

E-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!

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- * Reaching and Teaching All Students: Differentiating Instruction
- * Giving Meaningful Feedback
- * 5th Six Weeks Unit Previews

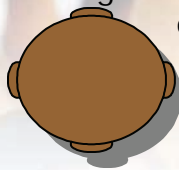
Questions?

Your local service center contacts are listed on the last page.

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ESC Region XIII Local
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Tips & Tools for Managing Cooperative Learning: Roundtable

Roundtable and Simultaneous Roundtable are valuable strategies to help students work cooperatively to contribute ideas. These strategies can be used in all content areas and grade levels to support students generating ideas



and showing comprehension of content. Whether the student activity is creative writing, problem solving, or drawing pictures to complete a cycle, students can benefit from working together.

Roundtable

Start with an idea, question, problem, or prompt on a single piece of paper. The process starts with one student in a small group. That student begins by contributing ideas on the paper. After a designated amount of time provided by the teacher, the student passes the paper to the next team

member in a clock-wise rotation. Students continue to pass the paper around the group. Each group member adds to the thoughts, answers, and drawings. After all members have contributed, a group or class discussion can be initiated using the ideas generated from the activity.

Simultaneous Roundtable

In simultaneous roundtable, more than one sheet of paper (no more than 4 sheets total) is passed within a small group. You can provide questions with related content that will help students generate ideas to help with comprehension and internalization of the concept being taught. Practice problems for math could be provided
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Reaching and Teaching All Students: Differentiating Instruction

How can I reach all of the students in my classroom? I have TEKS to cover, IEPS to follow, and TAKS to prepare for. I have to ensure the learning of my ELLs with the ELPS. What about the GT students? In this alphabet soup of acronyms, one word emerges as an answer in article after article, in book after book, and on the lips of leader after leader. The word is differentiation.

After hearing about differentiation over and over, how can we really be sure we know the meaning and the process? According to Webster's dictionary differentiation is "...to make unlike; to develop specialized differences in..." How can that help in the classroom? Carol Ann Tomlinson, author of many publications on differentiation, defines differentiation as adapting "instruction to respond to the diverse student needs found in inclusive, mixed-ability classrooms." She also says that differentiation is "...shaking up what goes on in the classroom so that the curriculum is a better fit for all." Differentiated instruction moves teachers away from "One Size Fits All" and encourages students to take more responsibility for their own learning. Differentiation is based on the premise that students learn in different ways. Students come to us with different levels of knowledge, so there is no real similar starting point. Differentiation helps teachers

tailor instruction to each student's level.

Brain research done in the past decade reveals much about how people learn and provides another reason for differentiating instruction. Research shows that learning happens when the brain seeks connections to what it already knows. The connections are different for each person because each person's experiences are different. Differentiation is an approach to teaching that works well with brain-based learning.

How can differentiation take place within a CSCOPE lesson? The answer is multifaceted. In order to manage a classroom in such a way that the needs of all students are being met, you must first evaluate the abilities, prior knowledge and interest level in the group. Consider what you know about your students as you review the recommendations in the CSCOPE Exemplar Lesson. How is it written to already differentiate instruction? What is in the lesson that already meets the needs of a variety of student learning styles, abilities, interests and prior knowledge? Differentiation can take place in the content being presented, the process by which students are expected to attain the information and/or the product students must complete to show acquisition of

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**TALA Stipends for 6th, 7th,
and 8th Grade Teachers!**



Middle School Teachers! TEXAS
TALA
ADOLESCENT
LITERACY
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Learn successful academic literacy routines
as part of an effective RtI model!

ELA Academy for ELA and Reading teachers \$500 for 3-day session + online follow-up	Content Area Academy for Math, Science, & Social Studies teachers \$250 for 1½-day session + online follow-up
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Summer 2009
Contact your regional education service center to register today!

Giving Meaningful Feedback

We all need helpful feedback if we are to learn successfully. In an attempt to provide helpful feedback, many of us have spent hours laboring over generating copious and voluminous feedback on every aspect of a student's work only to watch the student glance over and then ignore it. So how can teachers target feedback so students use and benefit from it? No matter what the context of feedback is, the timeliness, specificity, and usability of the feedback are critical.

