When a teacher tries to teach something to the entire class at the same time, “chances are, one-third of the kids already know it; one-third will get it; and the remaining third won’t. So two-thirds of the children are wasting their time.”

Lillian Katz

How are we bridging the gap?
Reach and Teach All Children

If children do not learn the way we teach them, then we must teach them the way they learn.
By the end of this session...

- Participants will have a clear understanding of what differentiation is and is not.
- Participants will work on assessing their learning styles and will receive sample assessments that can be used as models for the rest of the school year.
- Based on assessment results, participants will make practical applications of their findings. They will differentiate instruction by grouping students more effectively.
- Participants will work on differentiated activities that can be used as models for the rest of the school year.
Differentiating Instruction ... 

Chances Are, You’re Already Doing It!
Activity 1--Take a few minutes to create a Circle Map.
Differentiating Instruction

What I know

What I do

What I understand

How do I know
Differentiated Instruction is Based on the Following Beliefs

- Students differ in their learning profiles.
- Classrooms in which students are active learners, decision makers and problem solvers are more natural and effective.
- Effective classrooms are ones in which students are not served with a “one-size-fits-all” curriculum but are active recipients of information.
- “Covering information” takes a backseat to making meaning out of important ideas.

Tomlinson, Carol Ann. How to Differentiate Instruction in Mixed-Ability Classrooms.
Differentiation is making sure the right students get the right learning tasks.
Differentiation is **NOT**

- individualized instruction for each student.
- homogeneously grouping children as ‘Bluebirds’, and ‘Buzzards’.
- chaotic.
- giving more of the same.
- expecting more of advanced learners than of ‘typical’ learners.
- expecting less of struggling learners than of ‘typical’ learners.
- a substitute for specialized services.
- new.

Jones-Riley, Deborah Ann. *Differentiated Instruction Practical Classroom Applications.*
Differentiation is

- shaking up what goes on in the classroom.
- proactively planning for students.
- more quality rather than simply more of the same thing.
- being student centered.
- evolutionary with both students and teachers as learners.
- a mixture of whole-class, group and individual instruction.
- responsive teaching rather than one size fits all.
Differentiation IS..... (continued)

- starting where kids are rather than with a ‘cookie-cutter’ approach.
- effective attention to student differences rooted in an environment of mutual respect, safety, emphasis on individual growth, and shared responsibility for learning.
- continuously raising the stakes for success for all students.
- redefining ‘fair’ as trying to make sure each child gets what they need to grow and succeed.

ONE SIZE DOES NOT FIT ALL
Differentiated Instruction Continuum

DIFFERENTIATING INSTRUCTION IS NOT A YES OR NO PROPOSITION.

It is a road along which you travel as you develop the skills for being responsive to the different learning needs in your classroom.

Not differentiated

Highly differentiated

“One-Size-Fits-All”

EVERYONE IS ON THE JOURNEY!!

Assessment
Learning Profile
Tiered Activities
Curriculum Compacting
Learning Contracts
Independent Study
Flexible Grouping
Anchor Activities
Learning Centers/Stations
Problem-Based Learning
Project-Based Learning
Lev Semyonovich Vygotsky's Zone of Proximal Development (ZPD)

- Humans learn best with moderate challenge. This means that the learning tasks must be neither too easy nor too hard, but an appropriate level to challenge growth.
- The difficulty of skills taught should be slightly above the learner’s current level of mastery. When appropriately challenged learners are most productive and most creative.
Z.P.D. in “Kid-Speak”

“It wasn’t too easy – I had to try! But it wasn’t so hard that I got frustrated or thought, ‘this is annoying!’”

~ 8th-Grade Physical Science Student~
Plan for Diverse Needs

- Learning styles, skill levels, and rates
- Special learning needs
- Language proficiency
- Background experiences and knowledge
- Interests
- Motivation
- Ability to attend
- Social and emotional development
- Various intelligences
- Levels of abstraction
- Physical needs
Activity 2-- Jigsaw Reading Components of Differentiated Instruction.
Teachers Can Differentiate

According to Students’’

Adapted from The Differentiated Classroom: Responding to the Needs of All Learners (Tomlinson, 1999).
Activity 2 Jigsaw Reading
Components of Differentiated Instruction

- Everyone: Pp. 6-7 up to Differentiating Content
- Group 1: pp. 7–8,9 Differentiating Content
- Group 2: pp. 8,10 Differentiating Process
- Group 3: pp. 8-12 Differentiating Products
- Group 4: pp. 11-14 Differentiating Affect
- Group 5: p. 14-16 Differentiating Learning Environment
Activity 2 Jigsaw Reading Components of Differentiated Instruction

- Reading Focus
  - What are the big ideas?
  - What are some examples?

