

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!

In this issue:

- A Purpose for Learning: Using Guiding Questions
- ESL Strategies: Random Oral Questioning
- What is a VAD and what is its purpose?
- Preview of the 5th Six Weeks
- Resources: Tales from the Trenches, Opportunities for Professional Development, Research Source

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Tips and Tools for Managing Cooperative Groups

Our previous newsletter offered tips for cooperative group size, assignment, and tasks with time limits. In this issue, we'll briefly describe two group techniques. Notice that these strategies promote both individual and group responsibility, small and large group communication.

Teammates Consult (3-4 students)

- Team members each have identical questions to answer on paper.
- Students place their pencils in the team cup.
- The teacher (or selected student) reads the first question aloud, gives students time to discuss possible answers, and asks if everyone is ready.
- When everyone is ready, teachers signals students to pick up their pencils.
- **Without talking**, everyone writes his/her own answer.
- Students place their pencils back in the team cup.
- The teacher (or selected student) reads the next question.

Showdown. (Teams of four.)

- Prepare thought-provoking questions; write them on cards with answers on the back.
- Group students in teams of 4. Give a white board, markers, and eraser to each team. Team members number off one to four.
- Teacher or student leader chooses a card and reads the question.
- When team members agree on the answer, they write it on the white board..
- The leader says, "Showdown. Student number x will defend the team's answer."
- Teams hold up their white boards. The previously identified students number x may be called upon to justify the team's answer to the other teams. If all agree, the teacher or student leader reads the next question.

ESL Strategy of the Month...

Anyone who has been in a classroom for any time knows it's difficult to make sure that everyone is paying attention and interacting with the content. This month's tip is called **Random Oral Questioning**. Research by Buck (1997) shows that there is anywhere from a 22-33% increase in student achievement when high level discussion questions aligned to the standards are posed randomly than when participation is voluntary. With this technique, the students' level of concern is raised, and their focus is increased.

Before Using This Technique. Create a supportive atmosphere of responsibility and respect, where all students know that they will all be expected to respond and all students are supported.

Second, teach students appropriate ways to respond if they don't feel prepared to answer the question at the time it is asked. "May I have more information?" "May I have more time?" "May I ask a friend for help?"

Third, you'll be giving students think time. Teach them the signal you want them to use so you know they've thought of an answer—hands clasped on desk or a lowered hand.

Lastly, have students write their names on an index card or popsicle stick.

What it Might Look Like. "Everybody raise your hand. When you can answer this question, please put your hand down. Remain quiet until everyone has finished thinking." Ask your question. When all hands are down, call on students by selecting a card or popsicle stick. The student may either answer the question or ask for more time/more information/help from a friend. Make sure you come back and call on that student again before the end of class.



This establishes the idea that it is ok to pass, but everyone is expected to participate by the end of the discussion. Continue to use this procedure until you have finished your discussion.

Does this only help for ESL students? This works for ANY student, but it is especially important for ESL students to have time to process the language of the question so they can then access the content. Giving think time and teaching students a signal allows all students to process content at a deeper level and to give more thoughtful responses. Teaching students how to respond when they need more time or information, increases their repertoire of problem solving skills. Keys to success with this technique? Teach students the procedure, practice the procedure, and maintain a supportive learning environment.

CSCOPE Doc Spot...VAD Exposed

What is it? What is its purpose? How do you use the VADs?



The Vertical Alignment Documents (VADs) present standards across grade levels so that is clear how the depth and complexity of standards evolve over time. The VAD helps teachers see how student expectations (SEs) develop from the previous grade level, and at what level of rigor students will be expected to perform in the next grade level. Specificity (in blue print) has been added to each SE, based on study of the released TAKS, and TAKS information booklets. Tested student expectations are highlighted in gold, giving a clear visual to assist the teacher in prioritizing instructional time and targets.

Where do you find the VAD? Click on Curriculum Elements at the top of your home screen and scroll down to Resource Samplers. Select your content area and then you will see a Vertical Alignment Document folder. Select the grade level(s) that apply to you.

How do you use it?

- To plan instruction at the appropriate level of content and skill complexity.
- To assess student areas of need and plan effective intervention to address gaps.
- To select appropriate materials and resources to build student mastery.
- To prioritize instructional time.