Timely feedback is given when students are still thinking about the work and when they still have time to work on the learning target and make improvements. Giving the feedback days or even weeks after the performance is not timely, and therefore is not effective.

Specific feedback focuses on the positive features of the work. What did the student do correctly? What improvements did the student make over the last performance? Feedback about processes shows the student the connections between what they did and the results they got. (*When you added more detail, it made your thesis more clear. When you graphed the data and wrote a paragraph explaining it, the point was powerful.*) This will increase the likelihood that the student will be able to repeat

this process successfully in future assignments. If feedback lacks specificity, or it addresses every characteristic of student work from handwriting to conceptual understanding, the student will see it as useless and ignore it.



Usable feedback varies according to student need. What does the student need to do to improve progress toward learning goals? Some students benefit from a question that will lead to knowing what they need to do to improve their performance. Other students may need a specific suggestion about what to do next. Some students respond best to oral feedback; others to written. Teachers know what the best fit is for individual students. Usable feedback given in a way that students can hear encourages the student to think, and communicates that next steps are within the student's ability, control, and understanding. (Jackson, 2009)

Consider the impact of teacher feedback as shown by research. In his synthesis of research about formative assessment, William (2006) sum-

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Examples of Effective Feedback	Non-Examples
"Interesting thesis. Can you find more specific evidence to support it?"	"B-"
John is able to perform the basic algorithm for 2 column multiplication, but because he does not yet understand the reason for it he often makes avoidable errors."	"Approaching mastery"
"When you modeled the instructional strategy of _____, it started me thinking about how I can use that in my classroom. Can you make time for those kinds of things in all meetings?"	"That was a good faculty meeting."
"When I visited your classroom I noticed that students were engaged in group discussions around the concept of _____. Their discussions were higher level and utilized academic vocabulary. Do you plan to use other cooperative grouping strategies in future lessons?"	"Nice lesson."

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and circulated as a team activity. For a fun and interactive creative writing lesson, students could start with a sentence to create a story; each student passes his/her paper around to allow team members to contribute a sentence to continue the creative writing process. There are many creative and innovative ways you can use this strategy with students.

Planning with a Focus

As part of your team planning, start a discussion about how to use this cooperative learning strategy in your instruction. Start with the

Roundtable strategy. Once students feel comfortable with the Roundtable strategy, introduce Simultaneous Roundtable as applicable. After practicing with students, reflect on the effectiveness of the strategy. Revisit with your grade level team or department and discuss the implementation of the strategy in your instruction. This discussion is a valuable way to discuss the effectiveness of the strategy and ways to adapt the strategy to help support student learning.

Source <http://www.kaganonline.com/KaganClub/FreeArticles/TestScores.html>

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knowledge. Finally, use your knowledge of your students and your analysis of the Exemplar Lesson content, strategies and Performance Indicators to plan instruction for your students. Careful evaluation will uncover the truth that adaptations are possible while continuing to uphold the integrity of the Exemplar Lesson recommendations and the Performance Indicators.



Look for tips on how to differentiate in the next CSCOPE newsletter.

When applying it to real classroom strategies, it may be more effective to look at what differentiation is not. It is not simply offering a menu of different assignments for students to select from. Nor is it assessing some students harder on the same class assignment. "Awarding" additional problems or book reports to gifted students that finish early may be perceived as punitive instead of differentiated.

The idea of differentiating instruction to accommodate the different ways that students learn involves a hefty dose of common sense, as well as sturdy support in the theory and research of education. (Tomlinson & Allan, 2000) It encompasses that idea of making adjustments to meet the needs of all students. While many effective teachers adjust teaching based on the current needs of the class in real time, what could be called "reactive differentiation," true differentiation is an approach to teaching that requires active planning for student differences in classrooms. "Proactive differentiation" involves evaluation of the specific needs of your students in advance so you can plan for those differences while honoring your current teaching. This can be a strong and effective way to help students reach the potential that is really there.

Sources

[Merriam-Webster's Collegiate Dictionary, 11th Edition \(Red Kivar Binding with Jacket\). \(2003\).](#)

Tomlinson, Carol Ann. (October 1995). *Differentiating instruction for advanced learners in the mixed-ability middle school classroom*. ERIC EC Digest E536.

