

### In this issue:

- What is an IFD and what is its purpose?
- Tips and Tools for Managing Cooperative Learning
- ESL Strategies
- Preview of the 4th Six Weeks

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*Welcome to the first CSCOPE newsletter! 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!*

## Tips and Tools for Managing Cooperative Groups

"All right. Everyone get in a group and discuss the War of 1812." "I said to discuss the War of 1812, not talk about what you did last night!" Sound familiar? Sometimes it seems like putting students in groups is a recipe for disaster! Here are some simple tips for managing groups that will help quiet the chaos.

- Keep group size small. Groups of 3-4 have been shown to be the most effective group size, followed by pairs of students. (Marzano, 2001) Groups of 5 or more make it too easy for students to "opt out" of learning.
- Be specific about what you want students to do while in the group and how long you want them to do it. "I want you to create and label a diagram of the process of photosynthesis. Each person in your group should be able to explain at least one part of the process."

- Assign students to groups instead of letting students choose. Why? You can ensure that groups are heterogeneous, both socially and academically.
- Give students a specific amount of time to accomplish the task, starting with a shorter amount of time than you think it will actually take. "You must finish the first three problems in 10 minutes." This provides a sense of urgency. You can always extend the time. If students are given too much time, little work will be accomplished.

## ESL Strategy of the Month...

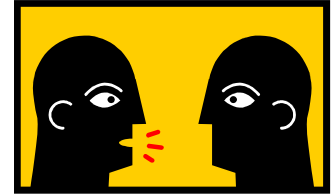
Think about the hardest class you took in college. Did you ever feel like everyone else “got it” quicker than you? I certainly did! Sometimes our students feel that way too. This ESL Tip of the Month works for *ALL* students, fits seamlessly into CSCOPE lessons, and requires *NO* preparation. It is called “**Think-Pair-Share.**”

**When do you use it?** Any time you want students to discuss something in a group—especially if it is a new or difficult concept. It will be particularly useful in the *Explain* part of CSCOPE lessons.

**How does it work?** The teacher teaches students the process for a Think-Pair-Share and then asks a question. Students think for 30 seconds. (You have to time them.) Then they pair up and share their thoughts for 1-2 minutes. (Again, give a specific amount of time for the discussion.) Then ask groups to share their thoughts.

**Why does it work?** ESL students are so busy trying to understand the language that sometimes they don’t get the opportunity to think about what is being said. Thinking time gives them a chance to think about content, not just the spoken words. Pairs work very well

because both students can contribute to the conversation. Sharing in pairs is *much* less scary than in a larger group. Being wrong as a pair isn’t as intimidating as being wrong alone. Finally, if students are talking in pairs, half the class is processing the question at once. If students are in groups of 4, only 1/4 of them are processing. And if only one person is speaking, then one person is processing.



**Does this only help ESL students?** No way!! This works for ANY student who needs a little more time to think about new concepts!

**How do I implement this?** With any new instructional strategy, you will have to specifically plan when to use this and will have to use it often. Tucker (2004) says that adults have to practice a new skill 21 times to establish a pattern.

**As always,** students must be taught this process. Teach the process and then ask the question. Tightly control the time you allow for thinking, pairing and sharing.

## CSCOPE Doc Spot...IFDs Exposed

***What is it? What is its purpose? How do you use it?***



The Instructional Focus Document (IFD) is the “why” for a unit of study. In the IFD, TEKS, concepts, key understandings and guiding questions connect to provide meaning and purpose to the unit. The IFD helps teachers and students understand how this content connects to the past and future units, as well as to what students learned the previous year. Key understandings and guiding questions provide focus for classroom discussion and help students make sense of the new knowledge. The rationale lets the teacher get in the mind of the lesson writer giving context to the unit.

Where is this powerful, meaningful document? When you open a unit, the link to the IFD will be about half-way down the screen under the Author box and above the Unit Assessment. How do you use it? About two weeks before you start a unit, print the IFD and discuss it in your team meeting. Discussing it ahead of time gives you time to process the concepts you’ll be teaching helping you to bring powerful learning to students. After IFD discussion, check out the VADs. The VADs bring a vertical perspective to the unit. And then, finally, check out the lessons.

