Best Practices for Differentiated Learning

One size doesn’t fit ALL

Mico CARE Centre 7TH Biennial Conference

Presenters: Yanique T. Matthews, Ed.S/NCSP
            Donna-Neisha Steele, M.Ed
Think & Share:
Differentiated Instruction

What does the term mean to you?

Why is it important?
Principles of Differentiated Instruction
Differentiated Instruction

- An instructional process

- It involves the use of **varied approaches** by the teacher to highlight the **content, process, product** and the **environment**.

  (Carol-Ann Tomlinson, 2001)
Differentiated Instruction

- Differentiating instruction is doing what’s fair for students.

- Creation of multiple paths so that students with different:
  - Ability Levels
  - Learning Needs or Readiness
  - Cognitive Needs
  - Interests
  experience equally appropriate ways to learn.
Differentiation of Instruction is a teacher's response to learner's needs.

It is guided by general principles such as:

- Respectful Tasks
- Flexible Grouping
- Ongoing Assessment and Adjustment

Teachers Can Differentiate

According to Student's:

- Readiness
- Interests
- Learning Profile
“Differentiated Instruction is used to accommodate and better prepare students of all learning types and ability levels to succeed in his/her own classroom” (Levy, 2008.)
Benefits of Differentiated Instruction

- Student-centered
- Caters to students’ needs
- Interest and motivation levels are piqued
- Allows for modification of content, process, product and learning environment
Benefits of Differentiated Instruction

- Provides an opportunity for students to realize their true potential.
- Opportunity for academic success
- Use of flexible groupings
Elements of Differentiated Instruction

- Content
- Process
- Product
- Learning Environment
Differentiating Instruction: Elements, Characteristics and Strategies

**Learning Environment**
(the context in which learning occurs)
- Safe, challenging, and collaborative community
- Access to resource-rich classrooms
- Flexible movement and use of space
- Multiple settings and environments
  - Flexible scheduling

**Product/Performance**
(the means by which students will communicate understanding)
- Open-ended tasks
- Authentic/real world solutions
- Extension, innovation, creation of new ideas and products
- Multiple forms and formats using varied techniques and materials

**Content**
(strategies for delivering content)
- Planning for differentiation
- Tiering
- Compacting
- Accelerating
- Enhancing content for depth, complexity, and novelty

**Process**
(strategies for engaged learning and sense-making)
- Flexible Grouping
- Questioning for Critical Thinking
- Problem-Based Learning
- Contracting
- Learning Centers

**Assessing the Learners’**
- readiness
- interests
- learning styles/preferences

**Learning Environment**
- Safe, challenging, and collaborative community
- Access to resource-rich classrooms
- Flexible movement and use of space
- Multiple settings and environments
  - Flexible scheduling

**Product/Performance**
- Open-ended tasks
- Authentic/real world solutions
- Extension, innovation, creation of new ideas and products
- Multiple forms and formats using varied techniques and materials

**Content**
- Planning for differentiation
- Tiering
- Compacting
- Accelerating
- Enhancing content for depth, complexity, and novelty

**Process**
- Flexible Grouping
- Questioning for Critical Thinking
- Problem-Based Learning
- Contracting
- Learning Centers

**Assessing the Learners’**
- readiness
- interests
- learning styles/preferences
Differentiation

**Content**
- ideas
- concepts
- descriptive information
- facts
- rules
- principles

**Learning Environment**
- arrangement of furniture
- color of classroom
- grouping preferences
- appropriate selection of resources
- Climate: friendly/comfortable; engaging; challenging

**Process**
- learning activities
- questions asked
- teaching methods
- thinking skills

**Product**
- projects
- essays
- written tests
- oral tests
- portfolios
- selected response test
Differentiating Content
(making the curriculum accessible)

- Resource materials at varying readability levels
- Audio and video recordings
- Highlighted vocabulary
- Charts and models
- Interest centers
- Varied manipulatives and resources
Differentiating Process
(making sense and meaning of content)