Tomlinson, Carol Ann. (2001) *How to differentiate instruction in mixed-ability classrooms*, 2nd Edition. Alexandria, VA: ASCD.

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marizes research (Butler, 1987) that showed that student performance improved substantially when descriptive feedback alone was given. Students are less likely to pay attention to descriptive feedback if it is accompanied by a grade *or an evaluative comment*. Furthermore, students who were given grades and praise showed no more progress than those given no feedback at all throughout their learning on the topic.

Wiggins (2008) summarizes the importance of feedback in the following way “. . . unless we build a strong feedback loop into our teaching and learning—providing for individual, targeted, specific feedback to each student, followed by opportunities to use it—then we will lose all except those students who would learn even without our help.”

Sources

Jackson, Robyn R. (2009). *Never work harder than your students and other principles of great teaching*. Alexandria, VA: ASCD.

Popham, W. James (2008). *Transformative assessment*. Alexandria, VA: ASCD.

Shute, Valerie (2007). *Focus on formative feedback*. ETS.

Wiggins, Grant (2008, January 22). *Feedback: how learning occurs*. Retrieved February 4, 2009, from Big Ideas: An Authentic Education e-Journal Web site: <http://www.authenticeducation.org>.

William, Dylan (2006). *Keeping learning on track: formative assessment and the regulation of learning*. ETS.



**CSCOPE State Conference for Teachers
San Antonio, Texas
June 23 and 24, 2009**



For more details, go to

<http://www5.esc13.net/cscopec/cscopeconference/index.html>

Quick Tip

It's Easy to Submit Unit Feedback!

To submit feedback for a specific unit, you must be working in the unit first.

1. Open a unit.
2. Click *View/Edit Unit*. (This is the first tab on the right side of the screen.)
3. Click *Collaborative Feedback*. (This is the third tab from the left.) You will be able to see all the feedback from your district.
4. Click *Submit Feedback* on the far right side of the screen.
5. Enter feedback or comments. Be very specific, using unit number, lesson number, page number and problem numbers.
6. Choose the category of feedback. You may enter different kinds of feedback:
 - Grammatical/Punctuation/Format Errors
 - Developer Issues/Bad Web Links/Attachment Issues/Other Tech Issues
 - Content-related suggestions or recommendations
 - Assessment Issues
7. Click the *Submit* button.

Once you submit feedback, the response to that feedback will be placed on your home page under the *Feedback* tab. Click the unit title to view the feedback and the response.



5th Six Weeks Lesson Preview



Mathematics

Kindergarten

Unit 14, Counting Through 20, introduces quantities 16-20 through exploration. Students will begin to move toward subitizing small groups using five as a base. Lesson 2 continues to teach addition and subtraction situations by emphasizing the action that is taking place, important content, what the question is asking, etc., as opposed to the practice of doing a problem. The unit continues to reinforce numeral writing, counting collections, fractions and geometry.

In **Unit 15 Patterns**, students use higher order thinking to see relationships, find connections, and make predictions about mathematical situations in their everyday environment. Lessons provide a strong language component to enable students to describe similarities and differences among patterns using words as well as write symbols. This unit reinforces counting collections and recording sets to 20, fractions and geometry.

In **Unit 16 Geometry: Attributes of Three-Dimensional Figures**, students use words to describe the position and attributes of real-life objects and three-dimensional geometric figures.

Students use the attributes to distinguish one figure from another. They describe the figures using informal geometric vocabulary. Positional language is developed through questioning that allows students to focus on the relation of one object or geometric figure to another. The unit reinforces numeral writing, counting and recording sets to 20, and patterns.

Grade 1

In **Unit 19 Operations and Data**, students reinforce their understanding of place value by continuing to create, describe, and order numbers to 99. The instructional rigor will increase through carefully scaffolded questions. The second part of this unit involves activities that develop graphing as a problem-solving tool and allow students to see how the same data can be represented in multiple ways.

In **Unit 20: Operations 2**, students continue to develop problem-solving strategies and reasoning methods to discover connections between the operations. Students share their thinking and demonstrate it with models, words, and symbols.

