate, question and invent utilizing the engineering design process. As a STEM center, Transformation 2013 provides contemporary, research-based professional development and instructional materials to support K-12 educators and education leaders in their quests to improve student achievement and prepare all students to be college and workforce ready.

The center recently contracted with highly qualified educators to write problem-based learning units that are aligned to the CSCOPE Year at a Glance documents for Algebra I, Geometry, Algebra II, Biology, Chemistry, and Physics. The units were designed using the 5E model of instruction, and they promote a real-world experience, targeting 21<sup>st</sup> Century Skills. The units are currently being edited; however, the first set of units will be available September 30, 2008 on the center's website.

Transformation 2013 also offers an array of additional services for both traditional K-12 schools and T-STEM academies. Some of those services include on- and off-site professional development for educators, instructional coaching in the areas of math and science, STEM technical assistance, and data analysis. Transformation 2013's services are committed to promoting best practices in rigorous, relevant, real-world instructional methods.

Visit [www.transformation2013.org](http://www.transformation2013.org) for a full menu of our professional development offerings and to view free, innovative instructional materials aligned to CSCOPE YAG documents.





## 2nd Six Weeks Lesson Preview

# Science



### Kindergarten

**Unit 3, Exploring Patterns, Cycles and Changes in My Day**, addresses patterns and changes in order to allow students to move from what they already know (patterns in their daily lives) to what they are learning about in the natural world (patterns and cycles in weather and day/night).

In **Unit 4 Exploring Plant Characteristics**, students will gain understanding of systems, parts of a whole, and the basic needs of plants in order to allow students to make valid observations about living organisms (plants). Observing the germination of seeds allows students to observe growth over a relatively short time period. Observations of plants introduce the parts of the plants and why those parts are important. For growth to occur, the needs of the seeds and plants must be met. This unit will engage students in activities designed to develop these concepts through explorations of everyday things in their environment.

### 1<sup>st</sup> Grade

In **Unit 2, Investigating Properties and Changes**, students will have the opportunity to explore the concepts of length and mass. In addition, graphing and charting of data is introduced. Students will also be observing and measuring ways they have changed since birth, and will predict how they will continue to change. A time capsule will be made so they can see at the end of the year how they have changed.

In **Unit 3, Investigating Plant Diversity**, students will learn about the structure and function of plants, with a focus on roots, stems and leaves. As a follow-up to learning about plants and plant parts, students will learn their uses in our everyday lives.

### 2<sup>nd</sup> Grade

In **Unit 3, Investigating Force and Motion**, students will examine a wide variety of objects and will observe, measure, record, analyze, predict, and illustrate changes in position and movement by changing the motion of an object. The changes in motion should be the results of pushes and pulls on the objects.

Students will explore magnetism as a force that can push or pull. Through investigations, they will understand that some objects will be pulled toward a magnet while other objects will not. Students will then examine a wide variety of objects and will observe, measure, record, analyze, predict, and illustrate changes in position and movement by changing the motion of an object.

In **Unit 4, Patterns of Change: Weather**, students will focus on the everyday experience of weather, and how it is tangible and relevant to their lives. Students will discover that there are observable patterns in our weather, and that weather can be measured and classified. They will learn words we use to describe weather, such as sunny, cloudy, rainy, snowy, hot, and cool. In addition, they will understand that the weather may change from day to day, but general trends in weather can be seen from season to season. Students will see how tools like thermometers, weathervanes, and rain gauges can be used to measure and record these weather changes. The three elements that comprise weather—precipitation, wind, and temperatures—will be discussed.



## 2nd Six Weeks Lesson Preview

# Science



### 3<sup>rd</sup> Grade

In **Unit 2, Investigating Systems**, students begin to understand that they are interconnected with the world around them. By thinking about the whole in terms of its parts and vice versa, the importance of relationships and interdependence is revealed. Students will explore various simple systems (yo-yos, toy cars, seeds, plants, etc.) and develop the notion that the parts can do things together that they cannot do by themselves. Students can begin to see the usefulness of looking at objects and processes as systems when confronted with systems that do not work, perhaps because of a missing or broken part.