- Use leveled or tiered activities
- Interest centers
- Hands-on materials
- Vary pacing according to readiness
- Allow for working alone, in partners, triads, and small groups
- Allow choice in strategies for processing and for expressing results of processing
Differentiating Products
(showing what is known and able to be done)

- Tiered product choices
- Model, use and encourage student use of technology within products and presentations
- Provide product choices that range in choices from all multiple intelligences, options for gender, culture, and race
- Use related arts teachers to help with student products
Strategies for Differentiated Instruction
Strategies for Differentiation

Utilization of strategies across levels:

- Content
- Process
- Product
- Learning environment
Strategies to Make Differentiation Work

Tiered Instruction

- Changing the level of complexity or required readiness of a task or unit of study in order to meet the developmental needs of the students involved.
Tiering

Key Concept Or Understanding

- Those who do not know the concept
- Those with some understanding
- Those who understand the concept
Tiered Instruction

- Assignment of different tasks within the same lesson or unit.

- Tasks vary according to the students readiness, interest and learning profile.

- Content, process, product and learning environment all can be tiered.
Example:
A class has three levels of students:
• Struggling learners
• On-target learners
• Highly-competent learners

General task: Read and write an article on the Slave Trade

Lesson tailored as follow:
• Struggling students: read and make notes on topic
• On target students: write an article on the same topic
• Advanced students: prepare a debate regarding the same topic.
<table>
<thead>
<tr>
<th>What Can Be Tiered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Processes, content and products</td>
</tr>
<tr>
<td>- Assignments</td>
</tr>
<tr>
<td>- Homework</td>
</tr>
<tr>
<td>- Learning stations</td>
</tr>
<tr>
<td>- Assessments</td>
</tr>
<tr>
<td>- Writing prompts</td>
</tr>
<tr>
<td>- Anchor activities</td>
</tr>
<tr>
<td>- Materials</td>
</tr>
</tbody>
</table>
What Can We Adjust?

- Level of complexity
- Amount of structure
- Pacing
- Materials
- Concrete to abstract
- Options based on student interests
- Options based on learning styles
## Sample Tiered Assignment Template

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Lesson Topic:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understandings:</th>
<th>Skills and Concepts:</th>
<th>Content for Assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning Objectives (for all students):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

This lesson is tiered by (process, product, and assessment) according to students’ (readiness, interest, learning profile).

### Tier 1 (Below Ready):

### Tier 2 (Ready)

### Tier 3 (Beyond Ready)
Strategies to Make Differentiation Work

**Anchoring Activities**

- These are activities that a student may do at any time when they have completed their present assignment or when the teacher is busy with other students.

- They may relate to specific needs or enrichment opportunities, including problems to solve or journals to write. They could also be part of a long term project.
Strategies to Make Differentiation Work

Flexible Grouping

- This allows students to be appropriately challenged and avoids labeling a student’s readiness as a static state.

- It is important to permit movement between groups because interest changes as we move from one subject to another.
Ebb and Flow of Experiences

(Tomlinson)

Back and forth over time or course of unit

Individual
Small Group

Small Group
Individual

Whole Group
### Flexible Grouping

#### Homogenous/Ability
- Clusters students of similar abilities, level, learning style, or interest.
- Usually based on some type of pre-assessment

#### Individualized or Independent Study
- Self paced learning
- Teaches time management and responsibility
- Good for remediation or extensions

#### Heterogeneous Groups
- Different abilities, levels or Interest
- Good for promoting creative thinking.

#### Whole Class
- Efficient way to present new content
- Use for initial instruction
Strategies to Make Differentiation Work

Compacting Curriculum

- Assess a student’s knowledge and skills, and provide alternative activities for the student who has already mastered curriculum content.

- This can be achieved by pre-testing basic concepts or using performance assessment methods.