In the next CSCOPE Doc Spot...The 5 E Lesson

Have a general CSCOPE question that you think would be a good article for the newsletter? Send it to jennifershinnners@esc13.txed.net. You could be famous!



5th Six Weeks Lesson Preview

Science



Kindergarten: This six weeks students will be exploring how plants and animals live and grow. In the first unit students will observe and compare how they have changed since the beginning of school. Students will gain knowledge about how taking care of themselves affects their personal growth. In the second unit, look for engaging opportunities for students to observe life in a mealworm habitat.

1st Grade: Students will explore how we experience change and look for patterns in our human growth and development. In the second unit, students will investigate the basic needs of organisms through activities such as researching and designing a habitat for a pet, as well as constructing garden containers to watch how organisms grow and change.

2nd Grade: It's all about plants! Students see plants in their daily lives, but do they know their seven basic needs? Students will explore the function, parts and characteristics, and learn that plants play a very important role in our environment.

3rd Grade: Students will observe and investigate inherited traits. In the first lesson, students will gain an understanding that our features, such as hair color, are characteristics that are passed along from our families. Students will make connections to other living organisms and their life cycles, such as observing mealworms and the larval stage of darkling beetles. In the next unit, students will investigate how plants and animals have special adaptations that help in survival.

4th Grade: Inherited and learned traits is the focus of learning in the first unit. Students will gain an understanding of how traits are passed from parents to their offspring. Look for a fun hands-on activity called Roberto's Family Connector. Students will investigate what learned traits look like in living organisms through activities like Pet Patrol. In the last unit for this six weeks, students will explore how plant and animal adaptations help aid in the survival of these organisms.

5th Grade: In the first unit, students will gain an understanding of how organisms use their characteristics to survive in the environment around them. Students will also learn the important role food web and food chains play in the balance of an ecosystem. The focus of the next unit is life cycles of plants and animals. Cycles such as the water, carbon, and nitrogen will be explored through hands-on investigations. Students will be asked to find commonalities among cycles, and understand that cycles interact with each other to keep nature in balance.

6th Grade: The focus of the first unit is how the atmosphere interacts with Earth's surface to create weather changes. Students will participate in an activity called Atmosphere Station Rotation. Students will then explore the rock cycle and become scientists that study the changes in the surface of the Earth.

7th Grade: Get ready for a disaster this six weeks! Students will research and explore through hands on investigations the effects of natural disasters. In the first lesson, look out for Blowing Your Top; this activity is sure to leave an impression!

8th Grade: In the first unit, students will explore Newton's Law of Motion through their own investigations and experiments. Students will then venture to identify similarities and differences in mechanical and electromagnetic waves. The final unit for the six weeks students delve into the universe through stars and galaxies. Students will study about the life cycles of stars and classify them using an HR diagram. Look for the elaborate piece where students create a rap or poem about the life cycle of a star. The performance indicator for the unit centers around students creating a travel brochure for visiting the universe!

IPC: Students will build on their background knowledge about conservation of energy. Students will create their very own roller coasters and compete in a design contest. Through group investigations, they will analyze the efficiency of energy from different types of sources and the environmental impact of these forms.

Biology: This six week's focus is investigating the systems of plants. Students will gain knowledge about the specialized functions of plants and the structure of plant cells. We will investigate and compare these characteristics and learn how specialized parts contribute to the survival of plants. Students will research and identify how plants adapt to the environment around them. Look for the group activity where students visit biome stations in your room in order to identify and analyze how plants adapt to environmental conditions in our world.



Resources



Source

Buck, H. J. (1997). Maximizing Student Learning with the Use of Random Oral Questioning in the College Classroom. *Journal of Educational Research*, 37(1). Retrieved January 26, 2008, from http://64.233.1***.104/search?q=cache:JKfVCgt0cP4J:www.coedu.usf.edu/fjer/1997/1997Buck.htm+%22student+participation%22+%22randomly+calling%22&hl=en&ct=clnk&cd=6&gl=us.

For further information on cooperative learning methods and Techniques:

www.Kaganonline.com

Cooperative Learning for Secondary Science Educators at <http://courses.ed.asu.edu/clark/CoopLearn/Index.htm>

Using Jigsaw, <http://www.jigsaw.org>

Access unit assessment FAQ's

<http://www5.esc13.net/cscope/docs/GUIDE%20TO%20UNDERSTANDING%20CScope%20UNIT%20ASSESSMENTS.pdf>

