

Training for the New Georgia Performance Standards

Day 5: Differentiation

**Content Facilitator's Guide
Science Grades 3-5**

We will lead the nation in improving student achievement.

Acknowledgements

This training program was developed by the Georgia Department of Education as part of a series of professional development opportunities to help teachers increase student achievement through the use of the Georgia Performance Standards.

Use of This Guide

The Content Facilitator's Guide includes the PowerPoint Presentation, and supplementary materials. It is available in print copy and CD to designated trainers throughout the state of Georgia who have successfully completed a Train-the-Trainer course offered through the Georgia Department of Education.

Materials (guides, presentations, etc.) will be available also electronically on <http://www.georgiastandards.org> under the training tab after all trainings of Day 5 have occurred. Consult the trainer for availability.

Table of Contents

Acknowledgements	2
Use of This Guide	2
Table of Contents	3
Overview	5
Goals.....	5
Module Sequence	5
Module Materials for Day 5 of Training	6
Recommended Readings/Viewings/Websites: Differentiation	7
Specialists' Contact Information	9
Agenda	10
Introduction to Differentiation	11
Differentiation	12
Defining Differentiation, an Introduction	15
The Three Stages of Standards-Based Education, A Review	19
The Young Boy and His Violin.....	21
Looking Inside Our Classrooms	24
Some Underlying Assumptions of Differentiated Instruction	25
The What, How, and Why of Differentiation	28
Overview of What, How, and Why of Differentiation	29
What Does Differentiation Look Like	32
What Does Differentiation Look Like: A True/False Quiz.....	33
Range of Activities in a Differentiated Classroom	38
Pre-Assessment Strategies	39
What to Differentiate	41
Teacher checklist for Group Work.....	46
Strategies for Managing a Differentiated Classroom	48
The Equalizer	52
Guided Practice: Analyzing a Differentiated Task	53
Differentiation	55
The Role of the Teacher in a Differentiated Classroom	57
Rethinking Our Roles	58
A Traditional Classroom Compared with a Differentiated One	59
Setting Personal Goals for Differentiating	65
Low-Prep and High Prep Differentiation	66
Action Plan.....	67

Glossary	70
Appendix	72
Some Underlying Assumptions of Differentiated Instruction	73
What Does Differentiation Look Like: A True/False Quiz.....	74
Examining Differentiating Tasks	75
Instructional Accommodations for ELLs.....	76
Georgia Department of Education, GPS Differentiation Menu.....	78
Student-Created Products	83
Teacher As . . . Graphics.....	85
Day 6 Assignment	86
Permission Forms for Student Work.....	87
<u>CONSENT AND ASSIGNMENT</u>	87
<u>CONSENT AND ASSIGNMENT</u>	88
Sternburg's Triachic Theory of Intelligence.....	89
Anchor Activities.....	91
Cubing.....	92
Interest Based Activity.....	93
Learning Centers	94
Learning Contracts	95
Menu Planner.....	96
RAFT	97
Think Dots	100
Think Tac Toe	103
Tiered Assignments	107
Bingo!.....	109
Blind Sequencing.....	110
Walking Into and Through a Picture	111
Product Ideas for Reviewing and Reporting.....	112

Overview



Goals

By the end of Day 5 of training, participants will be able to:

1. Define differentiation and explain the importance of differentiation in the standards-based education process.
2. Explain key elements in planning for differentiation.
3. Describe and develop procedures for differentiating instruction in a flexible classroom.
4. Describe and develop effective classroom management strategies in a differentiated classroom.
5. Describe the roles of the teacher in a differentiated classroom.
6. Set individual goals for differentiating instruction in each classroom.

Module Sequence

Prior Preparation—Participants will have attended Days 1 through 4 of GPS training; or, if replacing another trainer, be thoroughly trained in the knowledge, skills, and conceptual understandings introduced in Days 1 through 4.

A good article to read is Carol Ann Tomlinson's "Mapping a Route Toward Differentiated Instruction." *Educational Leadership* 57.1 (Sept. 1999): 12-16. http://pdonline.ascd.org/pd_online/diffinstr/el199909_tomlinson.html.

Introduction to Differentiation (1½ hours)

- Defining Differentiation, An Introduction
- The Three Stages of Standards-Based Education, A Review
- Looking Inside Our Classrooms

The What, How, and Why of Differentiation (3½ hours)

- Overview of What, How, and Why of Differentiation
- Guided Practice Analyzing a Differentiated Task
- True/False Quiz: What Does Differentiation Look Like?

The Teacher's Role in a Differentiated Classroom (1 hour)

- Rethinking Our Roles
- Setting Personal Goals for Differentiating

**Module
Materials for
Day 5 of
Training****Content Facilitator's Kit contents:**

- Content Facilitator's Guide (one for each leader)
- Complete set of slide transparencies (PowerPoint)
- Participant's Guide (one per participant and one per leader)

Other materials needed:

- Name tags
- Flipchart paper and stand
- A number of colored markers for flipchart
- Sticky notes
- Masking tape to post chart paper

Equipment:

- Overhead projector or computer and LCD projector

Recommended Readings/Viewings/Websites: Differentiation

Note: A more general list of resources for the standards-based education process is contained in the materials for Day 1 of training.

At Work in the Differentiated Classroom. Alexandria, VA: ASCD, 2001.

This excellent resource includes three VHS tapes and a Facilitator's Guide. The videos provide clips of real differentiated classrooms and include commentary by Carol Ann Tomlinson. One set of these materials is being sent to each local system.

Berger, Sandra L. "Differentiating Curriculum for Gifted Students." 1991. Information Center on Disabilities and Gifted Children. Council on Exceptional Children, 1996.

<http://ericec.org/digests/e510.html>.

Berger provides an overview of four areas of differentiation: content, process, product, and learning environment. In addition, she lists seven guiding principles for curriculum differentiation developed by the curriculum committee of the Leadership Training Institute.

Hall, Tracey, Nicole Strangman, and Anne Meyer. "Differentiated Instruction and Implications for UDL Implementation: Effective Classroom Practices Report." *Ideas that Work*. National Center on Accessing the General Curriculum. U.S. Office of Special Education Programs. CAST, Inc. 1999-2005.

http://www.cast.org/publications/ncac/ncac_diffinstructudl.html.

This report examines information on the theory and research behind differentiated instruction and the intersection with Universal Design for Learning (UDL), a curriculum designed approach to increase flexibility in teaching and decrease the barriers that frequently limit student access to materials and learning in classrooms. The report includes a number of links to sites with more information about differentiated instruction.

"Interact Graphic Organizers." *Write Design Online*. zNet. <http://www.writedesignonline.com/organizers/interact.html#interaction>.

Using varying types/levels of graphic organizers provides one means of differentiating content or process. This website includes a number of different types of graphic organizers along with explanations and suggestions for their use. Links to other resources may also be valuable.

"The I-Search Curriculum Unit." *Literacy Matters*. Education Development Center, Inc., 2003-04.

<http://www.literacymatters.org/content/isearch/intro.htm>.

- Individual and group investigations, valuable strategies for differentiation, may be organized as I-Searches. An I-Search can actively engage students in the research process as they pursue questions of importance that they care about. This site explains one version of the I-Search process.
- Laturnau, Joseph. "Standards-Based Instruction for English Language Learners." Honolulu: Pacific Resources for Education and Learning. http://www.prel.org/products/pc_/standards-based.htm.
This article examines the potential benefits of standards-based instruction for English Language Learners (ELLs), presents a standards-based process for designing standards-based instructional units, and reviews the design of two standards-based units for ELLs. The benefits of performance standards for ELLs are clearly represented in a chart included in the article.
- Renzulli Learning Systems: Free Trial. 2005. <http://students.renzullilearning.com/>.
This site, developed by Renzulli Learning Systems, provides comprehensive enrichment and differentiation activities for students. Beginning by determining an individual student's profile—interests, abilities, preferred style of expression, and learning style—this site then matches individual students with a number of enrichment and differentiation opportunities. Although the resource is still in the development stage, this URL offers teachers a free trial opportunity to navigate the site.
- Rose, David H., and Anne Meyer. *Teaching Every Student in the Digital Age: Universal Design for Learning*. Alexandria: ASCD, 2002
This introduces a framework for utilizing technology to address the needs of all students and meet the challenges posed by high standards and increased student diversity.
- Teaching Styles Inventory*. Texas Collaborative for Teaching Excellence. CORD, 2005. <http://www.texascollaborative.org/tools/TSI.pdf>.
Use this twelve item teaching style inventory to self-assess and self-score your teaching style in the areas of concept representation, learning, interaction, and cognitive processing.
- Tomlinson, Carol Ann. *How to Differentiate in Mixed-Ability Classrooms*. 2nd ed. Alexandria, ASCD, 2001.
This valuable resource explains both the theory behind and the means to achieve differentiation in mixed-ability classrooms. Each school received one copy of this resource along with other materials in the fall of 2004.
- , "Mapping a Route Toward Differentiated Instruction." *Educational Leadership* 57.1 (Sept. 1999): 12-16. http://pdonline.ascd.org/pd_online/diffinstr/el199909_tomlinson.html.
Tomlinson provides a view into three separate classrooms to illustrate what a differentiated classroom does and does not look like.

-----. *The Differentiated Classroom: Responding to the Needs of All Learners*. Alexandria, ASCD, 1999.

In this book, Tomlinson discusses the what, how, and why of differentiation, and provides examples from a number of differentiated classrooms.

Tomlinson, Carol Ann, and Caroline Cunningham Eidson. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades K-5*. Alexandria, VA: ASCD, 2003.

This resource provides a brief primer on differentiation, as well as six differentiated units of instruction for grades K-5: two language arts units, two mathematics units, one science unit, and one social studies unit.

-----. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 5-9*. Alexandria, VA: ASCD, 2003.

This resource provides a brief primer on differentiation, as well as six differentiated units of instruction for grades 5-9: one language arts unit, one mathematics unit, one science unit, two social studies units, and one French unit.

-----. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 9-12*. Alexandria, VA: ASCD, 2005.

This resource is scheduled to be published in August of 2005.

Specialists' Contact Information

For a list of district coordinators visit the Georgia Learning Connection:

English Language Learners

<http://www.glc.k12.ga.us/contact/contact.asp?groupname=ESOL+District+Coordinators>

Gifted and Talented

<http://www.glc.k12.ga.us/contact/contact.asp?groupname=Gifted+Education>

For specialists at the Georgia Department of Education:

English Language Learners -- Evelyn Barker

wbarker@doe.k12.ga.us

Gifted and Talented – Linda Andrews

liandrew@doe.k12.ga.us

Exceptional Students (Special Education)—Marlene Bryar

mbryar@doe.k12.ga.us

Agenda

This is a one-day course, with approximately 6 hours of instructional time.

Introduction to Differentiation 1½ hours

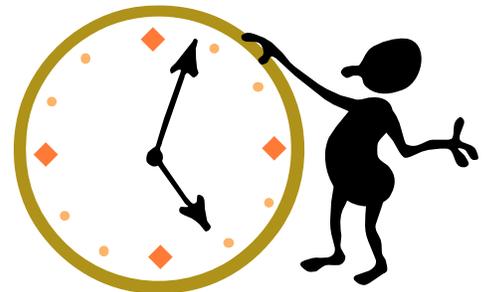
- Defining Differentiation, An Introduction
- The Three Stages of Standards-Based Education, A Review
- Looking Inside Our Classrooms

The What, How, and Why of Differentiation4 hours

- Overview of What, How, and Why of Differentiation
- True/False Quiz: What Does Differentiation Look Like?
- Guided Practice Analyzing a Differentiated Task
- Strategies for Differentiation

The Teacher's Role in a Differentiated Classroom..... 1/2 hour

- Rethinking Our Roles
- Setting Personal Goals for Differentiating

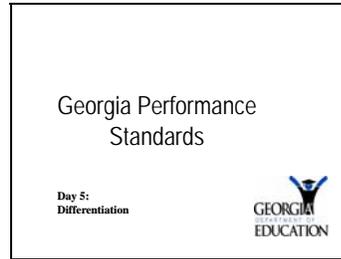


Introduction to Differentiation

Time	1 1/2 hours
Overview	In the introduction, the participants share their preconceptions about differentiation and relate these preconceptions to Carol Ann Tomlinson's statements about differentiation. Then, the group reviews Days 1-4 of the Standards-Based Education Process and examines the importance of differentiation in this process.
Objectives	<ul style="list-style-type: none">➤ Define differentiation and explain the importance of differentiation in the standards-based education process.➤ Explain key elements in planning for differentiation.
Activities	<ul style="list-style-type: none">➤ Share Preconceptions About Differentiation➤ Review Stages One, Two, and Three of SBE Process➤ Self-Evaluate
Materials	<ul style="list-style-type: none">➤ Overhead projector or computer and LCD projector➤ Transparencies or PowerPoint presentation

Differentiation

Title Slide Show title slide and welcome participants to training.



- Note Cards
- As participants come into the training session, have them fill out an index card with their name and contact information. Explain that you will use the information to send them materials and set up a dialogue with the group.
 - Have them note their status in understanding of Georgia Performance Standards: They attended last year's training in **science**, they attended redelivery of **science**, and they have heard about the standards they attended training or redelivery of another subject, or they have no previous experience with GPS.

You may wish to share your contact information with them at this time.

Welcome!	
•	Please fill out an index card with your name and contact information.
•	Name
•	Grade level or system assignment
•	Previous GPS science training
–	State level attendance
–	System level attendance
–	Attended training in a different subject
–	New to the training of GPS
•	Email address

House-keeping

- Show slide, Group Norms and Housekeeping.

Group Norms and Housekeeping

<p>Group Norms:</p> <ul style="list-style-type: none"> • Participate and share • Ask questions • Work toward solutions • Honor confidentiality • Meet commitments or let others know if you are struggling to do so 	<p>Housekeeping:</p> <ul style="list-style-type: none"> • Phone calls • Rest rooms • Breaks • Lunch (on your own)
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- Have participants who are local give ideas for lunch locations.

Overview

- Reflections
- Introduction to Differentiation
- The What, How, and Why of Differentiation
- The Teacher's Role in a Differentiated Classroom

- Ask: **What questions can I answer about today's agenda before we continue?**

Slide:
*Essential
Question 1*

1. Show slide, Essential Question 1.

Essential Question #1

What does differentiation imply and how does differentiation fit into the standards-based education process?



2. Read the quotes on the slide. Have groups choose one to discuss. Share thoughts and set focus for the day.

Choose one to discuss.

- "The biggest mistake of past centuries in teaching has been to treat all children as if they were variants of the same individual and thus to feel justified in teaching them all the same subjects in the same way." Howard Gardner
- "Differentiation doesn't suggest that a teacher can be all things to all individuals all the time. It does, however, mandate that a teacher create a REASONABLE RANGE OF APPROACHES to learning much of the time so that most students find learning a fit much of the time." Marcia Imbeau

3. Ask:

What misconceptions and obstacles keep us from differentiating for all students?

How can we minimize the barriers?

What do we need to accomplish to have a better classroom environment for all students?

Who needs the differentiation? What does our classroom look like?

Transition **Let's look at diverse learners.**

Defining Differentiation, an Introduction

Chart
paper
Markers

4. Present:
- **In order to meet the needs of diverse learners in our classrooms, we must differentiate instruction to meet those needs. Let's take a minute to list some of the characteristics of diverse learners we have in our classrooms.**
 - Have participants make charts listing diverse learners and their characteristics.
 - Expect or work to elicit responses such as:
 - advanced or gifted learners
 - struggling learners
 - English language learners
 - students with disabilities
 - students with varying degrees of experiences and/or prior knowledge
 - students with personal or family problems that inhibit their ability to learn
 - students with varying interests and/or attention spans.

Sticky
note ideas

5. Present:
- **As we can see from this list, the needs of the diverse learners we encounter in our classrooms each year can't be addressed with a "one size fits all" approach to teaching and learning.**
 - **In today's workshop, we will be focusing on differentiation of instruction in order to address the needs of all students. But just what do we mean when we use the term *differentiation*? Let's take a few minutes to identify our preconceived notions of differentiation.**
 - **In your table groups, brainstorm your ideas about differentiation then discuss your brainstormed lists.**
 - **Put ideas on sticky notes and post them on the chart next to the diverse learner it would impact.**

Allow 7-10 minutes for the table groups to discuss, and then ask each group to share their ideas.

