Differentiated Instruction: An Overview and One Classroom’s Transformation

Melissa Storm, PhD
American Institutes for Research
and
Lori Centerbar, MEd
South Burlington Public Schools, VT
Session Overview

• What is Differentiation?
• Differentiation Strategies
• One Classroom’s Transformation
• Implementing Differentiation
• Resources
Objectives

Participants will

• Gain an overview of differentiated instruction;

• Be able to implement several differentiation strategies; and

• Identify things to consider when implementing differentiation at the classroom, school, and district level.
Why Differentiate?

- All kids are different.
- One size does not fit all.
- Differentiation provides all students with access to all curriculum.
What Is Differentiation?

• A teacher’s response to learner needs

• The recognition of students’ varying background knowledge and preferences

• Instruction that appeals to students’ differences
According to Students’ Readiness, Interest, and Learning Profile, Teachers Can Differentiate Content, Process, and Product.

Adapted from *The Differentiated Classroom: Responding to the Needs of All Learners* (Tomlinson, 1999).
Comparing Traditional and Differentiated Classrooms

• Consideration of student differences
• Use of assessment
• Use of student interest and learning style
Comparing Traditional and Differentiated Classrooms (continued)

- Instructional format
- Assignment options
- Factors guiding instruction
Differentiation Strategies

• All strategies are aligned with instructional goals and objectives.

• Specific strategy selection based on
  – Focus of instruction
  – Focus of differentiation
## Differentiation Strategy [1]

<table>
<thead>
<tr>
<th>Primary Use</th>
<th>Description of Strategy</th>
<th>Things to Consider</th>
</tr>
</thead>
</table>
| Tiered Assignments and Products | Assignments and products are designed to instruct and assess students on essential skills that are provided at different levels of complexity, abstractness, and open-endedness. The curricular content and objective(s) are the same, but the process and/or product are varied according to the student’s level of readiness. For example, students with moderate understanding about a topic are asked to write an article. Students with a more advanced understanding are asked to prepare a debate. | • Focus task on a key concept  
• Use a variety of resource materials at different levels of complexity and abstractness and associated with different learning modalities  
• Adjust learning by complexity, abstractness, number of steps, concreteness, and independence to ensure challenge and not frustration |
| Compacting | Compacting is the process of eliminating teaching or student practice due to previous mastery of learning objectives. Compacting involves a three step process:  
1. assess the student to determine his/her level of knowledge on the material to be studied and determine what he/she still needs to master  
2. create plans for what the student needs to know, and excuse the student from studying what he/she already knows | • Thoroughly pre-assess the learner’s knowledge and document findings  
• Explain the process and its benefits to the student  
• Create written plans and timelines for study  
• Allow student choice in enrichment or accelerated study |

---

[1] This chart was adapted from *The Differentiated Classroom: Responding to the Needs of All Learners* (Tomlinson, 1999).
Examples of Differentiation Strategies

- Choice Boards
- Tiered Activities
- Learning Contracts
Diner Menu – Photosynthesis

**Appetizer (Everyone Shares)**
- Write the chemical equation for photosynthesis.

**Entrée (Select One)**
- Draw a picture that shows what happens during photosynthesis.
- Write two paragraphs about what happens during photosynthesis.
- Create a rap that explains what happens during photosynthesis.

**Side Dishes (Select at Least Two)**
- Define respiration, in writing.
- Compare photosynthesis to respiration using a Venn Diagram.
- Write a journal entry from the point of view of a green plant.
- With a partner, create and perform a skit that shows the differences between photosynthesis and respiration.

**Dessert (Optional)**
- Create a test to assess the teacher’s knowledge of photosynthesis.
**THINK-TAC-TOE**

**Book Report**

<table>
<thead>
<tr>
<th>Draw a picture of the main character.</th>
<th>Perform a play that shows the conclusion of a story.</th>
<th>Write a song about one of the main events.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write a poem about two main events in the story.</td>
<td>Make a poster that shows the order of events in the story.</td>
<td>Dress up as your favorite character and perform a speech telling who you are.</td>
</tr>
<tr>
<td>Create a Venn diagram comparing and contrasting the introduction to the closing.</td>
<td>Write two paragraphs about the main character.</td>
<td>Write two paragraphs about the setting.</td>
</tr>
</tbody>
</table>
## Tiered Activity – Writing a Persuasive Essay
### 4th–6th Grade Classroom

<table>
<thead>
<tr>
<th>Outcome/Objective</th>
<th>Beginning</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will determine a topic and will write a five-sentence paragraph with a main idea, three supporting sentences, and a concluding sentence.</td>
<td>Students will determine a topic, state a point of view, and write two paragraphs defending that point of view.</td>
<td>Students will determine a topic, state a point of view, and write an essay of at least five paragraphs that uses multiple sources to defend that point of view.</td>
<td></td>
</tr>
</tbody>
</table>

| Instruction/Activity | Students will receive a model of a five-sentence paragraph and explicit instruction in constructing the paragraph. As a prewriting activity, students will list their topic and develop a list of at least three things that support their topic. | Students will receive a model of a persuasive essay and a graphic organizer that explains the construction of a persuasive essay. Students will also receive explicit instruction in writing a persuasive essay. As a prewriting activity, students will use the graphic organizer to plan their writing. | Students will review the graphic organizer for a persuasive essay. Students will be given explicit instruction in locating sources and quotes for their essays. As a prewriting activity, students will use the graphic organizer to organize their essay. Students will also compile a list of five sources that defend their main point. |

| Assessment | Students will be able to write a five-sentence paragraph that successfully states and supports a main idea. The paragraph will meet the criteria on the state writing rubric. | Students will be able to state a point of view and successfully defend the idea using two paragraphs that defend the point of view using main ideas and supporting details. The paragraphs will meet the criteria on the state writing rubric. | Students will be able to write a five-paragraph essay that states a point of view, defends the point of view, and uses resources to support the point of view. The essay will meet the criteria on the state writing rubric. |
Learning Contract #1