- Students demonstrating they do not require instruction move on to tiered problem solving activities while others receive instruction.
Differentiation of Content
Differentiating the Content

- Compacting
- Read/Question/Answer
- Learning Centres
- Independent Study
- Split Journals
  - (Double-Entry)
- RAFT
- Jigsaw Groups
- Texts Selections
- Enrichment Clusters
- KWLH/KWL
- Games
- Learning Logs
Flexible Grouping

- Students are part of many different groups.
- Heterogeneous or homogeneous in readiness level.
- Teachers or students can select work groups.
- Group assignments can sometimes be purposeful or random.
- Allows for tiered tasks.
The RAFT  (Role, Audience, Format and Topic)

- Information processing strategy

- Allows students to respond creatively

- Involves students assuming a given **role**, determining an **audience** and **format** in which to explore a **topic**.
## Sample RAFT (Role, Audience, Format and Topic)

<table>
<thead>
<tr>
<th>ROLE</th>
<th>AUDIENCE</th>
<th>FORM</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writer</td>
<td>Self</td>
<td>Journal</td>
<td>An issue relevant to the text or time period.</td>
</tr>
<tr>
<td>Artist</td>
<td>Government</td>
<td>Interview</td>
<td>Topic of personal interest or concern for the role or audience.</td>
</tr>
<tr>
<td>Scientist</td>
<td>Parents</td>
<td>Song lyric</td>
<td></td>
</tr>
<tr>
<td>Adventurer</td>
<td>Lion</td>
<td>Dub poems</td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>Local community</td>
<td>Comic strip</td>
<td></td>
</tr>
<tr>
<td>Reporter</td>
<td>Country</td>
<td>News/weather</td>
<td>Topic related to an essential question or prompt.</td>
</tr>
<tr>
<td>Dog</td>
<td>Teachers</td>
<td>report</td>
<td></td>
</tr>
</tbody>
</table>
What are your thoughts about the cartoon in relation to content differentiation?
Differentiation of Process
## Differentiating the Process

<table>
<thead>
<tr>
<th>Choices (Intelligences)</th>
<th>Games and Interactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiered Instructions</td>
<td>RAFTS</td>
</tr>
<tr>
<td>Graphic Organizers</td>
<td>Cubing/Choice Board</td>
</tr>
<tr>
<td>Flexible Grouping</td>
<td>Questioning Strategies</td>
</tr>
<tr>
<td></td>
<td>Centres &amp; Stations</td>
</tr>
</tbody>
</table>
Cubing

- Used when considering a topic from 4 to 6 points of view (Cowan and Cowan, 1980; Tomlinson, 2001)
- Provides students with a variety of activities
- Graphic organizers
- Structured based on students’ learning and or environmental preferences
Why might $\frac{1}{4}$ be less than $\frac{1}{2}$?

Compare ...
How is $\frac{1}{2}$ different from $\frac{1}{4}$?

FRACTIONS

True or False?
$\frac{1}{2}$ is greater than $\frac{1}{4}$

Andre has $\frac{1}{2}$ of a pizza.
Roshawn has $\frac{1}{4}$ of a pizza.

Who has more?
Draw your Answer
Complete the sequence

1. 4  __  6  ___  8  ___  ___

2. 1  2  3  ___  ___  ___  ___

3. 8  ___  10  11  12  ___  ___

4. 5  ___  ___  ___  9  ___  ___
Differentiation of Product
## Approaches to Product Differentiation

<table>
<thead>
<tr>
<th>Multiple Intelligences</th>
<th>Tiered Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAFT</td>
<td>Enrichment Clusters</td>
</tr>
<tr>
<td>Cubing</td>
<td>Choice Boards</td>
</tr>
<tr>
<td>Independent Study</td>
<td>Learning Centres</td>
</tr>
<tr>
<td>Alternative Assessments</td>
<td>Compacting</td>
</tr>
</tbody>
</table>
Product Classification

- Performance Assessments
- Written Traditional Assessments
Tools Used in Product Differentiation

- Alternative Assessments
- Structured writing tests
- Exit slips
- Selected-response tests
- Short answer response tests
- Graduated rubrics
DIFFERENTIATION OF THE LEARNING ENVIRONMENT
Elements of the Learning Environment

- Lighting
- Ventilation
- Space
- Seating arrangement
- Classroom Climate
  - Relationship between teachers and students
- Furniture arrangement
- Furniture type
- Behaviour modification techniques
- Noise level
Adjusting the Learning Environment