Present:

- **In the past few minutes we have touched on a number of ideas about diverse learners and differentiated instruction, and we will spend the remainder of today exploring many of these ideas. However, a thorough and comprehensive study of differentiation is beyond the scope of our workshop today.**

- **ASCD has prepared a series of materials on differentiation that will complement and enhance the information from today's training. This series, *At Work in the Differentiated Classroom*, Alexandria, VA: ASCD, 2001, includes three VHS tapes and a Facilitator's Guide. The videos provide clips of real differentiated classrooms and include commentary by Carol Ann Tomlinson.**

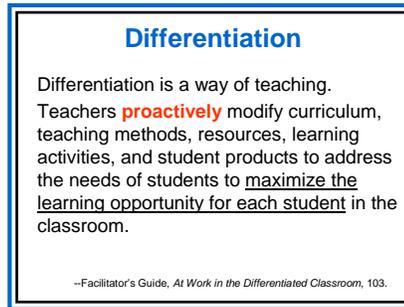
- **The facilitator's guide of this set of materials suggests formats for utilizing the videos and other materials. One set of these materials was provided to each local school system and each RESA.**

- **In addition, each system received one copy of *Differentiation in Practice, Grades K-5* and one copy of *Differentiation in Practice, Grades 5-9*.**

- **I strongly recommend that you use these resources to further your conceptual understanding of differentiation.**

- **Let's take a look now at some of the experts' statements about differentiation.**

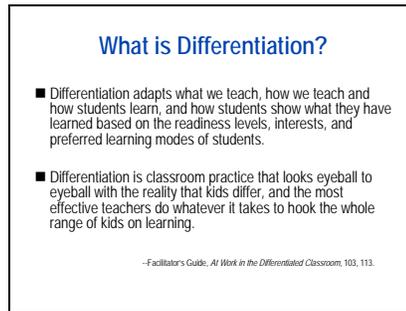
- Slide: ➤ Show slide, *What is Differentiation?*
Differentiation



- Let's examine the key elements here: **"Differentiation can be defined as a way of teaching in which teachers proactively modify curriculum, teaching methods, resources, learning activities, and student products to address the needs of individual students and/or small groups of students to maximize the learning opportunity for each student in the classroom."**
- **What does it mean when we say differentiation is "a way of teaching?"**
- Allow participants to respond. Summarize responses and conclude: **Differentiation is not merely a single strategy or bag of tricks we can pull from. Differentiation is more a philosophy that requires us to rethink teaching and learning in order to understand not only what to do but also why it matters . . . to rethink not only our instructional decision-making but also the learning environment and what our classrooms look and feel like . . . to rethink everything we do in light of the potential for the academic growth of all students.**
- **In a differentiated classroom we modify curriculum, teaching methods, resources, learning activities, and student products PROACTIVELY.**
- **We make the conscious decision to offer multiple ways of learning and multiple means of providing evidence of learning that are based on our assessments of the needs of those students or groups of students in our classrooms, assessments that are continuous and ongoing.**

Slide: *What is Differentiation?*

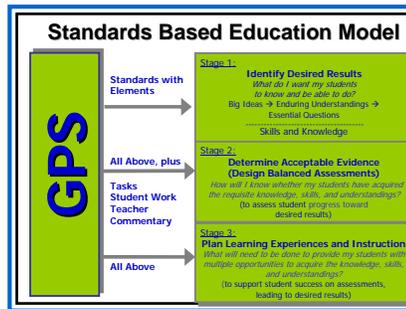
➤ Show next slide, *What is Differentiation?*



- **Assessment is the bedrock of a differentiated classroom. In order to meet the needs of individual students or groups of students, we must be cognizant of our students' prior knowledge and experiences, as well as of their readiness to learn those skills and concepts included in different units of instruction.**
- **Because individual students have a variety of strengths and weaknesses, assessing readiness is continuous and ongoing. A student, for example, may read fluently and comprehend sophisticated texts but, at the same time, have difficulty communicating his/her ideas in writing.**
- **We must also explore and address the individual interests of our students. As Wiggins and McTighe emphasize, engaging students is an essential step toward student learning; and tapping into the interests of our students is one way to hook them.**
- **Finally, as we have discussed in our previous days of training, students learn and provide evidence of learning via different modalities. Knowing the learning styles and preferences of our students allows us to provide instruction and assessment opportunities that work best for those students.**
- **Transition: I've just referred to what we've discussed on previous training days, but we may not all be at the same readiness level in terms of our prior knowledge and experience with the SBE process, so let's review that process before we move on.**

The Three Stages of Standards-Based Education Review

Slide: *The SBE Model* 1. Show slide, The Standards-Based Education Model.
 [Trainer's Note: Click to show each stage of the model.]



- **How does all of this fit into the Standards-Based Education process? To answer this question, we need to review the stages of the standards-based education process.**
- [Trainer's Note: Name each of the three stages and click to show that information on the slide.]
- **To review the stages of the SBE process, we're going to form peer groups based on prior knowledge and experience.**
 - I know some of you have been to all of the GPS training, Days 1 through today, Day 5;**
 - some of you have been to every session EXCEPT Day 1;**
 - some missed both Day 1 and Day 2;**
 - some attended for the first time for Days 3 and 4;**
 - and some of you may be new today.**
- **If today is your first day, raise your hand.** [Note any new participants and assign them to separate groups. The number of groups will depend on the total number of participants, but you will need to have a minimum of 3 groups. The goal is to create a number of groups equal in prior knowledge and experience.]
- **Now, raise your hand if you have been to all of the Days of GPS training.** [Divide these participants among the different groups.]

Page 21— Story about violin Assign the remainder of the participants to a group according to the days of training they have attended. The goal is to create a number of groups equal in prior knowledge and experience.

Chart paper

Markers

2. Present:

- Relate the story of the young boy and the violin. It is on the next page in this guide. Use this story to give participants a perspective of how teaching the Georgia Performance Standards will evolve.
- After reading the story, say: **The K-12 Science GPS has received honor roll status, most improved in the nation by the Fordham Report. It is a guaranteed and viable curriculum.**
- **Some of the teachers in your district may have questioned the value of the GPS training process. Just as the young man in the story realized the value of his violin, some educators now realize how valuable the implementation of Georgia Performance Standards is in regards to student achievement. Hopefully, as the year progresses much of our anxiety and apprehension about the implementation process will be eased.**
- **In your groups, I'd like for you to review briefly the different stages of the SBE process.** [Assign each group a different stage. If you have more than 3 groups, have multiple groups assigned to a single stage.]
- **You will have 10 minutes to review the essential information relevant to your assigned stage of the SBE process and to represent that information on chart paper. In 10 minutes, I'm going to ask you to share this essential information with the rest of the group.** [Designate wall space where charts can be posted in order: Stage One, Stage Two, and Stage Three.]
- Allow 10 minutes for group work. Provide 5 and 1 minute warnings. Encourage participants to post work as they finish.

The Young Boy and His Violin

There was once a young boy who was participating in an auction. He was interested in auctioning off his new attractive, well-crafted violin which he had just acquired. As the young boy began to interact with the hundreds of people that had gathered around the stage where he was standing, the inexperienced boy, not aware of the value of this priceless object began to shout to the crowd, "\$1! \$2! \$3 for this violin!"

As the boy shouted to the large assembly, an elderly man standing in the rear of the crowd observed what was happening. The old man slowly began to make his way to the stage where the boy continued to bargain with certain individuals in the crowd.

The elderly man took the violin from the boy and carefully placed the instrument under his chin. He began to play the violin with such a unique style, such superior skill, and an unequalled mastery, that he left the crowd spellbound and astonished by his remarkable talent.

As the old man handed the boy back the violin, the young boy looked at the instrument as if it was the most precious thing he had ever received. The boy raised the violin high as he could in the air and started to shout to the crowd, "\$1000! \$2000! \$3000, for this violin!"

From this experience the young boy realized the value of his violin.

Some of the teachers in your district may have questioned the value of the GPS training process. Just as the young man in the story realized the value of his violin, some educators now realize how valuable the implementation of Georgia Performance Standards is in regards to student achievement. Hopefully, as the year progresses much of our anxiety and apprehension about the implementation process will be eased.

3. Ask group(s) that focused on Stage One to share their work then summarize and ask: **What connections do you see to differentiation at this stage of the process?**
 - Allow for responses, then say: **In their resource guides entitled, *Differentiation in Practice*, Carol Ann Tomlinson and Caroline Cunningham Eidson state, “There is no such thing as effective differentiation devoid of high-quality curriculum The teacher’s first job is always to ensure that curriculum is coherent, important, inviting, and thoughtful. Then and only then does it make sense to differentiate that curriculum.” The Georgia Performance Standards provide a high-quality curriculum for all learners.**

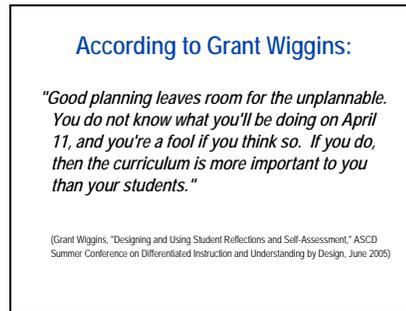
4. Ask group(s) that focused on Stage Two to share their work then summarize and ask: **What connections do you see between assessment and differentiation?**
 - Allow for responses, then say: **Tomlinson and Eidson stress the connections between assessment and differentiation. They note that “everything a student says and does is a potential source of assessment.” Assessment is ongoing. First we must pre-assess to determine a student’s “knowledge, understanding, and skill set related to an upcoming unit or lesson” because it’s “critical for the teacher in a differentiated classroom to have a sense of student starting points.”**

 - **Tomlinson and Eidson specify that assessment must also occur throughout the unit to continuously figure out a student’s knowledge, understanding, and skill set as s/he progresses through the unit; and final assessments should involve more than one format, for example, a product as well as a test or essay.**

5. Ask group(s) that focused on Stage Three to share their work, then summarize and ask: **Does differentiation also play a part in Stage Three: Making Instructional Decisions? How?**

6. Allow for responses, then say: **As we saw from Rick Stiggins’ work, assessment *for* learning means using assessment to make instructional decisions. We plan instruction based on what we find out each day about our students’ progress toward the learning goals.**

Slide: 6. Show slide, *Grant Wiggins' quotation*.
Grant Wiggins' quotation



7. Present:

- **At the ASCD conference on differentiation held in New York in June of 2005, Grant Wiggins stated that *"Good planning leaves room for the unplannable. You do not know what you'll be doing on April 11, and you're a fool if you think so. If you do, then the curriculum is more important to you than your students."***
- **Wiggins may be exaggerating. He certainly advocates using the SBE model to plan instruction at the course and unit levels, so he's not saying we shouldn't plan. However, the message here is clear: in a differentiated classroom, teachers intervene and adjust instruction to meet the needs of the learners in that classroom; and that means using feedback from Monday's class to determine exactly what I need to do on Tuesday. Therefore, I will plan instruction carefully, but I must be willing to modify those plans to meet the needs of the students each day in my classroom.**

8. Transition: **So far we've been speaking theoretically about differentiation. Before we move on to the what, how, and why of differentiating on a practical level, let's each apply some basic assumptions underlying differentiated instruction to our own classroom practices.**

Looking Inside Our Classrooms

1. Present:

- **As stated previously, establishing a differentiated classroom is a way of thinking about teaching. Most of us are already at work implementing the Georgia Performance Standards in our classrooms. You've identified the learning goals for a unit of instruction, prepared an assessment plan, and made instructional decisions. We'll be talking specifically about the what, how, and why of differentiation a bit later, but first let's take a minute to pre-assess.**
- **Let's each look inside our individual classrooms to see where we are before we determine where we hope to go and how we're going to get there.**
- **Think about the unit of instruction that you are currently teaching. Use the list of "Some Underlying Assumptions of Differentiated Instruction." (This is the next page in the guide. There is a duplicate copy in the Appendix of this guide.) If you are not currently teaching a unit plan, just respond with a particular unit of instruction in mind.**
- **Read each assumption and assess your own "way of thinking about teaching" by marking the star if this assumption is implicit in your practice throughout the unit, the smiley face if you've taken this assumption into consideration in some way for this unit and the question mark if you need to think about your practice in terms of this assumption. You have approximately 10 minutes for this activity.**

Some
Underlying
Assump-
tions of
Differenti-
ated
Instruction

Page 25
and
Appendix
page

Some Underlying Assumptions of Differentiated Instruction

Read each assumption and assess your own “way of thinking about teaching” by marking the star if this assumption is implicit in your practice throughout the unit, the smiley face if you’ve taken this assumption into consideration in some way for this unit and the question mark if you need to think about your practice in terms of this assumption.

The Underlying Assumption	☆	☺	?
1. I have planned this unit to accommodate multiple and varied learning needs (social as well as cognitive), rather than attempting to accommodate them after student frustration or failure.			
2. I work to create and maintain a classroom community where students feel safe and valued as they are; at the same time I support each student in order to maximizing his or her potential.			
3. I interact with each student with positive regard and positive expectations.			
4. I recognize every student has both talents and areas of need, and I emphasize the student’s strengths rather than accentuating labels, deficits, or differences. At the same time, I do not call attention to the differentiation, but rather I help students appreciate varied ways in which all of them can find personal success with important goals.			
5. I use multiple and alternative forms of assessment at all stages of student learning in this unit in order to uncover and address a full range of learning needs and strengths.			
6. I gather and employ knowledge and information about my students in order to identify and address their varied readiness levels, interests, and learning profiles during this unit.			
7. I find ways to provide access for all students to meaningful and powerful ideas, information, and skills in this unit rather than reducing the standards, watering down the curriculum, or assigning busy work.			
8. I use multiple methods in this unit to engage students in active learning. Although I may employ whole-class instruction, I know that differentiation does not take place during whole class instruction.			
9. I work to develop classroom management skills that allow 1) multiple tasks to proceed smoothly in the classroom, 2) students to take increasing responsibility for their learning, and 3) the time to monitor student activity and coach for student growth and quality work.			
10. I accept responsibility for successful teaching and learning of each student in the class while working collaboratively with specialists to ensure success of individuals and the class as a whole.			

Based on the work of Stephanie Corrigan, Utah Valley State College. Adapted from “The Facilitator’s Guide,” *At Work in the Differentiated Classroom*, Alexandria: ASCD, 2001, 57-58.

2. After approximately 10 minutes, say: **This pre-assessment is for your own use, but let's take a moment or two to debrief the activity and relate it to what we've looked at earlier this morning.**
3. Ask: **What are the important points that you have learned about differentiation so far?** [Allow participants to share what they've learned. Use this to summarize important points about differentiation before moving on to the next section of the training.]

Slide:
*Essential
Answer
#1*

**Essential Answer #1–
Let's Discuss**



What does differentiation imply and how does differentiation fit into the standards-based education process?

- **We began our exploration of differentiation with this essential question.**
- **I'd like to conclude this section with a couple of additional points stressed by Carol Ann Tomlinson and others.**

5. Show slide, What is Curriculum Differentiation?

Slide

**What is Curriculum
Differentiation?**

"In differentiated instruction, classroom teachers make vigorous attempts to meet students where they are in the learning process and move them along as quickly and as far as possible in the context of a mixed-ability classroom. It promotes high-level and powerful curriculum for all students, but varies the level of teacher support, task complexity, pacing, and avenues to learning based on student readiness, interest, and learning profile."

6. Present: **As Tomlinson makes clear, differentiation involves beginning where our students are; however, as we all know, our students may not all be at the same place at the same time.**
- **To differentiate effectively, Tomlinson and Eidson advocate six essential principles to guide our decision making.**

Slide: 7. Show slide: Essential Principles of Differentiation.

*Essential
Principles
of
Differenti-
-ation*

Essential Principles of Differentiation

1. Good Curriculum Comes First
2. All Tasks Should Be Respectful of the Learner
3. When in Doubt, Teach Up
4. Use Flexible Grouping
5. Become an Assessment Junkie
6. Grade for Growth

—Tomlinson & Eidson, *Differentiation in Practice: Grades 5-9*, 13-15.

- **We've already discussed the importance of having a rigorous curriculum for all students.**
- **What do you think we mean when we say the "all tasks should be respectful of the learner?"** [Allow participants to respond before going on.]
- **To challenge every learner, Tomlinson says "when in doubt, teach up." What's your response?** [Allow participants to respond before going on.]
- **We'll discuss assessment and flexible grouping in the next section.**
- **The final essential principle of differentiation focuses on grading. We're going to reserve our discussion of fairness and grading in a differentiated classroom for Day 6 of training when we look more closely at examining student work.**
- **Keep these essential principles in mind as we move on to the next section and look at the what, how, and why of differentiation.**

The What, How, and Why of Differentiation

Time 4 hours

Overview In this section will focus on the what, how, and why of differentiation. Topics of discussion will include readiness, student interests, and learning profiles; ways of differentiating content, process, product, and the learning environment; and access to learning, motivation to learn, and efficiency of learning. Participants will be provided with a guide for differentiating, and they will use this guide along with the information presented to prepare a plan for differentiating in a mixed-ability classroom.

Objectives

- Explain key elements in planning for differentiation.
- Describe and develop procedures for differentiating instruction in a flexible classroom.
- Discuss effective classroom management strategies in a differentiated classroom.

Activities

- Overview of What, How, and Why of Differentiation
- True/False Quiz: What Does Differentiation Look Like?
- Strategies—Practice using Differentiation
- Make and Take

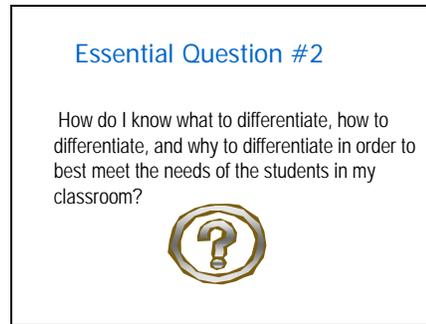
Materials

- Chart paper and markers
- Transparencies or PowerPoint presentation

Overview of What, How, and Why of Differentiation

Slide: 36. Show slide: Essential Question 2.

*Essential
Question 2*



[Trainer's Note: This section contains a great deal of information. Plan so that sufficient time is allotted for the application of this information. Several of the handouts included in the Facilitator's Guide can be noted as resources without going into detail.]

2. Present:

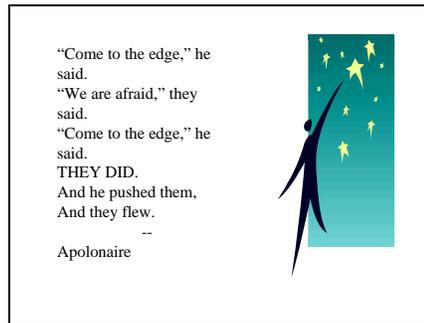
- **Differentiating in a mixed-ability classroom involves a complex process. It's not as simple as deciding to differentiate and "voilà," the next day or week or semester we've accomplished our goal.**
- **We need to work toward a more differentiated classroom one day at a time. As with all journeys, this one begins with the first step. Coming together to talk in a collegial way about differentiation is that first step.**
- **In this section of today's workshop, we will look at a number of aspects of differentiation that will help us make informed decisions about differentiating in our classrooms.**

3. Present:
 - **Each day when we enter our individual classrooms, we encounter students with diverse needs, abilities, and interests. Think for a moment about the students sitting in your classroom at this moment. Providing each of those students access to a rigorous curriculum is our goal.**
 - **This, however, does not mean we must individualize instruction for every student. Rather it means we must plan for the diverse groups of students we meet each day.**
 - **Children already come to school differentiated. Students in today's classrooms represent a broad range of academic readiness, interests, learning profiles, modes of learning, and cultures.**
 - **To maximize the potential for each learner, educators need to meet each child at his or hers starting point and ensure substantial growth during each school term. Sometimes that means pushing our students beyond their comfort zones.**
4. Show slide, "The Business of Schools."

The Business of Schools is

to produce work that engages students, that is so compelling that students persist when they experience difficulties, and that is so challenging that students have a sense of accomplishment, of satisfaction—indeed, of delight—when they successfully accomplish the tasks assigned.

Slide: 5. Show slide: Come to the edge.
Come to the edge.