In **Unit 3, Investigating Forces**, through simple investigations with pushes and pulls, students can begin to see that all changes in motion are dependent upon forces. In this unit, students will use toy cars and everyday objects to explore these ideas. Students will expand on their knowledge of force and motion as they examine several devices which multiply forces and change the direction of forces – simple machines.

### 4<sup>th</sup> Grade

**Unit 2, Matter**, bundles student expectations that address a review of the states of matter and build to the complex topics of density and buoyancy. This unit provides students with an introduction to scientific testing. Due to the nature of matter, students will be able to use many of the tools of science and experience hands-on activities.

During **Unit 3, Energy**, students will explore another type of energy: light energy. The concept of systems will be addressed through circuits that include light bulbs. After circuits and systems are addressed, students will illustrate how characteristics of matter are affected by rotations, reflections, and translations. This comes naturally after students have studied light because the only way objects and their reflections, translations, and rotations can be observed is through the reflection of light. Symmetry of natural objects will also be explored. After students explore energy associated with the universe, weather, winds, photosynthesis, matter, and light, they will begin to explore how energy has reshaped the surface of Earth.

### 5<sup>th</sup> Grade

In **Unit 2, Energy**, students will learn about the interactions of energy and matter in order to understand energy transformations. The unifying concept of systems will continue to be developed through electrical circuits. This varied look at energy will set the ground work for energy as it relates to natural resources. **Unit 3, Natural Resources**, will set the stage for a deeper understanding of natural energy resources on Earth. This unit builds on prior knowledge of types of energy and energy transformations. The study of natural resources helps students understand how resources are created and maintained through constancy and change.

### 6<sup>th</sup> Grade

#### **Unit 03: Energy Transformations: Non-Living Systems.**

Students will develop a clear understanding of and be able to define the concept of energy. Students will also be able to define energy by noting that energy causes change in matter through an exploration of the different forms of energy and the changes they create. Students will observe and explain energy transformations through lab investigations.

**Unit 04: Energy Transformation: Living Systems** addresses how energy flows through a system in order to connect the interdependence among organisms in an ecosystem.



## 2nd Six Weeks Lesson Preview

# Science



### 7<sup>th</sup> Grade

In **Unit 03, Organism's Internal Responses**, students gain an understanding of the relationship between structure and function in order to reinforce how organisms respond to stimuli. In Lesson 2, students will learn that homeostasis depends on the ability of the body to respond to stimuli. Students will understand that for every change in the environment, living organisms will react to maintain homeostasis (balance in the organism).

#### **Unit 04: Inherited and Adaptive Traits for Survival**

Students will observe and compare the traits of plants produced by both sexual and asexual reproductive methods. They will also look at the advantages and disadvantages of each type of reproduction. Students will understand how the traits of both plants and animals help them to adapt and survive in their environment. Students will search for traits among their peers and differentiate between dominant and recessive traits. Students will also demonstrate an understanding that physical traits come from genes passed from parents to offspring.

### 8<sup>th</sup> Grade

**Unit 04, Interdependence among the Systems of the Human Body**, makes connections between how different body systems interact with each other to help the body to function and feedback mechanisms that help to maintain equilibrium. Students will investigate the interdependence of body systems through Internet research. Students will also investigate the importance of feedback including blood sugar, water levels, and temperature regulation to living systems. **Unit 05, Heredity and the Environment: Traits and Genetics**, explores the concept that traits of species can change through generations.

### Biology

**Unit 04: The Cell.** Students gain an understanding of cellular structures, functions, specialization, and levels of organization which lead to further development in genetics, evolution, classification, microorganisms, plants, and body systems.

In **Unit 05, Genetics - Cellular Reproduction**, students develop an understanding of the cell cycle, structure and function of chromosomes, and the processes of mitosis and meiosis. Students will use this knowledge to develop an understanding of genetic variety and genetic diseases.

### Chemistry

#### **Unit 04: Chemical Bonding.**

This unit bundles student expectations that use the periodic table to predict characteristics of elements. Chemical bonding is taught at this time to take advantage of the introduction of many of the trends in the periodic table that were taught in the last unit. This gives the students an opportunity to see how those concepts, such as electronegativity, apply to chemical bonding.