### **In the next CSCOPE Doc Spot...Exploring Vertical Alignment Documents...**

*Have a general CSCOPE question that you think would be a good article for the newsletter? Send it to [carol.gautier@esc13.txed.net](mailto:carol.gautier@esc13.txed.net). If we include it in the next newsletter, you might win a prize...or at least be CSCOPE famous!*



## 4th Six Weeks Lesson Preview



# Mathematics

**Kindergarten:** In numeracy, the focus is on using lots of repetition to build and compare numbers to 15. Then students will look at attributes of geometric figures and ways to sort them. Finally students will use examples and non-examples to build understanding of fractional equivalency.

**1st Grade:** Patterns, patterns, patterns! Students will build on place value patterns learned 21-40 in 3rd six weeks to patterns for 41-99 in 4th six weeks. They will also study repeating and additive patterns to foster algebraic thinking. Students will make connections between coin values. Finally they will review attributes of 2D and 3D figures in order to study nonstandard units of measure.

**2nd Grade:** Students will use *concrete manipulatives* to build understanding of multiplication. The focus is on making equal groups of objects, not learning facts. Then students will work with benchmark fractions, relating them to number lines, probability and money. Check out the part of the lesson that connects to fractions to money. It's a little tricky!

**3rd Grade:** This is the introduction to standard units of measure, both metric and customary, and including volume and capacity! Until 3rd grade, students only work with nonstandard units (the length of a knuckle, the size of a sheet of paper, etc.) In 3rd grade students learn why we need standardized units and what the units are. Then they will formally study the attributes and classification of geometric figures. Heads up! Lots of cards will need to be made for this unit.

**4th Grade:** Measurement is king this six weeks. Area and perimeter were studied with the operations, so the focus will be on finding volume through layering blocks. With the TEKS revision, all formulas have disappeared from the 4th Grade TAKS Mathematics Chart. This probably means that students will be measuring to find the perimeter, area, and volume on the TAKS test. So get those charts out and let students measure, measure, measure!

**5th Grade:** Students will study the rest of the probability TEKS this six weeks, including lists, tree diagrams, and the fundamental counting principle. Then it's time for measurement! Area and perimeter have been included throughout the year, so they will be quickly reviewed, and then on to volume. Students will use tables to study conversions (time, metric and customary) so students can build meaning from patterns that they are familiar with.

**6th Grade:** 4th six weeks is all about measurement, geometry, and proportional reasoning. Students build understanding of angle measurement using wedge protractors and then use protractors to measure angles and aid in classifying polygons. Students will study capacity, weight and volume by reading scales and doing conversions using tables. Finally students will develop the idea of unit rate and proportional reasoning using two-color counters and familiar real-life situations.

**7th Grade:** Measurement and geometry are studied the whole six weeks. First complementary and supplementary angles and the angles of a polygon allow students to review solving equations. Then break out those cubes! Students build figures and draw them on isometric dot paper. Collect some boxes too so students can build nets! Finally they will apply measurement skills they have been learning all year!

**8th Grade:** This six weeks has four short units: Pythagorean Theorem, Similar Figures using Dilations, Perspective Drawing, and the beginning of a longer Proportionality Unit that will be continued 5th six weeks. Check out the Pythagorean Theorem Unit! A couple of the activities may be a little different than the way you have taught the Pythagorean Theorem before, but I've used both with my own students and they are awesome!

**Algebra I:** In Unit 07 students will learn how to work with exponents and polynomials, leading them to a later understanding of solving quadratic equations. Unit 08 extends the knowledge and understanding of linear functions to quadratic functions. The focus of this unit is to provide investigations to analyze characteristics and graphs of quadratic functions, recognize situations represented by them, and mathematically communicate descriptions of parameter effects of "a" and "c" on the parent function,  $y = ax^2 + c$ .

**Algebra II:** Unit 8 is the study of exponential functions including their graphs, equations and inequalities, and logarithms. Unit 9 ties together all the types of functions learned in Algebra II through real-world situations and data collection.

**Geometry:** Take note—The lengths of the units are changed from the YAG. Since area and perimeter have been included throughout the year, these concepts will be applied to new situations, such as regular polygons, and composite figures. There is LOTS of Algebra included in this unit, including domain, range, and scatterplots.

**Math Models:** Exponential growth and decay, trigonometric functions and periodic motion, variation, art and architecture, and music are the focus this six weeks. Something for everyone!