6. Present:
- **The words of Apolonaire have particular significance both for the students we teach and for ourselves as teachers and instructional leaders.**
 - **For most of us, differentiating in a mixed-ability classroom offers a challenge that brings with it moments of fear and uncertainty.**
 - **Real growth occurs when we move to the edge of what we know and are able to do, don wings, and fly into new territory.**
 - **How well we fly, however, depends on those wings. In this section we’re going to construct metaphorical wings that will allow us to soar into the realm of differentiation.**
 - **Similarly, real student growth occurs when we encourage our students to move to the edge of what they know and are able to do—the zone of proximal development—help them build their wings, and then gently push them off the edge so that they can fly.**
 - **In order to help our students fly, we must first determine how best to help them build their wings.**

What Does Differentiation Look Like

Slide: 5. Show slide: True/False Quiz.

*True/False
Quiz*

A True/False Quiz:
What Does Differentiated Instruction Look Like?

Directions:

- Turn to page 33 in your guide. There is a duplicate in the appendix.
- Mark each item **T** if it is **TRUE** for a differentiated classroom or **F** if it is **FALSE** for a differentiated classroom.
- After you have responded individually, think/pair/square to compare your answers to the others in your table group.
- When you disagree, discuss your various points and attempt to reach consensus.
- Be prepared to share important points with the whole group.



6. Present:

*True/False
Quiz*

- **To conclude this section, we're going to take a brief True/False Quiz.**
- **You will find this quiz in this guide on the next page and a duplicate copy in the Appendix.**
- **Follow the directions on the slide to complete the quiz. Tomlinson's responses to these items are on the next slide; but remember they may be more than one way of looking at a particular item. Context is significant when discussing aspects of differentiation.**
- **You have 10-12 minutes for this activity and then we will compare our answers.**
- **Allow time for participants to discuss, compare, and provide reasons for their answers BEFORE revealing the next slide with one person's "right" answers.**

What Does Differentiation Look Like: A True/False Quiz

Directions: Mark the item T if it is TRUE for a differentiated classroom or F if it is FALSE for a differentiated classroom. After you have responded individually, compare your answers to the others in your table group. When you disagree, discuss your various points and attempt to reach consensus.

- _____ 1. Allowing all students in the class completing the same work for a unit/chapter
- _____ 2. Assessing students before a unit of instruction to determine what they already know
- _____ 3. Adjusting the **core** curriculum by content (below to above grade level)
- _____ 4. Limiting how and what is taught by teaching to the average student
- _____ 5. Providing assignments tailored for students of different levels of achievement
- _____ 6. Having high expectations for **ALL** students
- _____ 7. Providing educational experiences which extend, replace, or supplement standard curriculum
- _____ 8. Assigning more work at the same level to high achieving students
- _____ 9. Focusing on student weaknesses and ignoring student strengths
- _____ 10. Using activities that **all** students will be able to do
- _____ 11. Structuring class assignments so they require high levels of critical thinking and allow for a range of responses
- _____ 12. Giving the same kind of problems or questions and expecting more
- _____ 13. Creating more work such as extra credit work, to do when assignment is completed
- _____ 14. Having students participating in respectful work
- _____ 15. Putting students in situations where they don't know the answer- often
- _____ 16. Ensuring that students and teachers are collaborating in learning
- _____ 17. Providing free-time challenge activities
- _____ 18. Differing the pace of instruction
- _____ 19. Using capable students as tutors
- _____ 20. Using higher standards when grading
- _____ 21. Blending of whole class, group, and independent learning
- _____ 22. Using individualized instruction

Slide: *What Does Differentiated Instruction Look Like?*

7. Show slide: What Does Differentiated Instruction Look Like?

What Does Differentiated Instruction Look Like?	
Differentiated Instruction is...	Differentiated Instruction is not...
1. Assessing students before a unit of instruction to determine what they already know	1. All students in the class completing the same work for a unit/chapter
2. Adjustment of the core curriculum by content (below to above grade level), process (concrete to abstract), and product (simple to complex)	2. Limiting how and what is taught by teaching to the average student
3. Providing assignments tailored for students of different levels of achievement	3. Assigning more work at the same level to high achieving students
4. Having high expectations for ALL students	4. Focusing on student weaknesses and ignoring student strengths
5. Educational experiences which extend, replace, or supplement standard curriculum	5. Activities that all students will be able to do
6. Structuring class assignments so they require high levels of critical thinking and allow for a range of responses	6. Giving the same kind of problems or questions and expecting more
7. Students participating in respectful work	7. Creating more work-extra credit, do when done
8. Students and teachers collaborating in learning	8. Using higher standards when grading
9. Putting students in situations where they don't know the answer- often	9. Providing free-time challenge activities
10. Differing the pace of instruction	10. Using capable students as tutors
11. A blend of whole class, group, and independent learning	11. Using individualized instruction

8. Present:

- **Take a minute to compare the answers we came up with to the “correct” answers, remembering that, depending on context, there may be more than one way to approach an item.**

Slide: *How Do We Differentiate?*

9. Show slide: How Do We Differentiate?

How Do We Differentiate?

We determine how to differentiate by assessing the



readiness

interests

learning profile

of particular students
or groups of students

10. Present:

- **To determine a student's readiness to learn, we must assess the student's abilities, prior knowledge, and experiences.**
- **To determine a student's interests we must take the time to find out that student's likes and dislikes, what s/he spends time doing outside the classroom, and what piques that student's desire to learn.**
- **To determine a student's learning profile, we must analyze that student's learning style in order to discover the most effective ways the student learns as well as the best ways for that student to provide evidence of learning and to convey understanding.**
- **We determine a student's readiness, interests, and learning profile through assessment. Initially this means pre-assessing our students.**

Slide: *Pre-Assessment* 11. Show slide: Pre-Assessment.

Pre-Assessment 

- a way to determine what students know about a topic before it is taught or the skill level of students before instruction begins. It should be used regularly in all curricular areas. Teachers can use the information gained in pre-assessment to make instructional decisions about student strengths and needs.
- a means to help the teacher determine flexible grouping patterns as well as which students are ready for different levels of instruction

12. Present:

Range of
Activities in
a
Differenti-
ated
Classroom

- **Pre-assessment allows us to make the appropriate instructional decisions for each of our students. It also helps us to decide how to use flexible grouping to maximize learning.**
- **Tomlinson uses a chart to illustrate the range of activities in a differentiated classroom. This chart is on page 38 in this guide.**
- **In a differentiated classroom, students work in a variety of instructional arrangements, some whole class, some small group, some individual, and some student-teacher conferences.**
- **At times groups may be formed with students of similar levels of readiness, interests, or learning styles; other times groups may be made up of individuals with a range of abilities interests, or learning styles.**
- **Most importantly, the constitution of these groups changes throughout a unit or course of study based on the needs and/or growth of the students. Flexible grouping is an integral part of a differentiated classroom. Tomlinson and Eidson define flexible grouping as the “purposeful reordering of students into working groups to ensure that all students work with a wide variety of classmates and in a wide range of contexts during a relatively short span of time” (*Differentiation in Practice, Grades 5-9*, 235).**
- **Pre-assessment helps teachers determine the most effective activity formats and/or groups for particular purposes and to meet the needs of the diverse learners in the class.**

Slide: *Pre-Assessment Strategies* 13. Show slide: Pre-Assessment Strategies.

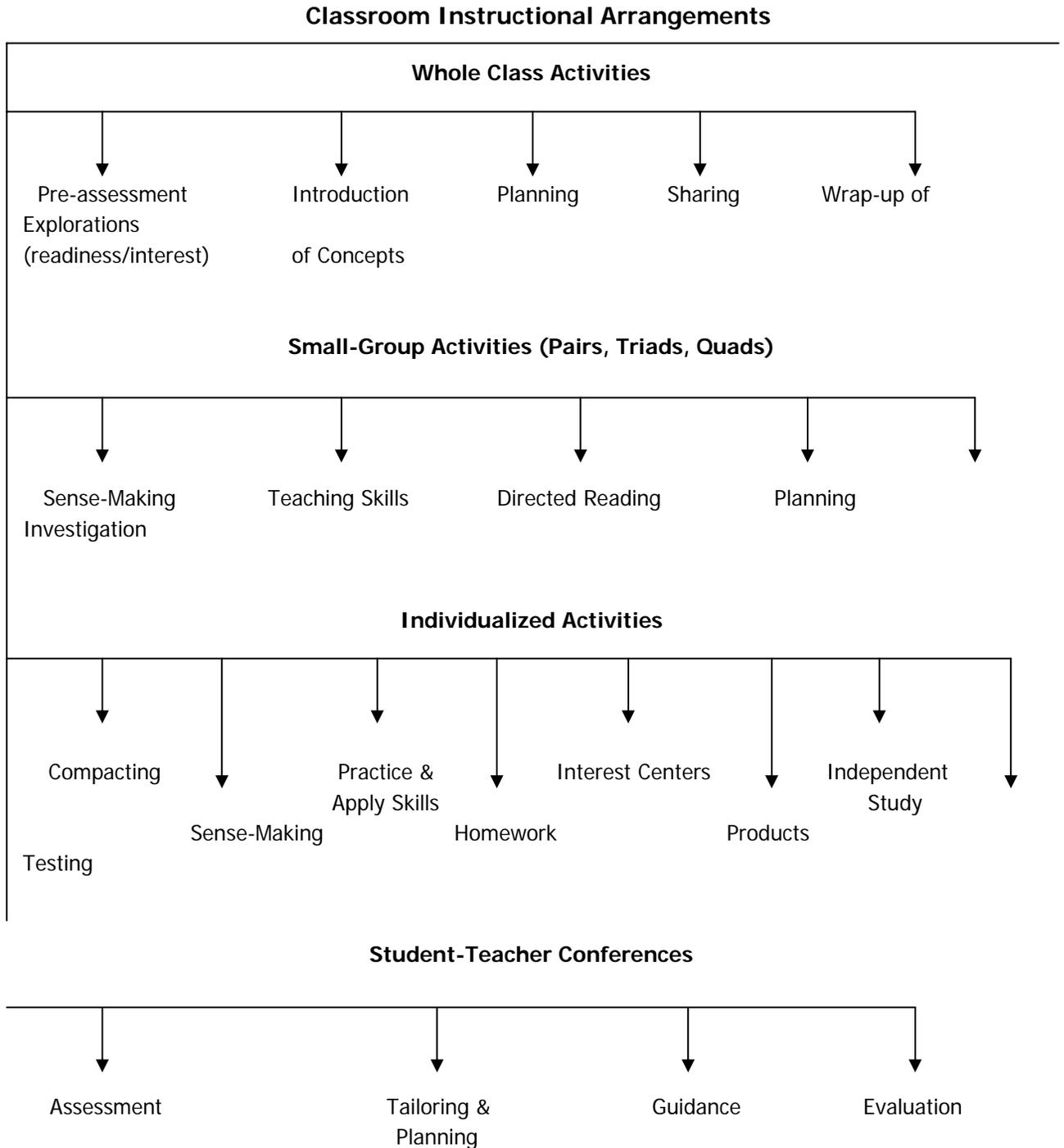
Pre-Assessment Strategies	
<ul style="list-style-type: none"> ✓ teacher prepared pretest ✓ KWL charts and other graphic organizers ✓ writing prompts/samples ✓ Questioning ✓ guess box (what is this???) ✓ picture interpretation ✓ prediction ✓ teacher observation/checklists ✓ student demonstrations and discussions ✓ initiating activities ✓ informational surveys/questionnaires/inventories 	<ul style="list-style-type: none"> ✓ student interviews ✓ student products and work samples ✓ self-evaluations ✓ portfolio analysis ✓ game activities ✓ show of hands to determine understanding: every pupil response ✓ drawing related to topic or content ✓ standardized test information ✓ reader response survey ✓ anticipation journals

Pre-Assessment Strategies

14. Present:

- **This slide lists a number of pre-assessment strategies. You can find this list on page 39.**
- **As you can see, testing is but one way to pre-assess.**
- **Assessing certain students or groups of students such as English Language Learners (ELLs) and learners with special needs often requires specific knowledge and skills. Our focus for today is on differentiating in the mixed ability classroom.**
- **While all classroom teachers work with diverse populations, including English language learners and students with special needs, specialists are available at the school, system, or state level to assist in these areas. For specialists' contact information, see page 9.**
- **A few resources related to English language learners and students with special needs are included in the Appendix. These include an overview of the factors involved in assessing English language learners, a list of instructional accommodations for ELLs, and a differentiation menu for students with special needs.**
- **Finally, assessment is ongoing throughout any unit of instruction. We don't make differentiation decisions one time and move on. Differentiation is ongoing and guided by continuous assessment.**

Range of Activities in a Differentiated Classroom

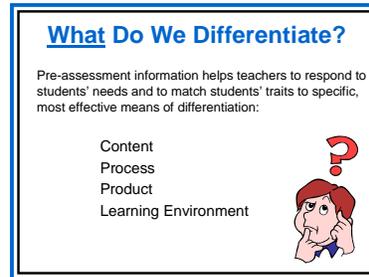


Pre-Assessment Strategies

- ✓ **teacher prepared pretest**
- ✓ **KWL charts and other graphic organizers**
- ✓ **writing prompts/samples**
- ✓ **questioning**
- ✓ **guess box**
- ✓ **picture interpretation**
- ✓ **prediction**
- ✓ **teacher observation/checklists**
- ✓ **student demonstrations and discussions**
- ✓ **initiating activities**
- ✓ **informational surveys/questionnaires/inventories**
- ✓ **student interviews**
- ✓ **student products and work samples**
- ✓ **self-evaluations**
- ✓ **portfolio analysis**
- ✓ **game activities**
- ✓ **show of hands to determine understanding: every pupil response**
- ✓ **drawing related to topic or content**
- ✓ **standardized test information**
- ✓ **reader response survey**
- ✓ **anticipation journals**

Slide: *What Do We Differentiate?*

15. Show slide: What Do We Differentiate?

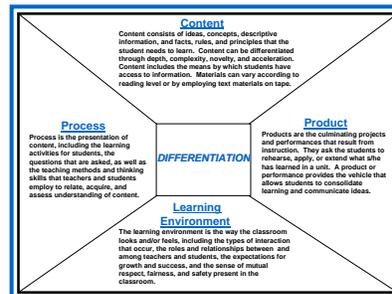


16. Present:

- **In order to decide how to differentiate, we need to look at the four most effective means of differentiating.**

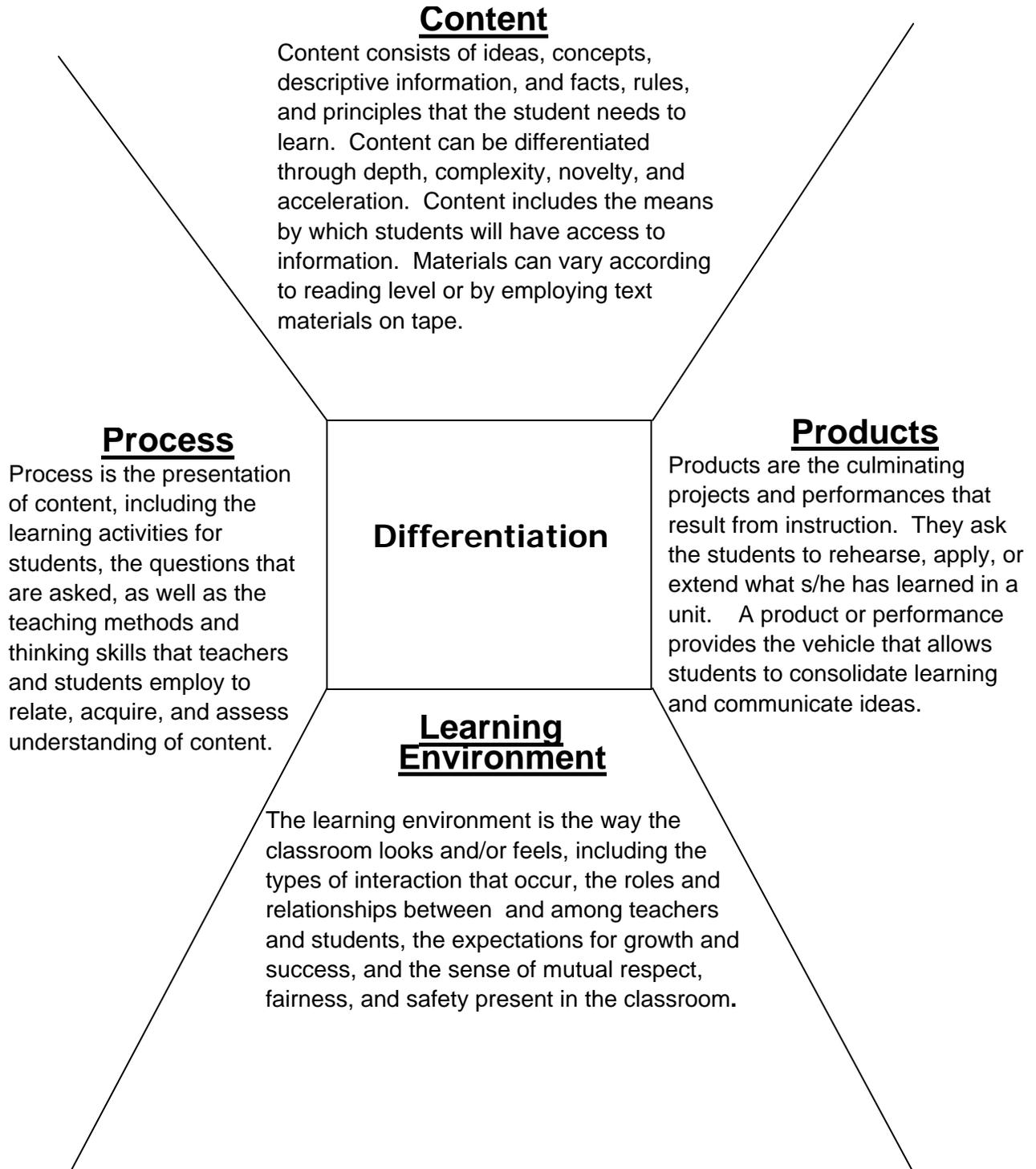
Slide: *What to Differentiate*

17. Show slide: What to Differentiate. [Trainer's Note: Click to reveal each of the four means of differentiation, one at a time.]