#### **Unit 05: Chemical Formulas.**

This unit bundles student expectations that take the chemical bonds studied in the last unit to the next level. In this unit, the students will learn to "speak and write chemistry" by learning how to represent compounds with symbols and names. The ability to write and state the name of chemical compounds, both ionic and molecular, will be very important to the students' success in the next few units.



## 2nd Six Weeks Lesson Preview

# Science



### IPC

#### Unit 04: Changes in Matter

This unit bundles student expectations that build upon previous units by having the students go from observing physical and chemical properties to realizing that these properties can change and/or stay the same depending on whether or not a substance undergoes a physical or chemical change. By then concluding with the Law of Conservation of Mass, students transition to the next unit, Reactions, where the Law of Conservation of Mass is a fundamental building block for student success.

#### Unit 05: Reactions

This unit bundles student expectations to expand on the last unit by exploring chemical reactions in more detail while also comparing and contrasting chemical reactions with nuclear reactions. In conclusion, students explore the impact that end products from all types of reactions may have on the environment.

### Physics

#### Unit: 04 Newton's Laws of Motion

This unit bundles student expectations that address motion as it applies to Newton's Laws. It is customary to begin the study of motion without a detailed knowledge of what causes the motion. That area of study is called kinematics. Once we are able to describe motion, the next logical step is to study the cause of the motion. Newton's Three Laws of Motion, knowledge of forces, and the knowledge of the inertial properties of matter provide powerful tools for this analysis. The application of these three 'simple' sounding laws often proves to be more complex than expected. This is due in part because many persons have developed their own laws of motion, and those misconceptions are difficult to remove. Student analysis is further complicated by the vector nature of forces. A systematic approach using free body vector diagrams of external forces is necessary to apply these laws to real situations while stressing that Newton's laws are valid only in inertial frames of reference and technically only apply to point masses.

## Upcoming Professional Development

Look for these and other workshops in the e-Campus catalog (<http://www5.esc13.net/index.html>).

**Maximizing Student Performance: Effective Classroom Strategies.** (FA0813009) October 10, 2008  
Participants will experience and learn about a variety of instructional grouping strategies. The focus will be on easy to manage and time saving strategies that will successfully engage all types of students in learning.

**Maximizing Instructional Time: What do your students really know?** (FA0814356) December 9, 2008  
Why wait until the end of the unit to know what your students know? This course will focus on assessing student knowledge during the unit without the use of time-consuming quizzes. You will examine CSCOPE lessons and identify opportunities for providing feedback on students' work. You will then learn practical, easily implemented processes to plan subsequent instruction using the data you collect. (Please note that this is not a workshop that addresses the CSCOPE unit assessments. The focus is on ongoing assessment for learning.)



## 3rd Six Weeks SPARCs

Grade	Workshop ID	Dates
<b>Kinder Math/Science</b>	FA0812941	10/20
<b>1st Math/Science</b>	FA0812955	10/22
<b>2nd Math/Science</b>	FA0812948	10/21
<b>3rd Science</b>	FA0812967	10/24
<b>4th Science</b>	FA0812957	10/22
<b>5th Science</b>	FA0812952	10/21
<b>6th Science</b>	FA0812968	10/24
<b>7th Science</b>	FA0812959	10/22
<b>8th Science</b>	FA0812954	10/21
<b>Biology</b>	FA0812970	10/28
<b>IPC</b>	FA0812974	10/31

These workshops are held at Region XIII from 9:00-4:00 and cost \$50 each.

### Feedback from SPARCs...

- \* *I got great idea for the kids from the first day of school.*
- \* *Great workshop...look forward to more in the future.*
- \* *What I liked the most was that I got to visit with other math teachers and received much encouragement as a brand new teacher.*
- \* *Great presentation and great learning time with other colleagues.*
- \* *Very helpful hints on how to adapt lesson to make more dynamic in the classroom. Also how to use lessons for formative assessment.*
- \* *This was great and look forward to more. I wish you had these last year.*