Unit 21: Relationships explores parts-of-a-whole, additive patterns, and coins through the lens of relationships. Students learn to look for order in situations, make conjectures, predict beyond the information at hand, and make generalizations. This unit will also provide an informal understanding of probability and introduce formal language. Each of these relationships will develop a foundation for 2nd grade content.

2nd Grade

Unit 09: Geometry introduces formal geometric language and two new attributes—length of opposite sides as equal or not equal, and square corners. Grade 3 will continue this development by classifying figures according to their attributes, which builds on the geometric relationships that will continue to be investigated throughout their study of mathematics.

In **Unit 10: Measurement** students use concrete models that approximate standard



5th Six Weeks Lesson Preview



Mathematics

units of length and use non-standard units to measure area, weight, and capacity. One objective of this unit is for students to identify the attributes that can be measured and the units of measure needed. Use of non-standard units of measure allows students to focus directly on the attribute being measured, rather than on the tool being used.

3rd Grade

Unit 10: Probability and Data Analysis includes collecting, organizing, recording, and displaying data in pictographs and bar graphs. The emphasis of this unit is analysis and interpretation of data, with a focus on the necessary components needed for each type of graph. Probability has a close connection to data collection and analysis. Through experimental activities, students will collect data, make generalizations, and describe events as “more likely than,” “less likely than,” and “equally as likely.” Operations are the primary focal points for 3rd grade. Therefore **Unit 11: All Operations** draws on the skills learned in prior units to enhance students’ problem-solving strategies. Because determining which operation(s) to use when given a word problem is extremely difficult for many students, this unit focuses on interpreting word problems and identifying the process needed to solve them.

Grade 4

Unit 09: Geometric Figures encompasses the geometric concepts necessary to understand parallel and perpendicular lines, angles, and the attributes of two- and three-dimensional figures. Students sort, build, draw, model, measure and construct to increase their capacity to visualize and understand geometric relationships.

In **Unit 10: Transformations**, students investigate the idea that geometric figures can be transformed in many ways, and describe and analyze their transformations mathematically.

This is students’ introduction to the formal vocabulary of transformations.

Unit 11: Probability addresses all possible combinations of a given set of data. Students organize data into lists, tables and diagrams and use the Fundamental Counting Principle to find the number of possible combinations. The Fundamental Counting Principle is used to review basic multiplication facts.

Grade 5

Unit 10: Geometry encompasses the identification of the attributes of two- and three-dimensional figures. Students investigate the idea that geometric figures can be transformed in many ways and that they can be described and analyzed mathematically.

In **Unit 11: Statistics** students collect, display, and analyze data and study measures of central tendency. They locate and name ordered pairs to create and understand line graphs. Please note that, in Grade 5, students study median, mode, and range only. Mean is introduced in Grade 6 with concrete objects only and is not calculated until Grade 7.

In **Unit 12: Data Collection and Analysis**, students create appropriate data displays using classroom-generated data. They use measures of central tendency describe the characteristics of their collected data.



5th Six Weeks Lesson Preview



Mathematics

Grade 6

Unit 11: Time and Temperature addresses integers, temperature, and time through measurement to represent relative changes or values. Grade 6 is the first grade to introduce integers and does not include operations. Integers are introduced with intuitive real-world encounters including “number line”-type situations such as a thermometer, yards gained or lost, etc. to describe relative changes or values. Grade 6 only studies first quadrant coordinate grids; therefore, graphing integers on the coordinate grid is not included.

In **Unit 12: Data Representation 2** students investigate and analyze different data representations, such as location of points on a coordinate plane (quadrant I only), various graphs (line plot, line graph, bar graph, stem and leaf), and measures of central tendencies (mean [concretely and/or pictorially], median, and mode) and range of data. This investigation continues to develop the understanding that data can be represented and described and that changing the data set affects the description of the set.

Unit 13: Proportional Relationships 2 addresses multiple representations such as tables, graphs, verbal descriptions, equations, symbols, and visual models for proportional and non-proportional relationships and arithmetic sequences. It underscores that proportionality is the “big idea” in middle school mathematics. This unit will establish three main characteristics of proportional relationships.