- **The content of this slide is also on page 41.**

What to Differentiate



18. Present:

- **Let's take a closer look at each of these four means of differentiating.**
- **Time does not allow us to discuss all the possible differentiation strategies; however, a glossary of many of these strategies is provided in the Appendix on pages 76-82.**

Slide: *Content*

19. Show slide: Content. [Trainer's Note: Present the information from each slide and ask participants to suggest additional strategies for each before going on to the next.]

Content

Content consists of ideas, concepts, descriptive information, and facts, rules, and principles that are presented to the learner. Content can be differentiated through depth, complexity, novelty, and acceleration.

Examples of differentiating content include the following:

- using materials at varying readability levels
- putting text materials on tape
- using spelling or vocabulary lists at readiness levels of students
- meeting with small groups to re-teach an idea or skill for struggling learners, or to extend the thinking or skills of advanced learners

(Tomlinson, C.A., Differentiation of Instruction in the Elementary Grades, August 2000)

Some Strategies for Differentiating Content

Readiness testing	Concept based teaching	Learning Contracts	Multiple and/or supplementary texts	Small group
Learning styles and Multiple Intelligences	Interest based mini lessons	Curriculum compacting	Technology	Varying rate of learning and complexity

Ways to Differentiate Content

<ul style="list-style-type: none"> • Reading Partners/ Reading Buddies • Read/Summarize • Read/Question/Answer • Visual Organizer/ Summarizer • Parallel Reading with Teacher Prompt • Choral Reading/ Antiphonal Reading • Split Journals (Double Entry-Triple Entry) 	<ul style="list-style-type: none"> • Highlights on Tape • Digests/ "Cliff Notes" • Note-taking Organizers • Varied Texts • Varied Supplementary Materials • Highlighted Texts • Think-Pair-Share/Preview-Midview-Postview • Books on Tape • Flip Books
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Slide: *Process*

20. Show slide: Process.

Process

Process is the presentation of content, including the learning activities for students, the questions that are asked, as well as the teaching methods and thinking skills that are used. Examples of differentiating process or activities include the following:

- using tiered activities through which all learners work with the same important understandings and skills, but proceed with different levels of support, challenge, or complexity
- providing interest centers that encourage students to explore subsets of the class topic of particular interest to them
- developing personal agendas (task lists written by the teacher and containing both in common work for the whole class and work that addresses individual needs of learners) to be completed either during specified agenda time or as students complete other work early
- offering manipulatives or other hands-on supports for students who need them
- varying the length of time a student may take to complete a task in order to provide additional support for a struggling learner or to encourage an advanced learner to pursue a topic in greater depth

(Tomlinson, C.A., Differentiation of Instruction in the Elementary Grades, August 2000)

Some Strategies for Differentiating Process

Student Choice	Tiered Curriculum	Cubing	Learning Stations	Similar Readiness Grouping
Mixed Readiness Grouping	Learning Contracts	Choice of Work Arrangement	Anchor Activities	Varied Journal Prompting

Ways to Differentiate Process

- Fun and Games
- RAFTS
- Cubing
- Think Dots
- Centers
- Choices (Intelligences)
- Tiered Lessons
- Contracts

Slide: *Products*

21. Show slide: Products

Products

Products are the outcomes of instruction that consolidate learning and communicate ideas. Examples of differentiating products include the following:

- giving students options of how to express required learning in their preferred learning style (e.g. create a puppet show, write a letter, develop a mural with labels, etc.)
- using rubrics that match and extend students' varied skills levels
- allowing students to work alone or in small groups on their products
- encouraging students to create their own product assignments as long as the assignments contain required elements

(Tomlinson, C.A., Differentiation of Instruction in the Elementary Grades, August 2000)

Some Strategies for Differentiating Products

Tiered products	Student choice	Interest-based investigations	Independent study	Mentors
-----------------	----------------	-------------------------------	-------------------	---------

Ways to Differentiate Product

- Choices based on readiness, interest, and learning profile
- Clear expectations
- Timelines
- Agreements
- Product Guides
- Rubrics
- Evaluation

22. Note: **More comprehensive lists of products are provided in the Appendix pages 83-84.**

Slide: *Learning Environment*

23. Show slide: Learning Environment.

Learning Environment

The learning environment is the way the classroom looks and/or feels, including the types of interaction that occur, the roles and relationships between and among teachers and students, the expectations for growth and success, and the sense of mutual respect, fairness, and safety present in the classroom.

Examples of differentiating learning environment include:

- *making sure there are places in the room to work quietly and without distraction as well as places that invite student collaboration
- *providing materials that reflect a variety of cultures and home settings
- *setting out clear guidelines for independent work that matches individual results
- *developing routines that allow students to get help when teachers are busy with other students and cannot help them immediately
- *helping students understand that some learners need to move around to learn, while others do better sitting quietly

(Tomlinson, C.A., *Differentiation of Instruction in the Elementary Grades*, August 2000)

Some Strategies for Differentiating Learning Environment

Class Meetings	Shared Decision Making	Response Journals	Responsibility for Learning	Established Protocols
----------------	------------------------	-------------------	-----------------------------	-----------------------

Group Work

- Teacher Checklist
- RICE
 - R— Recall
 - I—Imagine
 - C—Check
 - E—Expert
- When all else fails, begin with an anchor until the teacher can get to you.

24. Present:

- **Classroom management is an integral part of the learning environment. In a differentiated classroom multiple activities may be taking place and multiple groups or other teaching/learning arrangements may be operating at any one time.**
- **Consequently, it is imperative to have classroom protocols in place for everything from what to do upon first entering the classroom, to how to move from activity to activity, to what to do if students finish early.**
- **Tape 2 of the ASCD set entitled *At Work in the Differentiated Classroom* focuses on classroom management. The DOE will be providing each system and each RESA with a set of these materials, and we recommend that you view this tape to learn more about classroom management in a differentiated classroom.**
- **There is a Teacher Checklist of Group Work on the next page.**

Another strategy is to use RICE:

If students are stuck about what to do next when you're with a group...

(Tomlinson, 1999, p. 102)

R I C E

- They should first try hard to RECALL what you said.**
- If that doesn't work, they should close their eyes, see you talking, use good practical intelligence, and IMAGINE logically what the directions would have been for the task.**
- If that doesn't help, they can CHECK with a classmate (someone at their table or nearby doing the same task). This should be done in a whisper.**
- If that doesn't work, go to a designated EXPERT of the day who has the skills necessary to provide guidance. The EXPERT should continue with his work, stopping only long enough to help someone who is genuinely stuck.**

Teacher checklist for Group Work

- Students understand the task goals.
- Students understand what's expected of individuals to make the group work well.
- The task matches the goals (leads students to what they should know, understand, and be able to do."
- Most kids should find the task interesting.
- The task requires an important contribution from each group.
- The task is likely to be demanding of the group and its members.
- The task requires genuine collaboration to achieve shared understanding.
- The timelines are brisk (but not rigid).
- Individuals are accountable for their own understanding of all facets of the task.
- There's a "way out" for students who are not succeeding with the group.
- There is opportunity for teacher or peer coaching and in-process quality checks.
- Students understand what to do then they complete their work at a high level of quality.

Tomlinson, 2000

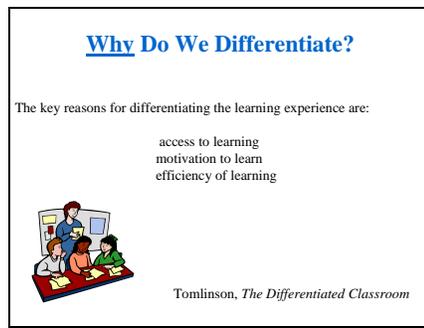
- **There is another suggested list of classroom management strategies in the appendix.**

In small groups brainstorm a list of classroom management practices. Have groups report strategies and record their ideas on a chart. Refer participants to tips on the next page for a list of strategies for managing a differentiated classroom by Carol Ann Tomlinson.

25. Say: **Before we put these ideas into practice, let's take a quick look at the reasons why we differentiate.**

Slide: Why Do We Differentiate?

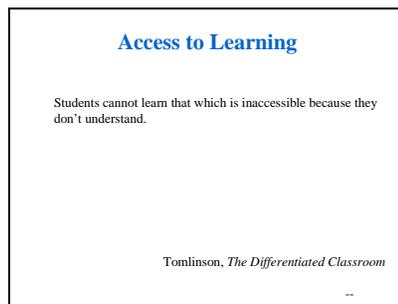
26. Show slide: Why Do We Differentiate?



[Trainer's Note: Show each of the next three slides and review the information on each.]

Slide: *Access to Learning*

27. Show slide: Access to Learning.



Strategies for Managing a Differentiated Classroom

Carol Ann Tomlinson

1. Have a strong rationale for differentiation instruction based on student readiness, interest, and learning profile.
2. Begin differentiating at a pace that is comfortable for you.
3. Time differentiated activities to support student success.
4. Use an “anchor activity” to free you up to focus your attention on your students.
5. Create and deliver instructions carefully.
6. Assign students into groups or seating areas smoothly.
7. Have a “home base” for students.
8. Be sure students have a plan for getting help when you're busy with another student or group.
9. Minimize noise.
10. Make a plan for students to turn in work.
11. Teach students to rearrange furniture.
12. Minimize “stray movement”.
13. Promote on-task behavior.
14. Have a plan for “quick finishers”.
15. Make a plan for “calling a halt”.
16. Give your students as much responsibility for their learning as possible.
17. Engage your students in talking about classroom procedures and group process

Slide: 28. Show slide: Motivation to Learn.

*Motivation
to Learn*

Motivation to Learn

Students cannot learn when they are unmotivated by things far too difficult or things far too easy.

Students learn more enthusiastically when they are motivated by those things that connect to their interests.

*Tomlinson, *The Differentiated Classroom**

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Slide: 29. Show slide: Efficiency of Learning.

*Efficiency
of Learning*

Efficiency of Learning

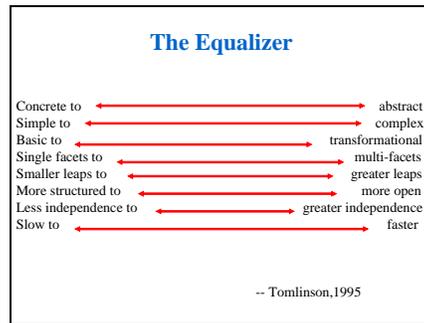
Students learn more efficiently when they have a suitable background of experience.

Students learn more efficiently when they can acquire information and express understanding through a preferred mode.

*Tomlinson, *The Differentiated Classroom**

--

Slide: *The Equalizer* 30. Show slide: The Equalizer.

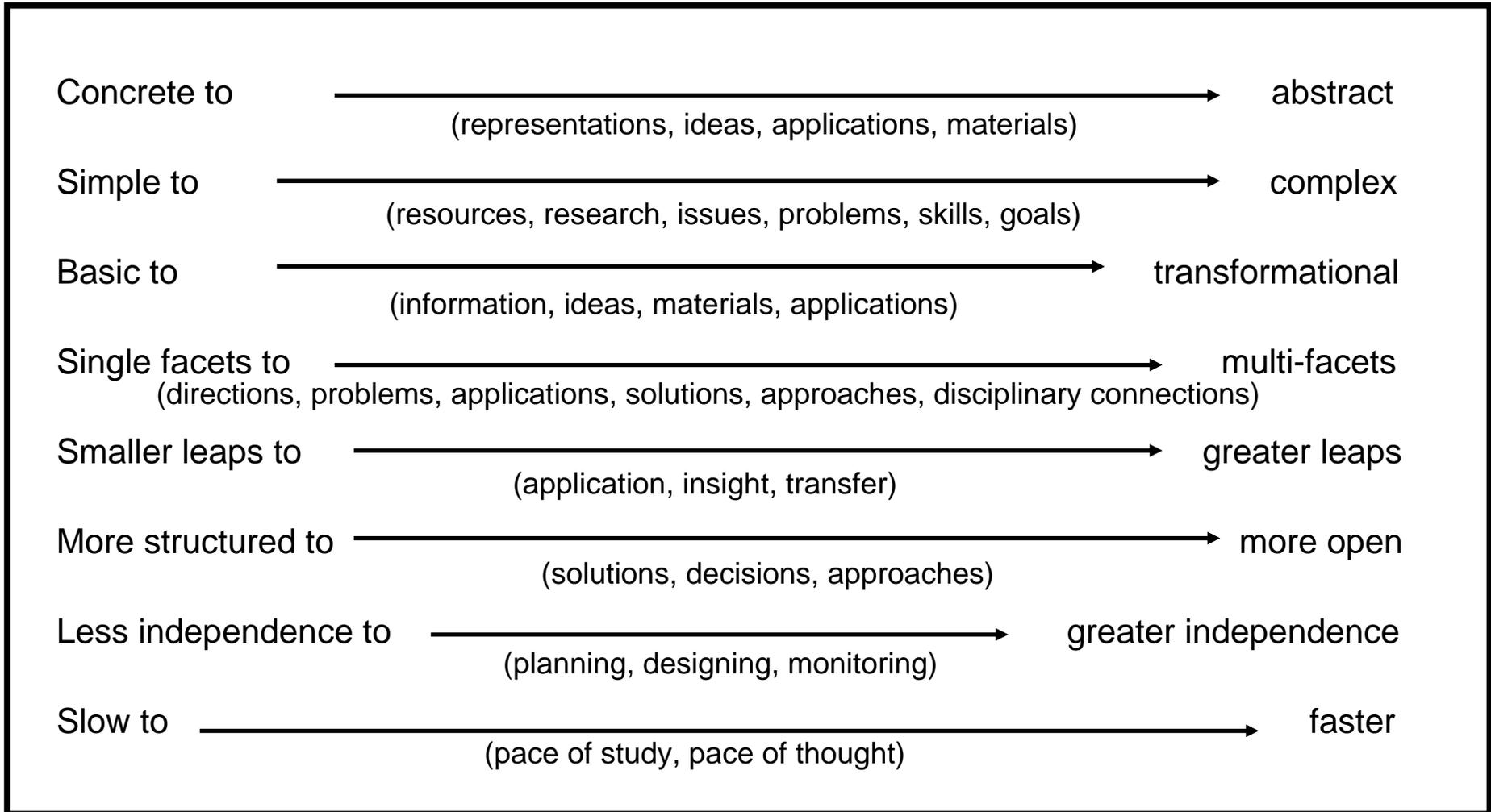


31. Present:

- **Carol Ann Tomlinson has developed a tool to use in planning differentiated lessons. She calls this tool “The Equalizer.”**
- **The equalizer provides a visual guide to help teachers create tiered tasks.**
- **Teachers can adjust the difficulty of a task or a product along several continua.**
- **Tomlinson notes that “by matching task difficulty with learner readiness, a teacher can provide appropriate challenge for a given learner at a given time” (*Differentiation in Practice, Grades 5-9, 235*).**

32. Here is an example of how one science teacher uses differentiation for students with different reading levels.
33. Have individuals read silently, then pair and share their thinking. Ask whole group to discuss.
- **“For example, Mrs. Santos often assigns students in her science class to reading squads when they work with text materials. At this stage, group assignments usually are made so students of similar reading levels work together. She varies graphic organizers and learning log prompts according to the amount of structure and concreteness the various groups need to grasp essential understandings from the chapter.**
 - **She also makes it possible for students to read aloud in their groups or to read silently. Then they complete organizers and prompts together. As students read, Mrs. Santos moves among groups. Sometimes she reads key passages to them, sometimes she asks them to read to her, but she always probes for deeper understanding and helps to clarify their thinking.**
 - **Sometimes Mrs. Santos asks students to complete labs, watch videos, or work with supplementary materials before they read the chapter so they have a clear sense of guiding principles before they work with the text. Sometimes they read the text for a while, do a lab, and go back to the text. Sometimes labs and supplementary materials follow text exploration.**
 - **Frequently, she will have two versions of a lab going simultaneously: one for students who need concrete experiences to understand essential principles and one for students who already grasp the important principles and can deal with them in complex and uncertain contexts. (*Ibid*)**
34. Present:
- **Let’s examine the other continua in order to make sure we understand how they can be used to adjust the difficulty of a task or product.**
 - Allow time for participants to discuss and reach consensus regarding the other continua before moving on.
- The Equalizer* ➤ **You can find this Equalizer on page 52.**

The Equalizer

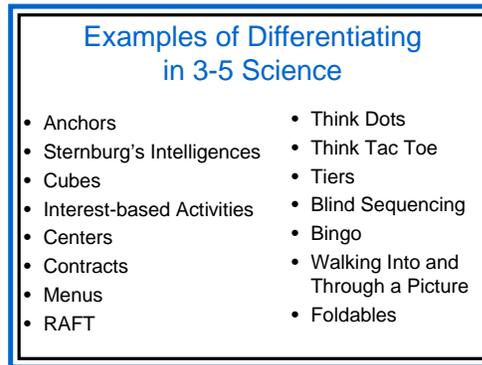


Tomlinson, 1995

Guided Practice: Analyzing a Differentiated Task

Slide:

35. Show slide: Examples of Differentiating in 3-5 Science.

Examples

- **There are several samples of differentiating tasks and strategies to use in the Appendix beginning on page 88. There are examples ranging through grades 3-5 and in different topics. Use them in redelivery according to the amount of time you have.**
- **After we look at an example, let's try some on our own. Any we create can be emailed to everyone to share.**
- **This part of the training will be a make and take session.**

36. Present:

*Guided
Practice*

- **Now it's time to begin to apply what we've learned about differentiation. You will find a standard and elements along with a suggested task using multiple ways to differentiate.**
- **Your job is to analyze these differentiated tasks to determine what and how the tasks have been differentiated.**
- **Is the content different? If so how?**
- **Are the processes different? If so how?**
- **Are the products different? If so how?**
- **Is the learning environment different? If so how?**
- **How might these differentiated tasks address the whys of differentiation: access, motivation, and efficiency?**
- **What continua on the Equalizer do you see differentiated?**

A handout with these questions is included in the Appendix.