- As a group,
  - Identify and list the big ideas using the chart paper provided.
  - Be ready to share your learning with others.

Time on task: 30 minutes; share out 15 minutes
Teachers Can Differentiate

Affect

Content

Process

Product

Environment

According to Students’

Readiness

Interest

Learning Profile

Adapted from *The Differentiated Classroom: Responding to the Needs of All Learners* (Tomlinson, 1999).
WHAT WE TEACH AND HOW WE GIVE STUDENTS ACCESS TO THE INFORMATION AND IDEAS THAT MATTER
Differentiating by Content

- Unit or concept compacting
- Independent contracts/individual goal setting
- Extensions
- Alternative assignments
- Vary pace of instruction
- Audio visuals/CD’s
PROCESS

HOW STUDENTS COME TO UNDERSTAND AND OWN THE KNOWLEDGE, UNDERSTANDING AND SKILLS
Differentiating by Process

- Use of higher order thinking activities
- Small group instruction
- Multiple intelligences
- Centers
- Mind-mapping, webs, outlining
- Cooperative tasks
PRODUCTS

HOW A STUDENT DEMONSTRATES WHAT HE OR SHE HAS COME TO KNOW UNDERSTAND AND DO
Differentiating by Product

- Tiered products
- MI tasks
- Graduated rubrics
- Alternative assessments
- Modified homework assignments
- Independent projects
Product Possibilities

VISUAL
Advertisement
Collage
Poster
Flow chart
Venn diagram
Painting
Map
Video
Story map
Timeline

AUDITORY
Audiotape
News broadcast
Speech
Debate
Lecture
Group discussion
Interview
Round table
discussion
Book review
Teach others

WRITTEN
Book report
Letter
Poetry
Research paper
Story
Checklist
Journal
Essay
Newsletter
Survey

KINESTHETIC
A model
Performance of a dance
or skit
Sculpture
Mobile
Diorama
Dramatization
Experiment
Pantomime
Role play
Display

“Four Square Products”, page 144. From Differentiating Instruction in a Whole-Group Setting, 3–8 © 2005 Crystal Springs Books. Used with permission from the author. All rights reserved.
What’s the Point?

- Readiness
- Interest
- Learning Profile

Growth

Motivation

Efficiency
Readiness

If tasks are a close match for their skills

Interest

If tasks ignite curiosity or passion

Learning Profile

If the assignment encourages students to work in a preferred manner
Assessment and instruction are inseparable.
Academic Assessment

Assessments include but are not limited to the following:

- NYSESLAT
- NYSAA
- Data from ARIS
- DIBELS
- Formative Assessment
- Summative Assessment
- ECLAS
- EPAL
- ELA/Math State Assessment
- Regents/ RCTs
- Predictive Assessments
- Interim Assessments
is determining student’s current performance levels.

Educators should make the work a little more challenging and provide students the support they need to succeed.
Differentiating by Readiness

- Varied texts
- Tier tasks/products
- Homework options
- Compacting
- Use of organizers
- Learning contracts
INTEREST……..

is making connections with experiences student’s already find appealing, intriguing, relevant and worthwhile.

Educators should help students connect with new information, understanding and skills to make these connections
Differentiating by Interest

- Give choices of mode of expressing learning
- Use interest based mentoring
- Give choices of tasks and products
- Set up interest centers
- Plan for enrichment clusters
- Group investigations
- Plan for Multiple Intelligence options
- Provide broad access to varied materials and technology
LEARNING PROFILE........

is assessing how students learn and engage with instruction.

Educators should help students learn in the way they learn best.
Learning Profile

- Do you learn best with noise? Quiet?
- Do you learn best around movement? Stillness?
- Are you visual/auditory/kinesthetic?
- What are your strongest Intelligences?
- Do you like lots of light? Low light?
- Do you like to work in groups? Alone? In pairs?
- Are you creative? Practical? Analytical?
Activity 3--Take a few minutes to complete the Learning strengths inventory.

http://www.ldrc.ca/projects/miinventory/mitest.html
Differentiating by Learning Profile

- Allow working alone or with peers.
- Create an environment with flexible learning spaces.
- Use part-to-whole and whole-to-part approaches.
- Vary teacher delivery of information.
- Adjust for gender/culture/language differences.
- Plan for Multiple Intelligence options.
Learning Profile

Interest inventories---
● Person-al-i-ties
● Circle graphs
● Puzzle pieces
● ‘All about me’ surveys
● Interest surveys