Grade 7

In **Unit 12: Probability** students construct sample spaces for simple and composite experiment and find the probability of independent events. They use probability and proportions to make predictions.

Unit 13: Measure and Representation of Data addresses data representation and analysis, and measures of central tendency. Students study line graphs, line plots, stem-and-leaf plots, circle graphs, and bar graphs. Venn diagrams are introduced and students create circle graphs rather than just sketching them. New to Grade 7 is the requirement to make inferences and convincing arguments based on represented data.

Grade 8

Unit 13: Measurement—Surface Area and Volume addresses surface area, volume, and dimensional change. This unit focuses on the connection of formulas to models for surface area and volume, and the effects of proportional dimensional change on three-dimensional figures. Students examine patterns to discover how changing dimensions proportionally affects perimeter, area, surface area and volume. In high school Geometry, students will also study changing dimensions, both proportional and non-proportional.

In **Unit 14: Making Connections**, students revisit many 8th grade concepts through a real-world problem situation. Students use operations with rational numbers, percents, two- and three-dimensional figures along with nets of these figures, scale models using similarity, measurement involving area, surface area and volume, proportional dimensional changes and their effects, and justification of solution process.



5th Six Weeks Lesson Preview



Mathematics

Algebra 1

Unit 08: Quadratic Equations and Applications involves solving and applying quadratic equations using tables, graphs, and factoring. Students explore the relationships between x-intercepts and zeros of the function, and between roots and solutions of the quadratic equation. Students then apply quadratic equations in problem situations.

Unit 09: Tying It All Together—Overview includes all Algebra I TEKS tested on the state assessment. In this unit, students analyze a variety of real-world situations and determine which function best fits the problem situation. They analyze the data using tables, graphs, verbal descriptions and algebraic generalizations. Then they use the representations to make predictions, critical judgments, and justifications. These data collection and analysis skills will continue to be applied throughout continuing mathematics courses as additional functions are introduced.

Geometry

In **Unit 15: Three-Dimensional Solids** students investigate the properties of three-dimensional solids including prisms, pyramids, cylinders, cones, and spheres. They use concrete models of solids, cube stacks, and isometric and orthographic views to explore three-dimensional figures. Students use algebra to describe the relationships between a figure's edges, faces, and vertices. Finally they describe the intersection of a plane with various polyhedra.

Unit 16: Surface Area and Volume addresses surface area and volume of three-dimensional solids and the effects of dimensional change. In this unit, students investigate surface area using nets. Concrete models are used to facilitate the understanding of surface area and volume formulas. Changes in surface area and volume are connected to changes in one or more dimensions of the figure.

Math Models

Unit 08: Tying It All Together connects the six fundamental strands of mathematics: number relationships, algebraic relationships, geometry and spatial reasoning, measurement, probability and statistics, and mathematical processes. In this unit, connections are made between those concepts and student expectations from prior courses that are targeted on the state assessment. Hands-on activities and practice problems are used to strengthen student knowledge and confidence in their conceptual understanding of the content.

Algebra 2

In **Unit 10: Logarithmic Functions, Equations, and Inequalities**, students investigate and explore the characteristics and applications of logarithmic functions, equations, and inequalities.

The logarithmic parent function is introduced and effects of parameter changes on the graph of the parent function are explored. Exponential and logarithmic functions are defined as inverses and their characteristics are compared. Logarithms are used to



5th Six Weeks Lesson Preview



Mathematics

solve exponential equations using tables, graphs, and algebraic methods. Logarithmic inequalities are solved only by tables and graphs. Students make predictions and critical judgments in logarithmic problem situations.

Unit 11: Combined Parent Functions combines all the functions studied in Algebra 2—linear, quadratic, exponential, logarithmic, rational, radical, and absolute value. In Unit 11, students make choices about which functions to use to solve particular problem situations. They collect and analyze data to decide which type of function best models specific types of data in order to make predictions.

In **Unit 12: Combined Systems—Linear and Non-linear**, students solve systems of equations and inequalities of different types of functions using tables, graphs and algebraic methods. As a result, systems can now have more than one solution or, graphically, more than one point of intersection.

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