Examining Differentiating Tasks

1. Is the content different?
2. If so, how?

3. Are the processes different?
4. If so, how?

5. Are the products different?
6. If so, how?

7. Is the learning environment different?
8. If so, how?

9. How might these differentiated tasks address the whys of differentiation?
 - Access

 - Motivation

 - Efficiency

Differentiation

37. Present:

What Does Differentiated Instruction Look Like?	
Differentiated Instruction is...	Differentiated Instruction is not...
1. Assessing students before a unit of instruction to determine what they already know	1. All students in the class completing the same work for a unit/chapter
2. Adjustment of the core curriculum by content (below to above grade level), process (concrete to abstract), and product (simple to complex)	2. Limiting how and what is taught by teaching to the average student
3. Providing assignments tailored for students of different levels of achievement	3. Assigning more work at the same level to high achieving students
4. Having high expectations for ALL students	4. Focusing on student weaknesses and ignoring student strengths
5. Educational experiences which extend, replace, or supplement standard curriculum	5. Activities that all students will be able to do
6. Structuring class assignments so they require high levels of critical thinking and allow for a range of responses	6. Giving the same kind of problems or questions and expecting more
7. Students participating in respectful work	7. Creating more work-extra credit, do when done
8. Students and teachers collaborating in learning	8. Using higher standards when grading
9. Putting students in situations where they don't know the answer- often	9. Providing free-time challenge activities
10. Differing the pace of instruction	10. Using capable students as tutors
11. A blend of whole class, group, and independent learning	11. Using individualized instruction

38. Say:

- **Let's look back at that True/False Quiz we did at the beginning of the day. Do you wish to change any answers or discuss any "Ah Ha" moments?**

Slide: *Essential Answer #2*

36. Show slide: Essential Answer #2.

Essential Answer #2
Let's Discuss.



How do I know what to differentiate, how to differentiate, and why to differentiate in order to best meet the needs of the students in my classroom?

37. Transition: **Reaching a conceptual understanding of the what, how, and why of differentiation is the first step toward providing every student with the opportunity to learn. In the final hour of today's workshop, we'll look at the role of the teacher in a differentiated classroom and set some goals for differentiating our own classrooms.**

The Role of the Teacher in a Differentiated Classroom

Time 1 hour

Overview This section will focus on the various roles and responsibilities of the teacher in a differentiated classroom. We will examine areas in which we may need to rethink traditional ways of doing in order to maximize every student's opportunity to learn. We will look at a number of ways of differentiating that require low levels of preparation, as well as other means that require more preparation. Finally, we will develop individual action plans for moving toward differentiated classrooms.

Objectives

- Describe the roles of the teacher in a differentiated classroom.
- Set individual goals for differentiating instruction in each classroom.

Activities

- Comparing and Contrasting Teachers in Traditional and Differentiated Classrooms
- Analyzing and Creating Teacher Metaphors
- Developing an Individual Action Plan for Differentiation
- Assignments for Day 6

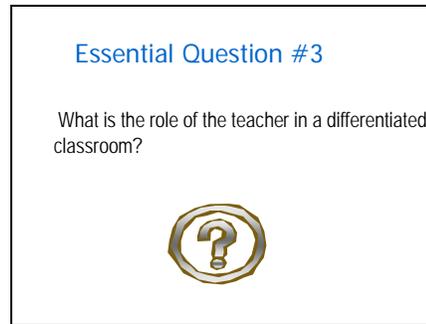
Materials

- Chart paper and markers
- Transparencies or PowerPoint presentation
- Traditional and differentiated comparison chart
- Cards with teacher metaphors

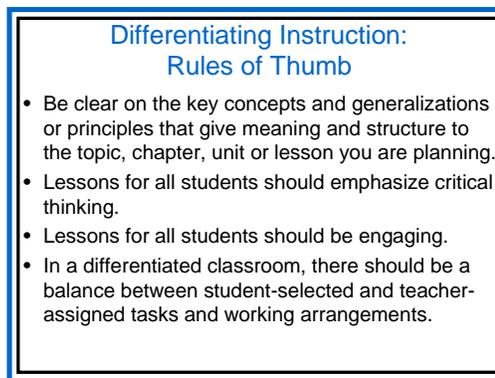
Rethinking Our Roles

Slide: *Essential Question 3*

1. Show slide: Essential Question 3.



2. Say:
 - **Let's review some "Rules of Thumb" for Differentiation.**



3. Present:

Traditional vs. Differentiated Comparison Chart

- **On pages 59-60, you will find a chart that compares a traditional classroom to a differentiated classroom. Please turn to that chart.**
- **In your table groups, read through the characteristics of a traditional classroom and compose a brief description of the teacher you visualize in that classroom.**
- **Next, read through the characteristics of the differentiated classroom and compose a brief description of the teacher you visualize in that classroom.**
- **You have 7-10 minutes for this activity.**

A Traditional Classroom Compared with a Differentiated One

Traditional Classroom	Differentiated Classroom
1. Student differences are masked or acted upon when problematic.	1. Student differences are studied as a basis for planning.
2. Assessment is most common at the end of learning to see "who got it."	2. Assessment is ongoing and diagnostic to understand how to make instruction more responsive to learner need.
3. A relatively narrow sense of intelligence prevails.	3. Focus on multiple forms of intelligence is evident.
4. A single definition of excellence exists.	4. Excellence is defined by individual growth from a starting point.
5. Student interest is infrequently tapped.	5. Students are frequently guided in making interest-based learning choices.
6. Relatively few learning profile options are taken into account.	6. Many learning profile options are provided.
7. Whole class instruction dominates.	7. Many instructional arrangements are used.
8. Coverage of texts and/or curriculum guides drives instruction.	8. Student readiness, interest, and learning profile shape instruction.
9. Mastery of facts and skills out-of-context is the focus of learning.	9. Use of essential skills to make sense of key concepts and principles is the focus of learning.
10. Single-option assignments are the norm.	10. Multi-option assignments are frequently used.
11. Time is relatively inflexible.	11. Time is used flexibly in accordance with student need.
12. A single text prevails.	12. Multiple materials are provided.
13. Single interpretations of ideas and events may be sought.	13. Multiple perspectives on ideas and events are routinely sought.

14. The teacher directs student behavior.

14. The teacher facilitates students' skills at becoming more self-reliant learners.

15. The teacher solves problems.

15. Students help one another and the teacher solve problems.

16. A single form of assessment is often used.

16. Students are assessed in multiple ways.

Carol Tomlinson, 1998.

Slide: 4. Show slide: Traditional vs. Differentiated.

*Traditional vs.
Differentiated*

Traditional vs. Differentiated

- Turn to page 58-59.
- In your table groups, read through the characteristics of a traditional classroom and compose a brief description of the teacher you visualize in that classroom.
- Next, read through the characteristics of the differentiated classroom and compose a brief description of the teacher you visualize in that classroom.
- You have 7-10 minutes for this activity.

Slide: 5. Show slide: Traditional vs. Differentiated.

*Traditional vs.
Differentiated*

Traditional vs. Differentiated

How are the teachers you visualized in the two classrooms similar?

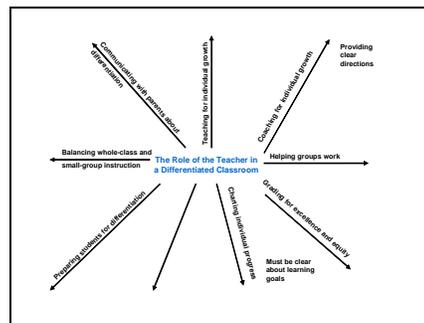
How are the teachers you visualized in the two classrooms different?

What conclusions might we draw from these similarities and differences?

6. Allow time for participant's to complete the activity, then ask:
- **How are the teachers you visualized in the two classrooms similar?**
[Allow time for participants to respond.]
 - **How are the teachers you visualized in the two classrooms different?**
[Allow time for participants to respond.]
 - **What conclusions might we draw from these similarities and differences?**
 - Responses will differ, but expect such things as:
 - Teachers will have to be able to adapt.
 - Teachers will have to be much better prepared.
 - Teachers will have to be more flexible.
 - The day of the teacher being front and center in the classroom are over.
 - Teachers can no longer assume one size fits all.

Slide: *The Role of the Teacher in a Differentiated Classroom*

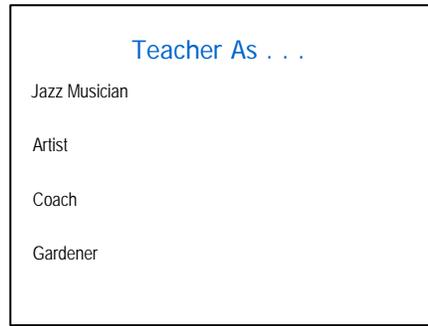
7. Show slide: The Role of the Teacher in a Differentiated Classroom.



8. Present:
- **Tomlinson lists 7 teacher roles in a differentiated classroom:**
 - **Preparing students for differentiation**
 - **Balancing whole-class and small-group instruction**
 - **Communicating with parents about differentiation**
 - **Teaching for individual growth**
 - **Coaching for individual growth**
 - **Helping groups work**
 - **Grading for excellence and equity**
 - **And charting individual growth**

- **She also specifies that teachers must provide clear directions and must be clear about learning goals.**
- **As we move to the last activity of the day—setting personal goals for differentiation—keep Tomlinson's list in mind.**

Slide: Teacher As
As...



10. Present:

- **Earlier today I said that differentiated instruction is more a philosophy than a particular strategy or bag of tricks.**
- **This philosophy involves a change in mindset, a new vision of the role of the teacher in a classroom.**
- **One of the ways we might begin to develop this new vision of the role of the teacher is to think metaphorically.**
- **Let's begin by looking at four possible metaphors: teacher as jazz musician, and teacher as artist, teacher as coach, teacher as gardener.**
- **I'm placing visuals around the room to represent these metaphors. I'd like for you to move to the metaphor that seems most relevant to you as you think about differentiating your classroom.**

[Trainer's Note: The graphics for these signs are reprinted in grayscale in the Appendix to this Facilitator's Guide.]

11. Present:

- **Working together with others who chose the same metaphor, create a list of attributes that a teacher as jazz musician, artist, coach, or gardener might have.**
- Allow a few minutes, and then ask: **How might those attributes contribute to the establishment of a differentiated classroom?**
- **Now move back to your table groups and create at least one additional metaphor for a teacher in a differentiated classroom. Think quickly, we only have a few minutes for this activity.**
- Allow no more than 5 minutes, and then ask the groups to share their metaphors.

Setting Personal Goals for Differentiating

1. Present:

- **Carol Ann Tomlinson notes that differentiated classrooms don't magically appear overnight. She contends that it is perfectly acceptable to begin slowly AS LONG AS WE DO BEGIN!**
- **To help teachers begin, Tomlinson has developed a list of what she calls "low-prep" and "high-prep" differentiation possibilities.**

*Low-Prep and
High-Prep
Differentiation*

- **Tomlinson's list is reprinted on page 65. Please turn to that page now.**

2. Present:

Action Plan

- **Using Tomlinson's chart and the Action Plan form, begin working on your individual action plan.**

Trainer's Note: The amount of time allotted here will depend on the time remaining. You need to allow time to sum up and time to go over the homework for next time.

Low-Prep and High Prep Differentiation

Low-Prep Differentiation

- Choice of books
- Homework options
- Use of reading buddies
- Varied journal prompts
- Orbitals
- Varied pacing with anchor options
- Student-teacher goal setting
- Work alone/work together
- Whole-to-part and part-to-whole explanations
- Flexible seating
- Varied computer programs
- Design-A-Day
- Varied supplementary materials
- Options for varied modes of expression
- Varying scaffolding on same organizer
- Let's Make a Deal projects
- Computer mentors
- Think-Pair-Share by readiness, interest, learning profile
- Use of collaboration, independence, and cooperation
- Open-ended activities
- Mini-workshops to reteach or extend skills
- Jigsaw
- Negotiated Criteria
- Explorations by interest
- Games to practice mastery of information and skill
- Multiple levels of questions

High-Prep Differentiation

- Tiered activities and labs
- Tiered products
- Independent studies
- Multiple texts
- Alternative assessments
- Learning contracts
- 4-MAT
- Multiple intelligence options
- Compacting
- Spelling by readiness
- Entry Points
- Varying organizers
- Lectures coupled with graphic organizers
- Interest groups
- Tiered centers
- Interest centers
- Personal agendas
- Literature Circles
- Stations
- Complex instruction
- Group investigation
- Tape-recorded materials
- Teams, Games, and Tournaments
- Think-Tac-Toe
- Simulations
- Problem-Based Learning
- Graduated rubrics
- Flexible reading formats
- Student-centered writing Formats

Tomlinson, How to Differentiate in Mixed-Ability Classrooms, 34.

Action Plan

Directions: Complete the following chart to create your individual plan for building a differentiated classroom. Consider the following:

- What am I already doing to differentiate?
- How can I assess and use student readiness, interests, and learning profiles to maximize learning growth for every student?
- How can I differentiate content, process, products, or the learning environment?
- How can I employ Tomlinson's Equalizer to create tiered assignments, activities, tasks, and products?
- What low-prep differentiations do I want to start with?
- What higher-prep differentiations do I want to work toward?

Differentiation:			
What	How	Why	By When

3. Present:

- **We have just skimmed the surface of differentiation today. Please dive deeper into this topic via the resources provided to each system and RESA by the DOE as well as the other resources listed in your Day 5 materials.**

4. Present:

Day 6 Assignment

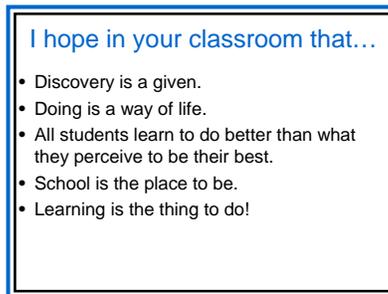
- Redeliver Day 5.
- Bring 4 copies of an example of student work with permission forms.
 - Do not bring handouts from a copyrighted source.
 - Make sure products are easy to carry. (Photos of posters, shoe boxes, etc. are easier to transport than the original.)
- Reflect on your ability to differentiate...Try a new strategy.

- **Day 6 of training will focus on Examining Student Work and Teacher Commentary.**
- **You'll find assignments for Day 6 also listed in the Appendix.**

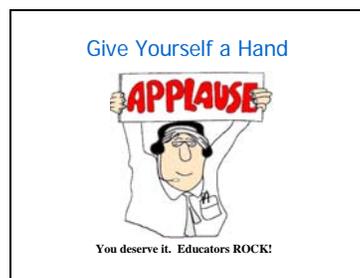
[Trainer's Note: The assignments are listed in the Appendix to the Facilitator's Guide as well.]

- **For Day 6, please bring a student work sample to training. This sample should include 4 copies of the student work, 1 copy of the assignment that generated the work including the standard(s) being assessed via this student work, and 1 copy of each of the two permission forms (teacher permission form and student/parent permission form). These forms are printed in the Appendix on pages 87-88.**

5. Present:
- **As you work to implement the GPS standards this first year, we also like for you record your experiences in a notebook, journal, or other calendar format.**
 - Note any tasks, strategies, assessments, etc., that worked especially well;
 - critical comments about particular standards (e.g., gaps that need filling, elements that are problematic, terms that need defining, etc.);
 - suggestions for teachers/instructional leaders in Phase II who will be implementing the following year;
 - thoughts or ideas about the second year of your implementation; etc.
 - **Please use this record to accurately fill out the survey giving feedback on the Georgia Performance Standards.**
 - **The State Board of Education will be reviewing the GPS each year, and your comments will provide information for this review, as well as topics for discussion in training. Don't worry; we don't plan to collect your journals . . . just your suggestions!**



- Slide: 6. Show slide: Give Yourself a Hand.
Give Yourself a Hand



7. Present:
- **Thanks for coming and for all that you do for Georgia's students.**
 - **Please remember that the staff at the DOE is available to help. Feel free to contact DOE personnel by phone or email.**



Glossary

Ability Grouping—Grouping students according to similar readiness levels or learning profiles.

Alternate Assignment—Assignments given to particular students or groups of students in lieu of the assignment given to the other members of the class. These assignments are designed to capitalize on student readiness levels, interests, or learning profiles.

Anchor Activity—A task or activity that a student automatically moves to upon completion of other assigned work.

Cluster Grouping—Flexible grouping and regrouping of students within a classroom to accommodate different instructional needs at different times and/or for different subject or content, different readiness levels, interests, or learning profiles.

Compacting—Modifying or streamlining content, process, or product in order to eliminate repetition of previously mastered material.

Contracting—Students contract for grades and/or choose from a variety of available project/product options.

Cooperative Learning—Students work with other students in groups to achieve a specific goal or purpose. Each group member has a particular, predetermined role in helping the group reach its goal.

Exit Cards—Teacher distributes index cards to students a few minutes before the end of class. Students respond quickly to a specific prompt such as “What’s the most important thing you learned today?” Exit cards provide a quick and easy method of assessing understanding.

Flexible Grouping—Purposeful reordering of students into a variety of different groups in a short amount of time in order to ensure that all students work with a number of different students on a regular basis. Criteria for grouping—readiness, interest, learning profile, activity or task, content—will vary regularly as well.

Interest Centers/Groups—Interest centers (often used with younger learners) and groups (often used with older learners) allow students choice in an area or areas of study.

Independent Study Projects—A student or small group of students pursues an area of interest related to a specific topic, curricular area, or individual area of interest.

Literature Circles—Small groups of students read and/or study different books with varying degrees of difficulty and/or focusing on a variety of topics of interest.

Product/Project Options—Students choose from a variety of options the way that they will provide evidence of learning. These options allow students to utilize their individual strengths and interests.

Pyramid Activities—Any activity that begins with students working individually, progresses through pairs, groups of four, etc., until ending with the whole-class group. This is a good way to review material or to practice test-taking strategies. Students may begin by individually recording what they know and then add to or change their responses as they collaborate with other students.

Questioning Strategies—Different types of questions are employed before, during, and after an activity, a lesson, or a unit of instruction to engage and challenge students to demonstrate their understanding from the knowledge level to the evaluation level. These questions allow students to clarify their thinking, increase their knowledge, and deepen their understanding.

RAFT Activities—Students select a Role, Audience, Format, and Topic for a particular task. The task vary but may include writing, oral presentations, skits, review activities, etc.

Reader's Workshop—This student-centered, instructional model for “real reading” uses authentic literature and allows students to self-select books. Students read at their own pace, reflect on what they read, and talk about their reading with others.