Learning style inventories
● Multiple Intelligence checklist
Debrief Questions

- Did your written inventory match your personal perception?
- In what way does this confirm (or not) what you already know about yourself?
- Did you learn something new about yourself?
- What does this information say about you as a learner?
- In what ways can information about learning strengths be used to develop a profile to drive instruction?
- How can data derived from learning assessments, teacher observations and learning inventories drive differentiation of instruction?
So, where do you go from here?
The Teacher’s Toolbox
Differentiated Instructional Strategies

- Adjusting Questions
- Anchoring Activities
- Cubing
- Curriculum Compacting
- Choice Boards
- Flexible Grouping
- Independent Study
- Interest Groups
Differentiated Instructional Strategies (continued)

- Jigsaw
- Learning Centers
- Learning Contract
- Literature Circles
- Multiple Intelligences
- Orbitals
- R.A.F.T *Role Audience Format Topic*
- Reading Buddies
Differentiated Instructional Strategies (continued)

- Small Group Instruction
- Tiered Assignments
- Think Tac Toe (Tic Tac Do)
- Thinking Maps
- Varied Questions
- Varied Supplementary Materials
- Varied Texts
Establish specifically what students should know using KUD

- **Know**- facts, vocabulary

- **Understand**- concepts, principles/generalizations

- **Do**- skills, activities
Know

- Facts
- Vocabulary
- Dates
- Places
- Names
- Summary
- State standards/ objectives
Examples

- Facts (Columbus came to the “New World” in 1492.)
- Vocabulary (voyage, scurvy)
- Summary (The chapter was about ....)
- Names (Pinta, Nina, Santa Maria)
Understand

- Concepts
- Sub-concepts
- Principles/Generalizations
Examples

- A person’s location shapes his or her opportunities.
- Humans resist controls by other humans.
- Power can cause those in power to resist reason.
Do

Skills
- Basic (literacy, numeracy)
- Thinking (analysis, evidence of reasoning, questioning)
- Of the Discipline (graphing, math)
- Planning (goal setting, use of time)
- Social skills
- Skills of independence
Examples

- Reading for meaning
- Interpreting maps
- Understanding multiple perspectives on a topic
- Setting and following criteria for success
- Following a timeline
- Making a contribution to the group’s success
Each time you change your method of teaching, a new group of students will become the stars!

E. Paul Torrance
The new legislation calls for a fundamental shift in our thinking about reading difficulties.

- In most cases, reading problems are not attributable to problems in the child.
- Most reading problems are due to the failure of instruction to meet the needs of the child.

Donna Scanlon, Reading Department & Child Research and Study Center of the University at Albany, September 28, 2005, Albany, NY
Covert

- Invisible
- Can’t see or hear
- Imagine…
- Think about…
- Remember…
- Picture…

- Picture it in your mind
- Rehearse it in your head
- Close your eyes how you can connect to the character
- I want everyone to think about something that we talked about today that you can use in class.
Overt

● Visual
● Observable
● Auditory

● Write…
● Underline…
● Discuss…
● Accountable Talk
● Wipe Off Board
● Gestures
● Expressions
● Post Its
● Idea on Parking Lot
Brain Compatible Teaching

“The overwhelming need for learners is for meaningfulness… we do not come to understand a subject or master a skill by sticking bits of information to each other.

Understanding a subject results from perceiving relationships. The brain is designed as a pattern detector.

Our function as educators is to provide our students with the sorts of experiences that enable them to perceive patterns that connect.”

NEURONS THAT FIRE TOGETHER
GET WIRED TOGETHER.
THAT IS WHAT A PATTERN IS!
What are Thinking Maps?

**Visual Patterns**

- Used in combinations for depth and complexity
- Based on 8 cognitive skills

**THINKING MAPS**

- Used by all teachers
- Applied in all content areas
Patterns for Thinking

Defining as Classifying as Describing as Comparing
Whole and Parts as Sequencing as Cause and Effect as Analogies

RF: Students wire …… Map with ……
<table>
<thead>
<tr>
<th>Questions from Texts, Teachers and Tests</th>
<th>Thinking Processes</th>
<th>Thinking Maps as Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are you defining this thing or idea? What is the context? What is your frame of reference?</td>
<td>DEFINING IN CONTEXT</td>
<td>Circle Map</td>
</tr>
<tr>
<td>How are you describing this thing? Which adjectives would best describe this thing?</td>
<td>DESCRIBING QUALITIES</td>
<td>Bubble Map</td>
</tr>
<tr>
<td>What are the similar and different qualities of these things? Which qualities do you value most? Why?</td>
<td>COMPARING and CONTRASTING</td>
<td>Double Bubble Map</td>
</tr>
<tr>
<td>What are the main ideas, supporting ideas, and details in this information?</td>
<td>CLASSIFYING</td>
<td>Tree Map</td>
</tr>
<tr>
<td>What are the component parts and subparts of this whole physical object?</td>
<td>PART-WHOLE</td>
<td>Brace Map</td>
</tr>
<tr>
<td>What happened? What is the sequence of events? What are the substages?</td>
<td>SEQUENCING</td>
<td>Flow Map</td>
</tr>
<tr>
<td>What are the causes and effects of this event? What might happen next?</td>
<td>CAUSE and EFFECT</td>
<td>Multi-Flow Map</td>
</tr>
<tr>
<td>What is the analogy being used? What is the guiding metaphor?</td>
<td>SEEING ANALOGIES</td>
<td>Bridge Map</td>
</tr>
</tbody>
</table>
A RAFT is...