- Learning Centres
- Interest Centres
- Flexible Groupings
- Text and Resource Selection
- Enrichment Clusters
Factors affecting Differentiated Instruction
Decision Factors Used in Planning and Implementing Differentiated Instruction

(adapted from Oaksford, L. & Jones, L., 2001)
Differentiated Instruction: PEP versus GSAT

- Performance-based Assessment
- Exam
- Classroom-based/ Teacher Assessed
Factors affecting Differentiated Instruction

- Readiness levels
- Learning profile
- Interest levels
Why Pre-Assess?

- To make instructional decisions about student strengths and needs.

- To determine:
  - Flexible grouping patterns
  - Which students are ready for advance instruction
  - Strategies and techniques to use when teaching.
<table>
<thead>
<tr>
<th>Pre-Assessment Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher prepared or Text prepared pre-tests</td>
</tr>
<tr>
<td>Traditional tests</td>
</tr>
<tr>
<td>Teacher observation/checklist/rating scales</td>
</tr>
<tr>
<td>Writing prompts/samples/pre-writing activity</td>
</tr>
<tr>
<td>Oral questions during formative assessment</td>
</tr>
<tr>
<td>Running records</td>
</tr>
<tr>
<td>Entrance cards</td>
</tr>
<tr>
<td>KWL Charts and other graphic organizers</td>
</tr>
<tr>
<td>Standardized test information</td>
</tr>
<tr>
<td>Portfolio analysis</td>
</tr>
<tr>
<td>Surveys/Inventory</td>
</tr>
</tbody>
</table>
Pre-Assessment Tools

- Student interviews
- Student demonstrations & discussion
- Student products and work samples
- Questionnaires/Inventories
- Game activities
- Show of hands to determine understanding
- Drawing related to topic or content
A Differentiated Instruction Classroom
What Differentiation Is ...

- Student Centered
- Best practices
- Different approaches
- 3 or 4 different activities

- Multiple approaches to content, process, and product
- A way of thinking and planning
- Flexible grouping
What Differentiation Isn’t

- One Thing
- A Program
- The Goal
- Hard questions for some and easy for others

- 35 different plans for one classroom
- A chaotic classroom
- Just homogenous grouping
Principles of a Differentiated Classroom

- Participate in meaningful and respectful work.
- Working in unison
- Teacher acts as a facilitator
- Time spent is based on student’s need.
- Flexible groupings
- Use of various instructional and assessment strategies
## Traditional Classroom versus Differentiated Classroom

<table>
<thead>
<tr>
<th>Differences: acted upon when problematic</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Assess at the end of lesson</td>
</tr>
<tr>
<td>- Single intelligence</td>
</tr>
<tr>
<td>- Curriculum driven</td>
</tr>
<tr>
<td>- Whole class instruction</td>
</tr>
<tr>
<td>- A single text prevail</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Differences: basis for planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Assessment is on-going</td>
</tr>
<tr>
<td>- Multiple intelligences</td>
</tr>
<tr>
<td>- Student driven</td>
</tr>
<tr>
<td>- Diverse class instruction</td>
</tr>
<tr>
<td>- Use of multiple materials</td>
</tr>
</tbody>
</table>

Adapted from “The Differentiated Classroom: Responding to the Needs of All Learners,” by Carol Ann Tomlinson, 1999, p.16
Lesson Planning

- Elements of Differentiated Instruction
- Factors of Differentiated Instruction
- Strategies
- Resources
In Summary.....

- What is fair isn’t always equal...
- Differentiation gets us away from “one size fits all” approach to curriculum and instruction that doesn’t fit anyone
This is what EQUITY looks like!
References


What is Blooms’ Taxonomy?

- It is a model used in pedagogy for thinking about students’ learning outcomes.
- It is used to create a classification system for learning objectives, ranging from lower-order to high-order thinking.
- The goal is for objectives to reflect different levels of thinking on a given concept and or topic.
Figure 1. Diagrammatic Representation of Bloom's Taxonomy of Thinking