Reading Buddies—One name for peer reading partners, pairs of students who assist each other in reading for comprehension. They may take turns: one reads aloud and the other summarizing OR one reads aloud while the other formulates questions about that reading, etc.

Scaffolding—This refers to any support system that enables students to succeed with tasks they find genuinely challenging.

Subject/Content Acceleration—A student or group of students moves to a higher level of at an earlier time or age than the other students.

Thinking Maps—Visual representations of ideas that allow students to “unpack” their thinking and organize ideas in a visual format rather than solely in sentences or paragraphs.

Tiered Assignments—Teachers adjust the degree of difficulty for a particular assignment or task in order to meet the needs of students with varying levels of readiness, varying interests, and/or varying learner profiles.

Writer's Workshop—This student-centered, instructional model for “real writing” uses authentic assignments that allow students to participate in differentiated activities while participating in all stages of the writing process. Students spend time on self-selected writing activities.



Appendix

The following documents are

- Duplicates of the Underlying Assumptions handout and True/False Quiz found in the Facilitator's Guide.
- Accommodations for ELL
- Differentiation Menu
- Student-Created Products
- Teacher as.... Metaphor Graphics
- Assignment for Day 6
- Permission forms
- Strategies for Differentiation
- Product Ideas for Reviewing and Reporting

Some Underlying Assumptions of Differentiated Instruction

Read each assumption and assess your own "way of thinking about teaching" by marking the star if this assumption is implicit in your practice throughout the unit, the smiley face if you've taken this assumption into consideration in some way for this unit and the question mark if you need to think about your practice in terms of this assumption.

The Underlying Assumption	☆	☺	?
1. I have planned this unit to accommodate multiple and varied learning needs (social as well as cognitive), rather than attempting to accommodate them after student frustration or failure.			
2. I work to create and maintain a classroom community where students feel safe and valued as they are; at the same time I support each student in order to maximizing his or her potential.			
3. I interact with each student with positive regard and positive expectations.			
4. I recognize every student has both talents and areas of need, and I emphasize the student's strengths rather than accentuating labels, deficits, or differences. At the same time, I do not call attention to the differentiation, but rather I help students appreciate varied ways in which all of them can find personal success with important goals.			
5. I use multiple and alternative forms of assessment at all stages of student learning in this unit in order to uncover and address a full range of learning needs and strengths.			
6. I gather and employ knowledge and information about my students in order to identify and address their varied readiness levels, interests, and learning profiles during this unit.			
7. I find ways to provide access for all students to meaningful and powerful ideas, information, and skills in this unit rather than reducing the standards, watering down the curriculum, or assigning busy work.			
8. I use multiple methods in this unit to engage students in active learning. Although I may employ whole-class instruction, I know that differentiation does not take place during whole class instruction.			
9. I work to develop classroom management skills that allow 1) multiple tasks to proceed smoothly in the classroom, 2) students to take increasing responsibility for their learning, and 3) the time to monitor student activity and coach for student growth and quality work.			
10. I accept responsibility for successful teaching and learning of each student in the class while working collaboratively with specialists to ensure success of individuals and the class as a whole.			

Based on the work of Stephanie Corrigan, Utah Valley State College. Adapted from "The Facilitator's Guide," *At Work in the Differentiated Classroom*, Alexandria: ASCD, 2001, 57-58.

What Does Differentiation Look Like: A True/False Quiz

Directions: Mark the item T if it is TRUE for a differentiated classroom or F if it is FALSE for a differentiated classroom. After you have responded individually, compare your answers to the others in your table group. When you disagree, discuss your various points and attempt to reach consensus.

- _____ 1. Allowing all students in the class completing the same work for a unit/chapter
- _____ 2. Assessing students before a unit of instruction to determine what they already know
- _____ 3. Adjusting the **core** curriculum by content (below to above grade level)
- _____ 4. Limiting how and what is taught by teaching to the average student
- _____ 5. Providing assignments tailored for students of different levels of achievement
- _____ 6. Having high expectations for **ALL** students
- _____ 7. Providing educational experiences which extend, replace, or supplement standard curriculum
- _____ 8. Assigning more work at the same level to high achieving students
- _____ 9. Focusing on student weaknesses and ignoring student strengths
- _____ 10. Using activities that **all** students will be able to do
- _____ 11. Structuring class assignments so they require high levels of critical thinking and allow for a range of responses
- _____ 12. Giving the same kind of problems or questions and expecting more
- _____ 13. Creating more work such as extra credit work, to do when assignment is completed
- _____ 14. Having students participating in respectful work
- _____ 15. Putting students in situations where they don't know the answer- often
- _____ 16. Ensuring that students and teachers are collaborating in learning
- _____ 17. Providing free-time challenge activities
- _____ 18. Differing the pace of instruction
- _____ 19. Using capable students as tutors
- _____ 20. Using higher standards when grading
- _____ 21. Blending of whole class, group, and independent learning
- _____ 22. Using individualized instruction

Examining Differentiating Tasks

10. Is the content different?

11. If so, how?

12. Are the processes different?

13. If so, how?

14. Are the products different?

15. If so, how?

16. Is the learning environment different?

17. If so, how?

18. How might these differentiated tasks address the whys of differentiation?

- Access

- Motivation

- Efficiency

Instructional Accommodations for ELLs

Accommodations for ELLs are appropriate and effective only to the level that these match the English language learners proficiency in English, prior academic knowledge and cultural learning patterns.

- give tests orally rather than in written form
- give more time to complete assignments
- allow same-language buddy to assist
- require fewer responses to demonstrate mastery
- permit incomplete sentences in responses
- permit ungrammatically correct sentences in responses
- provide lower level text on content material
- provide video on content material
- provide text on tape
- highlight key points
- reduce number of key points that student is responsible for knowing
- give advanced organizers/study guides
- permit open book tests
- use graphic organizers
- give written instructions as well as oral
- make a written record of instruction and display it on chart paper
- take time to develop students' prior knowledge of new topics
- increase % of student talk about topic (more discussions)
- break students into small groups for discussion
- plan for group work
- use demonstrations when possible
- present model of work done well at the beginning of the assignment
- use hands-on activities when possible
- give sufficient wait time after asking questions
- adapt homework requirements to reflect stage of language development
- use performance based assessment when possible
- adapt project/assignment requirements so students can participate
- provide learning centers (language masters, books on tape, magazines for classifying and developing picture dictionaries, language based games)
- provide computer time (phonics software, *Kidspiration* graphic organizer software, internet)
- seat student near teacher or positive role models
- relate content to real life
- present tasks from easy to hard

- **reduce details needed to learn main concepts**
- **use simpler vocabulary or paraphrase**
- **provide additional examples**
- **pair verbal directions with visual clues**
- **look at students when talking**
- **use audio-visual aids frequently**
- **provide student with outline of lesson notes**
- **use peer assisted note taking**
- **use role-playing**
- **use games**
- **provide self-checking materials**
- **use different colors for worksheets**
- **use enlarged type on worksheets**
- **reduce the length or amount of work**
- **mark only correct answers**
- **do NOT write the name of a Korean student in red...it means death**
- **give short quizzes/avoid long tests**
- **allow the use of a dictionary during tests**
- **allow student to take tests until passes/emphasize mastery**

Georgia Department of Education, GPS Differentiation Menu

For students who have difficulty with writing/composing written material:

- cooperative learning groups
- word processing application
- dictation to a scribe or onto a tape
- demonstrate/role play
- oral responses, presentation, and assessments
- multi-media presentation
- graphic organizer
- extended time on timed tasks
- word prediction software
- *Co-Writer, Write Out Loud, Dragon Naturally Speaking*, or other software
- voice output computer programs
- spell check/grammar check (not allowed on standardized tests)
- task item rubrics
- teacher prepared format
- break work into manageable parts
- individual or small group test taking
- story starters
- sentence starters
- outlines
- tape recorded essays and oral presentations
- voice activated software
- portable word processor
- prewriting conference/prewriting activities
- illustrations
- K-W-L chart
- provide sample work
- debates
- proofreading checklist
- word bank/word wall
- matrix usage
- note taking assistance
- provide student with key words on essay tests
- abbreviate assignments
- adapted writing tools or other assistive technology, as appropriate

For students who have difficulty with reading/accessing written material:

- cooperative learning groups/group discussion
- extended time on timed tasks
- voice output computer programs
- talking dictionaries

- break work into manageable parts/presentation of small chunks of a passage
- individual or small group test taking
- testing with reader or scanable text readers
- books on tape/listening to recording/viewing film version of story
- text read to the student by adult or peer
- reading guides (highlighted text, summaries, etc.)
- Language Master
- tracking light or other tracking device
- colored overlays
- computer generated books
- answer “yes/no” questions for comprehension checks
- choral reading
- pre-reading summary
- electronic text (text reader)
- oral (or audio) presentation to student
- teacher introduction of vocabulary words
- paired reading
- picture cues
- illustrations to show comprehension
- *CoWriter*, *Write Out Loud*, other software
- K-W-L chart
- previewing topics to introduce vocabulary and key concepts
- listening guide to facilitate note taking
- links to prior knowledge/personal experience
- debates
- word bank/word wall
- other assistive technology, as appropriate

For students who have difficulty speaking:

- sign language interpreter/transliterators
- augmentative communication devices
- communication boards
- cooperative learning groups
- usage of other preferred means of communication
- demonstrate/play act tasks
- picture symbol program
- object symbols
- voice output computer programs
- break work into manageable parts
- provide time to respond
- ask “yes/no” questions
- indicating correct answer by pointing
- assign written rather than oral reports
- avoid situations that create pressure
- other assistive technology, as appropriate

For students who have difficulty listening:

- cooperative learning groups
- visual presentation using computer software, such as *PowerPoint* or *Inspiration*
- break work into manageable parts
- repeat, rephrase, simplify statements and instructions
- provide time to respond
- use of literal, concrete speech
- visual aids
- preferential seating
- note taking assistance (copy or notes/note-taking guides/note taker)
- have student repeat instructions
- reinforce oral instructions with written instructions
- assistive technology, as appropriate

For students who have difficulty with mobility:

- cooperative learning groups
- switch use
- touch screen
- modified keyboards
- extended time on timed tasks (or waive timed tasks)
- modified handwriting and/or grid paper
- weighted pencils and other motoric devices
- slant board or wedge
- magnets, tape, or other paper stabilizers
- stabilized materials
- break work into manageable parts
- individual or small group test taking
- provide time to respond
- page turner
- flexible schedule/scheduled rest breaks
- provide assistance in manipulating classroom and personal materials
- note taking assistance
- adaptive or special furniture
- dictation to a scribe or onto a tape
- other assistive technology, as appropriate

For students who have difficulty attending to task:

- cooperative learning groups with specific tasks assigned
- rubrics
- graphic organizers
- extended time on timed tasks
- break work into manageable parts
- individual or small group test taking
- task analysis
- task analysis graphically displayed

- proximity control
- visual, verbal, and tactile cues
- gain student's attention before delivery of information
- flexible schedule/scheduled rest breaks
- preferential seating
- note taking assistance
- provide study guides for tests
- have student repeat instructions
- regular notebook/agenda checks
- give abbreviated assignments
- set time allotments for tasks
- organizer/daily planner/homework notebook/folders
- fewer items on each page
- allow students to mark answers in workbooks and test booklets
- select optimal time of day for assessments
- provide study carrel or other quiet work space with minimal distractions
- assistive technology, as appropriate

For students who have difficulty with organizations/study skills:

- cooperative learning groups
- graphic organizers
- extended time on timed tasks
- break work into manageable parts
- individual or small group test taking
- task analysis
- task analysis graphically displayed
- organizer/daily planner/homework notebook/folders
- provide time to respond
- preferential seating
- provide sample work
- task item rubrics
- provide study guides for tests
- have student repeat instructions
- regular notebook/agenda checks
- set time allotments for task
- fewer items on each page
- provide study carrel or other quiet work space with minimal distractions
- provide books to remain at home
- establish and post daily routines
- allow students to mark answers in workbooks and test booklets
- assistive technology, as appropriate

For students who are Deaf/Hard of Hearing:

- sign language interpreter/transliterators
- amplification equipment

- sound-treated classrooms/special acoustics
- visual presentation using computer software, such as *PowerPoint* or *Inspiration*
- highlighted vocabulary
- closed captioning for viewing movies and other video presentations
- cooperative learning groups
- demonstrate/play act tasks
- voice output computer programs
- individual or small group test taking
- give short, specific verbal instructions
- story webs
- story starters
- *Write Out Loud*, *CoWriter*, or other software
- peer scribe
- note taking assistance
- provision of class notes with critical information, test questions, and highlighted vocabulary
- preferential seating
- refrain from speaking with back turned to students
- provide a work space with minimal noise
- other communication aids (assistive technology), as appropriate

For students who are Visually Impaired:

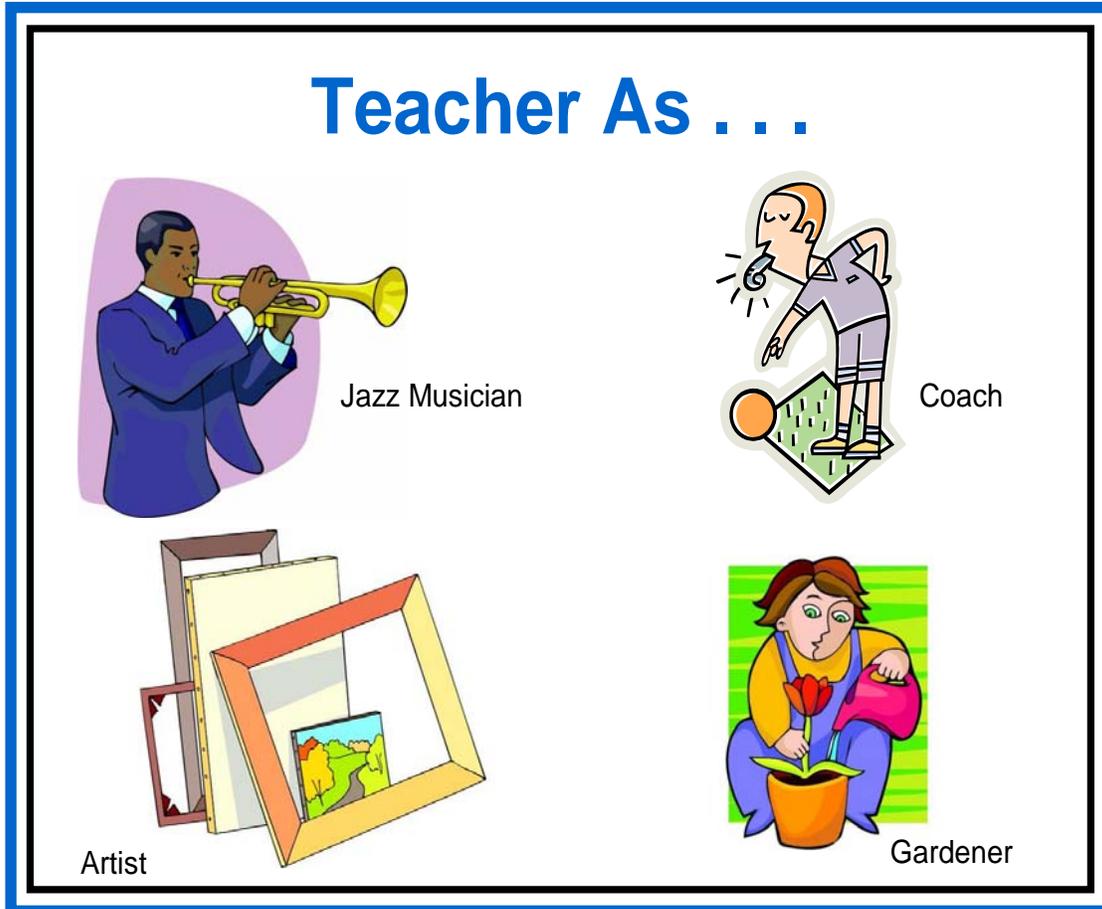
- Braille text/Braille writer
- enlarged print
- print with optical devices
- tactile symbols
- calendar system
- auditory and electronic formats
- dark or raised line paper
- cooperative learning groups
- slant board
- individual or small group test taking
- low vision devices/magnifying equipment
- screen readers/text scanners
- audio-taped directions and text (Talking Books for the Blind)
- word processing program with voice output
- electronic Braille note takers
- positioning in class away from glare
- black print handouts
- primary typewriter
- preferential seating
- usage of grid paper
- special or adapted lighting
- other alternate formats, communication aids, or assistive technology, as appropriate

Student-Created Products

<p>Verbal</p> <p>anecdote audio recording ballad book report campaign speech characterization choral reading cinquain comedy act comparison conference couplet debate description dialog discussion documentary dramatization explanation fairy tale/tall tale free verse interview jingle joke lecture lesson limerick mock interview monologue myth newscast nursery rhyme oral report panel discussion quatrain radio show radio commercial rap recorded dialogue rhyme riddle wire sculpture</p>	<p>riddle role-play song speech story telling survey</p> <p>Visual</p> <p>advertisement CD cover anagram animation annotated biblio. area graph artifact collection award banner bar graph blueprint book jacket booklet bookmark brochure bulletin board calendar cardboard relief cartoon chart checklist collage collection comic book costume cross-section crossword puzzle design diagram diorama display drawing film dialog dictionary</p>	<p>filmstrip flag flashcard flip chart flowchart game graphic greeting card hieroglyphic icon id chart illustration layout map mask mobile mosaic movie newscast outline painting pattern pennant photo essay photograph picture dictionary picture story pie chart playing card print puzzle scatter graph scenario scrap book scroll sign silk screen slide show stencil TV commercial timeline letter to editor limerick</p>	<p>transparency travel ad travel log tree chart video tape wall hanging weather map weaving web web page window shade word game word search</p> <p>Kinesthetic</p> <p>apparatus aquarium artifacts card game cardboard relief ceramics charade circuit boards clothing collage collection dance demonstration discovery center display dramatization equipment etching experiment fair food furniture gadget game hat imaginary play patent pen pal</p>	<p>improvisation instrument invention jigsaw puzzle kite laboratory learning center macramé mime mobile model origami parallel play paper mache play prototype puppet finger puppet marionette hand puppet puppet show puzzle quilt relief rubbing role play sand casting scavenger hunt service sewing cards shadow box simulation skit soap sculpture stage set stitchery terrarium tie-dye tool toy uniform vehicle weaving satire</p>
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<p><u>Written</u> advertisement autobiography book report booklet brochure business letter characterization classified ad comic book comparison computer prog. couplet creative writing critique database description</p>	editorial essay fairy tale/tall tale field manual free verse friendly letter glossary guidebook handbook handout interview script job description joke book jot list journal article label law lesson plan	list log lyrics magazine magazine article manual metaphor myth new story ending newsletter newspaper newspaper article notes novel oath outline pamphlet parody	petition plan play poem prediction profile puppet show questionnaire questions radio script rating scale rationale recipe reference report research paper review rewritten ending	science fiction scroll short story skit slogan speech story story problems survey telegram TV script term paper test travel log vocabulary list yearbook
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Teacher As . . . Graphics



Day 6 Assignment

For Day 6 for all grade levels and all content areas:

Each participant should bring a student work sample to Day 6 of training. This sample should include 4 copies of the student work, 1 copy of the assignment that generated the work including the standard(s) being assessed via this student work, and 1 copy of each of the two permission forms (teacher permission form and student/parent permission form). These forms are in the Participant's Guide for Day 6 of the training.