- ...an engaging, high level strategy that encourages writing across the curriculum
- ...a way to encourage students to...
  - ...assume a role
  - ...consider their audience,
  - ...write in a particular format
  - ...examine a topic from a relevant perspective,

- All of the above can serve as motivators by giving students choice, appealing to their interests and learning profiles, and adapting to student readiness levels.

Carol Tomlinson
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?
RAFTs can…

- be differentiated in a variety of ways: readiness level, learning profile, and/or student interest.
- be created by the students or incorporate a blank row for that option.
- be used as introductory “hooks” into a unit of study.
- keep one column consistent while varying the other columns in the RAFT grid.
Know
Understand
Do

How to Differentiate:
- Tiered?
- Profile? (Differentiate Format)
- Interest? (Keep options equivalent in learning)
- Other?

<table>
<thead>
<tr>
<th>Role</th>
<th>Audience</th>
<th>Format</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Raft Activities

<table>
<thead>
<tr>
<th>Role</th>
<th>Audience</th>
<th>Format</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinosaur</td>
<td>Sun</td>
<td>Petition</td>
<td>I’m getting too cold</td>
</tr>
<tr>
<td>Bacteria</td>
<td>Sun</td>
<td>Song</td>
<td>Oh, how warm you are!</td>
</tr>
<tr>
<td><strong>Pangaea</strong></td>
<td><strong>Today’s Earth</strong></td>
<td><strong>Newscast</strong></td>
<td>I’m all broken up</td>
</tr>
<tr>
<td>Trilobite</td>
<td>Sedimentary Rock</td>
<td>Letter</td>
<td>Don’t lose track of me!</td>
</tr>
</tbody>
</table>
Think-Tac-Toe is........

- a simple way to give students alternative ways of exploring key ideas.
- typically a grid consisting of 9 boxes (can be more).
- set up so that no matter which choices the students make they must work with key ideas and use the key skills central to the topic.
Think-Tac-Toe Planning

- Decide on a major theme.
- Look at your state standards to give you a focus.
- Brainstorm as many activities as you can think of that correlate with the standards.
- Write down each idea on a post-it and place on a grid in any order.
Think-Tac-Toe Planning (continued)

- Decide how to categorize the activities utilizing the following philosophies: Multiple Intelligences, Blooms Taxonomy, Levels of Readiness, Learning Styles, etc.
- Place each post-it on the grid so that no matter which way students choose, they will be doing a variety of activities to support the understandings.
- Create an assessment rubric with the criteria corresponding to the number of each activity.
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Lon Po Po and Little Red Riding Hood.</td>
<td>Complete a Double Bubble to show similarities and differences, Jack took the giant’s hen, gold, and harp. Was he a thief? Defend your point of view using supporting evidence. Choose a story to retell from the point of view of the villain.</td>
</tr>
<tr>
<td>Develop a timeline of events for the story of Snow White</td>
<td><strong>STUDENT CHOICE</strong> On your world map, place a color sticker to point to the settings of the stories you have read.</td>
</tr>
<tr>
<td>Read the 3 Little Pigs.</td>
<td>Write a persuasive speech for the Big Pig to convince the wolf to leave them alone. Create a simple machine that the wolf could use to get to the 3 little pigs. Read 10 fairy tales and check off the elements seen in each one.</td>
</tr>
<tr>
<td>Design an invitation card for a party.</td>
<td>List the food items you want to buy.</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Write about how you feel about the party afterwards.</td>
<td><strong>STUDENT CHOICE</strong></td>
</tr>
<tr>
<td>Design a menu for the party.</td>
<td>List the people you would like to invite and provide a reason.</td>
</tr>
</tbody>
</table>
Activity 4: Take about 30 minutes to complete an DI classroom activity

- As a group choose an activity that can be used in your classroom from your current curriculum or use language learning theme.
- Use the chart paper provided to create a representation of the activity your group choose.
- Be ready to share your learning with others.
References


Heacox, Diane (2002). *Differentiating Instruction in the Regular Classroom: How to Reach and Teach all Learners, Grades 3-12*. Free Spirit