For Day for all grade levels and all content areas:

As you work to implement the GPS standards this first year, please record your experiences in a notebook, journal, or other calendar format. Note any tasks, strategies, assessments, etc., that worked especially well; critical comments about particular standards (e.g., gaps that need filling, elements that are problematic, terms that need defining, etc.); suggestions for teachers/instructional leaders in Phase II who will be implementing the following year; thoughts or ideas about the second year of your implementation; etc. Please use this record to provide feedback on the Georgia Performance Standards. The State Board of Education will be reviewing the GPS each year, and your comments will provide information for this review, as well as topics for discussion in training.

Permission Forms for Student Work

CONSENT AND ASSIGNMENT

This Consent and Assignment (the "Assignment") is effective when signed by the undersigned Georgia educator ("Educator") and is between Educator and the Georgia Department of Education (the "GDOE"). For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree:

1. GDOE gratefully acknowledges the contribution Educator is hereby making to GDOE of the original work product (the "Work Product") created, developed, worked on or revised by Educator in connection with GADOE's Georgia Performance Standards Project (the "Project"). So that GDOE may fully use the Work Product in any manner it sees fit, including making copies, modifications and derivative works, Educator hereby fully and unconditionally transfers, assigns and conveys to GDOE all of Educator's copyright, ownership interests and other intellectual property rights in the Work Product (collectively, the "Intellectual Property Rights"). Educator further agrees that GDOE may publicly recognize and acknowledge Educator's contribution to, and involvement in, the Project.

2. This Assignment is governed by Georgia law, can only be amended if both parties do so in writing, is assignable solely by GDOE and supersedes any contrary oral or written agreement or understanding. Educator grants to GDOE the power and authority to execute any documentation deemed necessary by GDOE to register or protect the Work Product or Intellectual Property Rights therein or complete the full transfer of the Work Product and Intellectual Property Rights to GDOE which is the purpose of this Assignment.

"Educator"

Signature:

Print

"GDOE"

Georgia Department of Education

By:

Name: _____

Title:

Date:

CONSENT AND ASSIGNMENT

This Consent and Assignment (the "Assignment") is effective when signed by the undersigned legal guardian ("Guardian") on behalf of the Guardian and minor Georgia student named below ("Student"), and is among Guardian, Student and the Georgia Department of Education (the "GDOE"). For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree:

1. GDOE gratefully acknowledges the contribution Student and Guardian are hereby making to GDOE of the original work product (the "Work Product") created, developed, worked on or revised by Student. So that GDOE may fully use the Work Product in any manner it sees fit in connection with GADOE's Georgia Performance Standards Project (the "Project"), including making copies, modifications and derivative works, Guardian on behalf of Guardian and Student (and their heirs and successors) hereby fully and unconditionally transfer, assign and convey to GDOE all of Student's and Guardian's copyright, ownership interests and other intellectual property rights in the Work Product (collectively, the "Intellectual Property Rights"). Guardian further agrees that GDOE may publicly recognize and acknowledge Student's contribution to, and involvement in, the Project.

2. This Assignment is governed by Georgia law, can only be amended if both parties do so in writing, is assignable solely by GDOE and supersedes any contrary oral or written agreement or understanding. Student grants to GDOE the power and authority to execute any documentation deemed necessary by GDOE to register or protect the Work Product or Intellectual Property Rights therein or complete the full transfer of the Work Product and Intellectual Property Rights to GDOE which is the purpose of this Assignment.

"Guardian"

"GDOE"

Signature:

Georgia Department of Education

By:

Print Guardian's Name:

Title:

Relationship to Minor:

Date:

Print Minor's Name:

Sternburg's Triachic Theory of Intelligence

Triachic teaching is a strategy that you can use to differentiate according to Sternberg's theory of "successful intelligence."

Analytical	Practical	Creative
Analyze characters when reading or listening to a story	Take things apart and fix them	Design new things
Compare and contrast points of view	Learn through hands-on activities	Come up with ideas
Criticize my own and others' work	Make and maintain friends	Use my imagination
Think clearly and analytically	Understand and respect others	Play make-believe and pretend games
Evaluate my and others' point of view	Put into practice things I learn	Think of alternative solutions
Appeal to logic Judge behavior	Resolve conflicts	Notice things people usually tend to ignore
Explain difficult problems to others	Advise my friends on their problems	Think in pictures and images
Love logical problems	Convince someone to do something	Invent (new recipes, words, games)
Make inferences and derive conclusions	Learn by interacting with others	Suppose that things were different
Sort and classify	Apply my knowledge	Think about what would have happened if certain aspects of the world were different
Think about things	Work and be with others	Compose new songs and melodies
	Adapt to new situations	Act and role playing

Assignments for Analytical Thinkers

- Show the parts of ____ and how they work.
- Explain why ____ works the way it does.
- Diagram how ____ affects ____.
- Identify the key parts of ____.
- Present a step-by-step approach to ____.

Assignments for Practical Thinkers

- Demonstrate how someone uses ____ in their life or work
- Show how we could apply ____ to solve this real life problem: ____
- Based on your own experience, explain how ____ can be used
- Here's a problem at school _____
- Using your knowledge of _____, develop a plan to address the problem.

Assignments for Creative Thinkers

- Find a new way to show _____
- Use unusual materials to explain _____
- Use humor to show _____
- Explain a new and better way to _____
- Make connections between ____ and ____ to help us understand ____
- Become a ____ and use your "new" perspective to help us think about ____

Tips for Teaching Triarchically

- Some of the time, teach analytically, helping students learn to analyze, evaluate, compare and contrast, critique and judge.
- Some of the time, teach practically, helping students learn to apply, use, utilize, contextualize, implement, and put into practice.
- Some of the time, teach creatively, helping students learn to create, invent, imagine, discover, explore and suppose.
- Much of the time, enable all students to capitalize on their strengths.
- Most of the time, enable all students to correct or compensate for their weaknesses.
- Make sure your assessments match your teaching, calling upon analytical, creative, and practical as well as memory skills.
- Value the diverse patterns of abilities in all students.

Anchor Activities

A task to which a student automatically moves when an assigned task is finished

Traits

Important—related to key knowledge, understanding and skill

Interesting—appeals to student curiosity, interest, learning preference

Allow Choice—students can select from a range of options

Clear Routines and Expectations—students know what they are to do, how to do it, how to keep records, etc.

Seldom Graded – teachers should examine the work as they move around the room. Students may turn in work for feedback. Students may get a grade for working effectively, but seldom for the work itself. The motivation is interest and/or improved achievement.

Generally, homework is not an acceptable anchor activity—and anchor activities are typically completed individually.

Beginning Anchor Activities...

- Teach one key anchor activity to the whole class very carefully. Later, it can serve as a point of departure for other anchors.
- Explain the rationale. Let students know you intend the activities to be helpful and/or interesting to them. Help them understand why it's important for them to work productively.
- Make sure directions are clear and accessible, materials readily available, and working conditions support success.
- Think about starting with one or two anchor options and expanding the options as students become proficient with the first ones.
- Monitor student effectiveness with anchors and analyze the way they are working with your students.
- Encourage your students to propose anchor options.
- Remember that anchor activities need to stem from and be part of building a positive community of learners.

Examples of Possible Activities

Reading from supplementary material

Working on final products

Journal writing

Vocabulary extension

Learning about the people behind ideas

Learning about careers in the field of the ideas

Current events reading

Designing or completing "virtual science experiments"

Developing or completing relevant graphic organizers

An idea for an improvement, invention, innovation

Research more about a topic

Write a newspaper article about a topic (who, what, when, where, how)

Cubing

Decide which part of your unit lends itself to optional activities. You can make different cubes for different interests, different levels, or different topics.

Step One: Write 6 questions that ask for information.

Use levels of Bloom, intelligence levels to design questions.

Keep one question opinion based—no right or wrong—open ended.

Step Two: Use the first cube as your “average” cube; create 2 more using one as a lower level and one as a higher level.

Remember all cubes need to cover the same type of questions, just geared to the level. Don't water down or make too busy!

Label or color key your cubes so you know which level of readiness you are addressing.

Ask another teacher to read the questions and ask if they can tell high, medium, or low. If they can't tell, adjust slightly.

Step Three: Always remember to have an easy problem on each cube and a hard one regardless of the levels.

Color code the cubes for easy identification and also if students change cubes for questions.

Decide on the rules: Will the students be asked to do all 6 sides? Roll and do any 4 sides? Do any two questions on each of the 3 cubes.

Places to get questions: old quizzes, worksheets, textbook study problems, student generated questions

Describe it: Look at the subject closely (perhaps with your senses as well as your mind).

Compare it: What is it similar to? What is it different from?

Associate it: What does it make you think of? What comes to your mind when you think of it? Perhaps people? Places? Things? Feelings? Let your mind go and see what feelings you have for the subject.

Analyze it: Tell how it is made. What are its traits and attributes?

Apply it: Tell what you can do with it. How can it be used?

Argue for it or against it: Take a stand. Use any kind of reasoning you want—logical, silly, anywhere in between.

Ideas for Cubing:

Arrange ___ into a 3-D collage to show ____

Make a body sculpture to show ____

Create a dance to show ____

Do a mime to help us understand

Present an interior monologue with dramatic movement that ____

Build/construct a representation of ____

Make a living mobile that shows and balances the elements of ____

Create authentic sound effects to accompany a reading of ____

Show the principle of ____ with a rhythm pattern you create.

Explain how that works.

Interest Based Activity**Sample Fourth Grade—Weather**

S4E3. b. Identify how clouds are formed.

S4E4. c. Use observations and records of weather conditions to predict weather patterns throughout the year.

Choose your career and complete the task.

Meteorologist:

You are a meteorologist working for Channel 29 News. The show will “air” in 10 minutes with the weekend’s forecast, but all the equipment is failing. Look out your “windows” and use the clouds to predict the weather forecast for the local community. You can either (choose one)

- write your script for the news show explaining your prediction and your reasons for the prediction,
- create a poster or prop for the news show that shows the audience what you think the weather will do and why,
- role-play the part of the meteorologist and verbally present your forecast predictions to the audience.

Military Officer/General:

You are an officer, general, or soldier in the United States Army. Your troops need to finish their training this weekend because they have been assigned to a search and rescue mission. In order to finish their training, they must successfully complete their last two jumps from a plane. The pilot needs to be booked and the supplies prepared. Look through your “windows” and use your knowledge of clouds to decide which day would be best to jump.

You can either (choose one)

- Write a letter to the pilot to let him know which day and why,
- create a poster to inform the troops which day and why,
- role-play verbally telling the troops which day and why.

Athletic Director/Coach:

You are working for one of the Georgia Universities as a director, coach, or player. The championship game is this Saturday. If you win, it will mean big money for the school. You have a great chance of winning because the star quarterback has recovered and is back in the game. However, if it rains, he has a greater chance of slipping and injuring himself again, which would knock him out for the rest of the game and next season too. The coach needs to turn in his roster for the starting line up. Should he risk starting the star quarterback this Saturday? He really wants to play because he doesn't want to disappoint his fans and he heard there will be NFL talent scouts there, but he doesn't want to take the risk of being injured either. Looking through your “windows” and using your knowledge of clouds, decide whether the star quarterback should play or not.

You can either (choose one)

- Write a note from star quarterback to the coach telling whether he wants to start or not and why,
- Create a poster to the fans explaining whether he will play or not and why,
- Role-play a conversation between the star quarterback and the coach trying to make the decision and their reasoning.

Learning Centers

A learning center is a classroom area that contains a collection of activities or materials designed to teach, reinforce, or extend a particular skill or concept.

An interest center is designed to motivate students' exploration of topics in which they have a particular interest.

Possible Center Activities

Read	Solve	Deduce	Label
Phone	Start	Theorize	Compare
Make	Construct	Rate	Measure
Write	Research	Rate	Identify
Build	Criticize	Act out	Editorialize
Imagine	Advertise	Discover	Find out
Hypothesize	Experiment	Chart	Design
Develop	Improve	Survey	Invent
Explain	Interview	Predict	Refute
Conduct	Shadow	Observe	Question
Devise	Visit	Demonstrate	Talk
Arrange	Create	Plan	Tell
Investigate	Brainstorm	Measure	Convince
Use	Analyze	Graph	Study
Substitute	Evaluate	List	Illustrate
Rearrange	Match	Combine	Adapt
Collect	Describe	Map	Listen

Possible Products

Map	Lecture	Book list	Model
Diagram	Tour	Puzzle	Editorial
Sculpture	Printing	Costume	Placement
Discussion	Blueprint	Catalogue	Dialogue
Demonstration	Newspaper	Scrapbook	Lecture
Poem	Questionnaire	Flag	Graph
Profile	Museum	Advertisement	Computer program
Chart	Calendar	Coloring book	Song
Play	Game	Research Project	TV Show
Dance	Dictionary	Film	Collection
Campaign	Trial	Machine	Book
Cassette	Mural	Award	Recipe
Quiz Show	Model	Timeline	Toy
Banner	Article	Diary	Poster
Brochure	Magazine	Photographs	Terrarium
Debate	Petition drive	Teaching lesson	Prototype
Flow Chart	Speech	Club	Test
Puppet Show	Cartoon	Biography	Review

Learning Contracts

Contracts take a number of forms that begin with an agreement between student and teacher. The teacher grants certain freedoms and choices about how a student will complete tasks, and the student agrees to use the freedoms appropriately in designing and completing work according to specifications.

A learning contract has the following components:

1. A skills component
 - Focus is on skills-based tasks.
 - Assignments are based on pre-assessment of students' readiness.
 - Students work at their own level and pace.
2. A content component
 - Focus is on applying, extending, or enriching key content (ideas, understandings)
 - Requires sense making and production
 - Assignment is based on readiness or interest.
3. A time-line
 - Teacher sets completion date and check-in requirements
 - Students select order of work (except for required meetings and homework).
4. The agreement
 - The teacher agrees to let students have freedom to plan their time.
 - Students agree to use the time responsibly.
 - Guidelines for working are spelled out.
 - Consequences for ineffective use of freedom are delineated.
 - Signatures of the teacher, student and parent (if appropriate) are placed on the agreement.

Sample Fifth Grade—Volcanoes

S5E1a. Identify surface features caused by constructive processes.

- Deposition (Deltas, sand dunes, etc.) Volcanoes
- Earthquakes Faults

S5E1b. Identify and find examples of surface features caused by destructive forces.

- Erosion (water—rivers and oceans, wind) Earthquake
- Weathering Volcano
- Impact of organisms

Learning Contract Task

- Complete research for an article on why volcanoes are where they are for our science newspaper.
- Write the article.
- Have the class editor review it with you.
- Revise as needed.

Special Instructions

Watch your punctuation and spelling! Don't let them hurt your great skill at organizing ideas. Remember to complete the steps in the task by next Friday. Bring it to our conference so you can read it to me and tell me about the process you used.

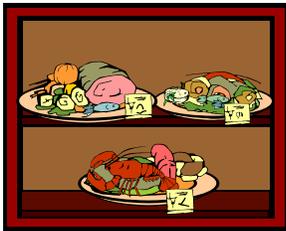
Menu Planner for (Name _____)

Appetizers



Something I can always be working on

Main Course



Required

Soups/Salads



Homework Assignments

Desserts



Things I can do to challenge myself

RAFT

RAFT is an acronym that stands for

Role of the writer-- What is the writer's role: reporter, observer, eyewitness?

Audience-- Who will be reading this writing: the teacher, other students, a parent, people in the community, an editor?

Format-- What is the best way to present this writing: in a letter, an article, a report, a poem?

Topic—Who or what is the subject of this writing: a famous mathematician, a prehistoric cave dweller, a reaction to a specific event?

Sample Third Grade—Pollution

S3L2. a. Explain the effects of pollution (such as littering) to the habitats of plants and animals.

GROUP ONE

Choose one:

Role	Audience	Format	Topic
A sick fish living in a river	Companies who operate factories on rivers	A sign to be posted on the river bank reminding companies to take care of rivers so that fish, birds, and other animals will have a place to live	I'm all choked up!
A leaf	The sun	A love-letter	You light up my life!

GROUP TWO

Choose one:

Role	Audience	Format	Topic
A worried honey bee	The queen bee	A letter	How will we make honey without flowers?
A bird	A forest of trees	An editorial	I'll be homeless with all this pollution.

GROUP THREE

Choose one:

Role	Audience	Format	Topic
A farmer	Employers who are hiring	A newspaper ad	I need a job! With so much pollution, I can no longer grow any crops.
Young citizen of planet Earth	Current adult citizens of planet Earth	A letter	The effect of water and air pollution on my future.

Sample Third Grade—Environment

S3L2. b. Identify ways to protect the environment.

- Conservation of resources
- Recycling of materials

Role	Audience	Format	Topic
The Earth	Aliens who might want to live on earth	A written set of rules with reasons	What you need to know and do if you want to live here
An endangered animal	Humans	A poster with an exhibit card to explain it	Why I need you and you can help save me
A natural resource	Our class	A speech	What people need to know about using us well and why that matters anyhow

Sample Third Grade—Plants

S3L1. b. Identify features of green plants that allow them to live and thrive in different regions of Georgia.

Role	Audience	Format	Topic
Plant parts	Plant needs	Picture	We're made for each other!
Roots	Stem, leaf, flower, seeds	Letter	You'd be lost without me!
Flower	Stem, leaf, roots, seeds	Ad	I'm more than just a pretty face!
Seeds	Flower, leaf, stem, roots	Song or poem	Here's where you got your start!
Stem	Flower, leaf, seeds, roots	Chart	Why you can't do without me!
Leaf	Stem, seeds, flower, roots	2 Riddles	Why I'm important to you!

Sample Fourth Grade—Astronomy

S4E1. a. Recognize the physical attributes of stars in the night sky such as number, size, color and patterns.

S4E1. b. Compare the similarities and differences of planets to the stars in appearance, position, and number in the night sky.

Directions: For this assignment you and your partners will choose one of the following. You will work with your partners to create a story that follows the topic and format. All topics can be found in your textbook but a minimum of two other sources is required. Choose your assignments wisely and be very creative. Students will also be responsible for presenting their assignments to the class in a 3-5 minute presentation.

Role	Audience	Format	Topic
Pluto	Other planets	Position	Why should I be a planet or moon?
Earth	Sun and other planets	Talk show	No I am the Center of the solar system.
A planet	Protoplanets	Motivational speaker	You too can be a strong, independent planet.
Sun Tour Guide	Sun tourists	Tour guide dialogue	Add some heat to your life.
Supergiant star	Younger star	Dialogue	A look back at my life
Moon	Astronauts	Advice column	What to expect with your visit

RAFT Rubric

	4	3	2	1
Accuracy	Information, details in RAFT always accurate and properly reflects information, ideas and themes related to the subject	The information you provide in RAFT is accurate but could use more support	The information you provide in your RAFT has some inaccuracies or omissions	The information you provide in your RAFT is incomplete and/or inaccurate
Perspective	RAFT maintains clear, consistent point of view, tone and ideas relevant to role played; ideas and information always tied to role and audience	You explain how your character would feel about the event(s).	You show little insight into how your character would feel or act during the event(s).	You do not accurately develop your characters thoughts or reactions to the event(s).

Think Dots – Kay Brimijoin, Chittenden South Supervisory Union, Vermont

After a conceptual unit has been presented and students are familiar with the ideas and associated skills, "Think DOTS" is an excellent activity for students to construct meaning for themselves about the concept they are studying. The instructor first defines readiness levels, interests, or learning styles in the class, using on-going assessment.

Each student is given a set of activity cards on a ring, a die, and an activity sheet. Each student rolls the die and completes the activity on the card that corresponds to the dots thrown on the die. Each student then completes the activity on the activity sheet.

Materials

8 1/2 X 11 inch paper	Hole punch	Metal or plastic rings
Dice	Scissors	Markers or dots
Laminating materials		

Construction

1. For each readiness level, six activities should be created.
2. On an 8 1/2 X 11 inch page divided into six sections. (This can be done easily on the computer by creating a 2 X 3 cell table and saving it as a template.), the activities should be written or typed in each section.
3. On the back of each page, dots corresponding to the dots on the faces of a die should be either drawn or affixed. (You can use adhesive dots.) on each of the six sections of the page.
4. The pages should be laminated for durability.
5. Then each page should be cut into the six sections.
6. Use a hole punch to make holes in one corner or in the top of each activity card.
7. Use a metal or plastic ring to hold each set of six cards together.
8. Create an Activity Sheet to correspond to the lesson for easy recording and management.

Suggestions

- Use colored paper and/or colored dots to indicate different readiness levels, interests or learning styles.
- Have students work in pairs.
- Let students choose which activities—for example: roll the die and choose any three; create complex activities and have students choose just one to work on over a number of days.
- After students have worked on activity cards individually, have them come together in groups by levels, interest, or learning style to synthesis.

Application

- Use ThinkDOTS to lead students into deeper exploration of a concept.
- Use ThinkDOTS for review before assessment.
- Use ThinkDOTS as an assessment.

Sample Fifth Grade—Matter**S5P2. Students will explain the difference between a physical change and a chemical change.**

- a. Investigate physical changes by separating mixtures and manipulating (cutting, tearing, folding) paper to demonstrate examples of physical change.
- c. Investigate the properties of a substance before, during, and after a chemical reaction to find evidence of change.

Suppose you were given some sugar cubes, a grinder, some water, a pan, and a hot plate. What physical and chemical changes could you make in the sugar?	How are physical and chemical properties different? Why?
There are 3 jars in the front of the room. Each has a substance with a strong odor. One is a solid, one is a liquid and one is a gas. Which odor would students in the back of the room smell first? Why?	Name three types of physical changes. Create a list with at least two examples of each that are different.
Brainstorm a list of 10 mixtures. Tell what each mixture has in it and how you could separate the mixture.	Choose an example of a chemical reaction. Explain how you know it is a chemical reaction by describing what materials you begin with, what happens when you combine them, and what the product is like.

Generic

Describe	Apply	Question
Argue for or against	Satirize	Model

Sample Fourth Grade—Planets

S4E1. Students will compare and contrast the physical attributes of stars, star patterns, and planets.

- b. Compare the similarities and differences of planets to the stars in appearance, position, and number in the night sky.

S4E2. Students will model the position and motion of the earth in the solar system and will explain the role of relative position and motion in determining sequence of the phases of the moon.

- d. Demonstrate the relative size and order from the sun of the planets in the solar system.

Build a model of the solar system and label its parts. Show why it is a system.	Create an illustrated glossary for a book about how the objects in our solar system move in space and are related to one another. Use the key vocabulary from our space study. Be sure to check your spelling.
You are an astronomer and have discovered another planet in our solar system. Describe the planet's location and attributes. Draw a picture and name your planet.	Draw and label a map of our solar system to scale.
You are an intergalactic travel agent. Create a travel brochure for our solar system. Be sure to include important information about these destinations.	If you were an astronomer, predict what your job would be like during the next 10 years. What might you discover/

Think Tac Toe

This plays off the game of Tic Tac Toe. It is a grid that has nine cells. The number of rows and cells can of course be adjusted.

It is important that no matter which choices students make, they must work on the knowledge and skills key to the understanding of the concept.

This assessment can be used with all grades and will all subjects. The idea is for students individually or in groups to choose three projects to do. The top line is simple, the middle line is a bit more difficult and the bottom line is composed of projects that would take several days to complete. Students can select any of the three columns (which would include on project from each level), or they could choose either diagonal. Teachers may decide to assign particular projects to the groups.

A well designed grid allows for differentiation by readiness, interest, and/or learning styles. Students must complete at least three squares, horizontal, vertical, or diagonal so they reach different levels.

Sample: Third Grade

S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.

- a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.

Create a poster supporting the protection of a non-domestic animal.	Make a collection of nursery rhymes or poems about a wild animal.	Read <u>Brother Eagle, Sister Sky</u> , and find other articles regarding the effect of "civilization" on habitats.
Predict what would happen to the habitat if one kind of wild animals became extinct.	Prepare a diorama of a habitat and tape a discussion of the animals in the diorama.	Write an interview with an animal and ask about where it lives and why it lives there.
Do a comic strip panel of an animal on vacation in a different region from where it normally lives. What did it have to pack in its suitcase?	Choose an animal that can be easily observed at home. Carefully watch 5-10 minutes and keep a record of the animal's movements.	Investigate and report on the effect of climate on an animal.

Sample: Fourth Grade

S4L2. Students will identify factors that affect the survival or extinction of organisms such as adaptation, variation of behaviors (hibernation) and external features (camouflage and protection).

- a. Identify external features of organisms that allow them to survive or reproduce better than organisms that do not have these features. (e.g. camouflage, use of hibernation, protection, etc.)

<p>Choose 3 animals from the Arctic that have adaptations to the cold weather. Label some of those physical traits.</p>	<p>Read and find the coldest average temperature and the warmest average temperature of the Arctic. Show them on a graph with warmest in red and coldest in blue.</p>	<p>http://www.gp.com/educationalinnature/index.html</p> <p>Use this website to identify and compare tracks, as well as bird beaks and bird feet. Explain what kind of feet animals in the arctic need to survive.</p>
<p>Write 5 questions you would like to know about reindeer and how they live in the Arctic cold. Research to answer your questions.</p>	<p>Create a matching quiz for a friend. List 10 Arctic animals on one side of the page. List adaptations and characteristics of each on the other side of the page. Quiz a friend to see if they know about these animals and their adaptations.</p>	<p>Choose 4 Arctic land animals and find pictures of them. Make a brochure or graphic organizer explaining the physical traits they each have in order to adapt to the cold Arctic weather.</p>
<p>Write a paragraph about how animals survive in extreme cold conditions. Use a map to locate some places that have these difficult living conditions.</p>	<p>Find pictures of 4 Arctic birds and label some of the physical traits they each have in order to adapt to the Arctic environment.</p>	<p>Research Arctic plants such as lichen, moss, and Arctic willows. Explain how these plants are adapted to live in Arctic conditions.</p>

S4P2. Students will demonstrate how sound is produced by vibrating objects and how sound can be varied by changing the rate of vibration.

- a. Investigate how sound is produced.
- b. Recognize the conditions that cause pitch to vary.

<p>Use any one of the classroom CD's. Close your eyes and visualize what you are hearing. Use pastels to create a picture of what you see. Art Smart</p>	<p>In your journal, made a list of things you might hear on your way home from school. OR Describe what your life would be like to live in a world without sound. Me Smart</p>	<p>Work with a partner to make a scale using glasses of water. Play a simple tune on the glasses by tapping them with a pencil. People Smart</p>
<p>Use a triangle. Tap the triangle in different places. Use a stopwatch to time how long the sound lasts. Record your findings. Math Smart</p>	<p>Read two books about sound. Record at least 5 things that you found out. Reading Smart</p>	<p>Using a paragraph from a story, create sound effects to go along with the text. Body Smart</p>
<p>Go on a nature walk. Listen to and record the sounds that you hear. Nature Smart</p>	<p>Create an acrostic poem from any of the words that we have explored that have to do with sound. Word Smart</p>	<p>Use a xylophone to create a short tune. Explain how the lengths of the bars determine the pitch of the sounds. Music Smart</p>

S4E2. Students will model the position and motion of the earth in the solar system and will explain the role of relative position and motion in determining sequence of the phases of the moon.

- a. Explain the day/night cycle of the earth using a model.
- c. Demonstrate the revolution of the earth around the sun and the earth's tilt to explain the seasonal changes.

Each student must pick one square from each horizontal row and use the two together.

Create one	Paint a picture that shows how the rotation and revolution of the Earth works to create day and night and seasons.	Use the computer to make a drawing that shows how the rotation and revolution of the Earth works to create day and night and seasons.	Construct a model that shows how the rotation and revolution of the Earth works to create day and night and seasons.	Create a book or puppet show that shows how the rotation and revolution of the Earth works
Pick a way to explain	Make labels for the sun, Earth, day, night, orbit to attach or use with your creation. Be ready to explain orally	Write sentences that identify and explain each part of your drawing or model and how each part works.	Write a story that explains the Earth's rotation, revolution, day and night, and seasons.	Write a poem that explains the Earth's rotation, revolution, day and night and seasons.

Sample: Fifth Grade

S5L1b. Demonstrate how plants are sorted into groups.

Draw or sketch a picture of plants you see around you. Art Smart	In your journal, write about plants in your world. Me Smart	Interview someone in the class about plants they have at home and how they are used (food, yard, decoration, etc.) People Smart
Plan a garden using area and perimeter as well as geometric shapes Math Smart	Read three books about plants. Do a storyboard panel to show what you found out. Reading Smart	Pretend you are a plant. How are you like a person? How are you different? Do a skit for someone. Body Smart
Gather 12 different kinds of leaves. Put them into groups and explain the rules you used to sort them. Nature Smart	Create a picture dictionary using words about sorting plants such as deciduous, leaf, needle, evergreen, vascular, nonvascular. Word Smart	Create a poem or rhyme that explains how to group plants. Music Smart

Tiered Assignments

Guidelines

- Be sure the task is focused on a key concept or generalization essential to the study.
- Use a variety of resource materials at differing levels of complexity and associated with different learning modes.
- Adjust the task by complexity, abstractness, number of steps, concreteness, and independence to ensure appropriate challenge.
- Be certain there are clear criteria for quality and success.
- Design a respectful activity that is just above the level of the learner. No student should look at the task and say, "I guess I'm in the dumb group."

Sample—Fifth Grade

S5P2. Students will explain the difference between a physical change and a chemical change.

- c. Investigate the properties of a substance before, during, and after a chemical reaction to find evidence of change.

Whole Class:

- Relate chemical changes to physical changes—how are they similar, how are they different.
- Discuss characteristics of chemical changes.
- Students tell about chemical changes that happen in our daily lives.
 - Cooking
 - Rusting (on bicycles and grills)
 - Oxidation of fruit (browning of apples and bananas),

Level 1 Make a mural using cut-out pictures and/or illustrations of chemical changes. Include at least one example of a before and after sequence and tell how you know there was a chemical change.

Level 2 Complete a Venn diagram comparing physical/chemical changes in matter. Tell how you can tell there is a chemical change in something.

Level 3 Make an illustrated flow chart to show the steps that occur during a chemical change such as adding baking soda to vinegar. Tell how you can tell there is a chemical change in something.

Sample—Fourth Grade

S4E3. Students will differentiate between the states of water and how they relate to the water cycle and weather.

- c. Investigate how clouds are formed.
- e. Investigate different forms of precipitation and sky conditions (rain, snow, sleet, hail, clouds, and fog).

Level 1 Match type of cloud in a picture with its name and explain the type of weather associated with the cloud type.

Level 2 Correctly identify different types of clouds from given pictures. Explain how they are different from each other and explain the type of weather associated with each cloud.

Level 3 Correctly label basic cloud types in given pictures, then using understanding of those types, identify clouds in given pictures that seem to be made up of more than one type. Explain the type of weather associated with the cloud type and why you think this.

Bingo!

Product:

Students in your group must choose activities that would give you a Bingo, such as across, up/down, or diagonally. The idea is that students are using different strategies to accomplish the goal in multiple formats.

This can be used to reinforce definitions, new vocabulary, math problems, even long thought out questions.

Letter to a Friend	Cereal Box	Picture Book	Greeting Card	Short Story
Rules for a Game	Advertisement	Recipe	Model with labels	Puzzle or Riddle
Skit or Scene	Little Book	FREE BINGO SPACE	Poster	Newspaper Article
Power Point slides	Letter to the Editor	Song Lyrics	Interview	Journal
Poem	Instructions	Vision into the Future	Letter to the Teacher	Oral Report

Another option is to call out clues of words, concepts or phrases for review. Students will find the correct answer and cover the space. OR Have students draw, describe, or give example of words across, up/down, or diagonally. Pair with someone who used a different strategy and share.

Habitat	Shelter	Animals	Plants	Fungi
Pollution	Piedmont	Ocean	Swamp	Mountain
Plain	Sand	Free Bingo Space	Soil	Loam
Rock	Clay	Pond	Water	Air
Food	Coast	Rivers	Conservation	Lakes

Blind Sequencing

Participants must correctly sequence using verbal descriptions only.

S4E2. Students will model the position and motion of the earth in the solar system and will explain the role of relative position and motion in determining sequence of the phases of the moon.

b. Explain the sequence of the phases of the moon.

Moon Phases

1. Each participant is assigned a number in the team.
2. All moon phase cards are dealt to the members of the team.
3. Team member #1 begins by describing the moon phase on her/his card and places the card on the table FACE DOWN.
4. Team member #2 describes the moon phase on her/his card and decides the correct spot in the sequence FACE DOWN.
5. Continue the process until the team places the moon phase cards FACE DOWN in the correct sequence.

Other ideas for sequencing: planets, water cycle, and food chains.

Walking Into and Through a Picture

Show students a picture of a habitat with a variety of organism. Have students study the picture to answer these questions.

1. Looking down into the picture, what do you see?
2. Jumping into the picture, what does it feel like?
3. Can you identify any figures in the picture?
4. If those figures could speak, what would they be saying?
5. Moving around inside the picture, what is the temperature like?
6. Do you feel comfortable in your surroundings?
7. If you could taste the scene, what would it taste like?
8. Looking around the background, do you notice anything you missed?
9. If you could touch particular parts of the scene, what would they feel like?
10. Does the picture remind you of a place you have been?
11. What is your emotional response to this picture?

http://www.rcs.k12.tn.us/rc/departments/ITS/Teacher_Resources

Product Ideas for Reviewing and Reporting

Flip Books

1. Give each student three sheets of paper.
2. With a ruler, show how to place the paper so there is a 1 inch overlap on each paper.
3. Show how to fold the paper so the student will have a six page booklet.
4. Staple the top.

Little Books

1. Fold an 8 1/2" X 11" piece of paper hot dog style (lengthwise).
2. Fold paper hamburger style (widthwise) TWICE.
3. Open paper and fold in center.
4. Cut the fold to the first crease.
5. Open and fold hot dog style. (You should see a diamond-shaped tunnel.)
6. Hold ends and press toward the center.
7. Fold all pages in the same direction to make the book.
8. The book has seven total pages including a front cover, five pages, and a back page.

Magic Books

One sheet of 9 X 12 paper
One sheet of 12 X 18 paper

1. Cut 9 X 12 sheet in half lengthwise.
2. Fold the 12 X 18 sheet widthwise twice.
3. Open and fold the outside flaps back to make a "W."
4. Mark 3", 6", and 9" on center folded edge.
5. Mark 3", 6", and 9" on other crease lightly and connect the points to make a line.
6. Cut along the line from fold to crease.

Take strips out from 9 X 12 paper and weave in and out. One side is under then over and the other side is over then under.

RAFT

Standard _____

Elements _____

Role	Audience	Format	Topic

Bingo!

Standard _____

Elements _____

		FREE BINGO SPACE		

Think Tac Toe

Standard _____

Elements _____

Cube

Standard _____

Elements _____

Questions	Level One	Level Two	Level Three

Tiered Assignment

Standard _____

Elements _____

Level 1	Level 2	Level 3