Name _______________________

My question or topic is:

To find out about my question or topic…

I will read:  

I will look at and listen to:  

I will write:  

I will draw:  

I will need:  

Here’s how I will share what I know:

I will finish by this date:
Learning Contract #2

To demonstrate what I have learned about ____________________, I want to

_ Write a report
_ Put on a demonstration
_ Set up an experiment
_ Develop a computer presentation
_ Build a model

_ Design a mural
_ Write a song
_ Make a movie
_ Create a graphic organizer or diagram
_ Other_____________________

This will be a good way to demonstrate understanding of this concept because

________________________________________________________________________

To do this project, I will need help with

________________________________________________________________________

My Action Plan is __________________________________________________________

The criteria/rubric which will be used to assess my final product is __________

________________________________________________________________________

My project will be completed by this date _____________________________

Student signature: ________________________________  Date __/__/__
Teacher signature: ________________________________ Date __/__/__
One Classroom’s Journey through Action Research
My Starting Point

- Reflections on my teaching
- My popular misconception
- Masters Action Research
Data Drives Action

• Student, Parent, Self Surveys
• Course of Action:
  – Build relationships
  – Provide increased choices
  – Offer multiple levels of materials
  – Offer flexible groupings
  – Use frequent, varied, authentic assessment
  – Provide meaningful assignments
  – Connect new information to existing knowledge
The Beginning

Iditarod Unit

- Differentiated content by use of leveled texts
- Multiple groupings based on readiness, interest
- Differentiated product by offering student choice in demonstrating understanding
- Authentic assessment
My Second Attempt

Poetry Center

- Use of varied groupings based on readiness, interest, and learners’ profiles

- Student choice in all assignments

- Authentic, performance-based assessment

- Opportunities for challenge
The Second Year

- Increased use of Multiple Groupings
- Stations
- Task & Exit cards
- More frequent use of formative assessments
- Increased student choice of content, process, and product
- Increased student self-reflection and input on class. Students had a voice!
My Research Ends . . . But

- Follow-up survey results
- Next steps
- New School
- Different Systems
…The Journey Continues

- Purposeful teaching of differentiated classroom environment
- Stations with tiered activities based on readiness
- World War II contracts – Student choice of content, process, and product
- Exit cards
- Brain-based research best practices
Today in class, you will be experiencing a concept known as stations. There are 12 different stations to which you will be traveling. You will work at the stations for approximately 20-minute segments of time – enough for you to learn or review some material, practice that material and then apply what you have learned to your narrative.

**EXPECTATIONS:**
My expectations during stations are that you keep your schedule safe and follow it exactly. You must follow all directions within each station in order to receive full credit. Missing work in any station will result in an incomplete/F until it is completed with quality. You must SAVE all of your station work as proof of your effort and turn it in with your schedule. **DO NOT LOSE THE SCHEDULE. IT MUST BE ATTACHED TO YOUR WORK!**

No one is to leave a station until everyone has completed the work and the checker has checked. This means that at the start of each “session,” a checker should be appointed. When time is up, neaten the folder, take any work or papers that you need, and move quickly and quietly to your next scheduled station.
Sample Exit Cards

Names:
Research topic:

Directions: Complete the following sentence starters.

• 1. I’m having the most success with…
• 2. I could use some help with…

Names:
Research Topic:

Directions: Complete these sentence starters regarding your research today.

• 1. I used time well today because I…
• 2. I need to do a better job of…during the next research session because…
In an effort to have as much interaction with your vocabulary words as possible, please choose 10 of the words we have reviewed from Act One of The Miracle Worker and write the word, the definition, part of speech, and add some artistic way to represent what it means in your dictionary. Try to choose words that you are having a more difficult time remembering.

You will be adding to this dictionary as we make our way through the vocabulary for The Miracle Worker. Design a unique and colorful cover. Your word representations also need to be colored. Take your time. I am not an artist, however, I can do a really neat and careful job in order to be proud of what I hand in. Presentation counts for a lot!!!

Have fun with this. And remember, there is always a method to my madness! ☺ Center
On and on . . .

- Increased use of formative assessments
- Increased use of technology
- Increased comfort with differentiation strategies
- Continued collaboration with Access Center staff and resources
Classroom Steps to Success

• Data Collection
• Creating Classroom Environment
• Relationship Building
• Explicit Teaching of Skills for a Differentiated Classroom
• Collegial Support
• Administrative Support
Implementing Differentiated Instruction: Your District or School

• Start with committed staff.
• Look for existing resources/infrastructure.
• Start with one or two strategies.
• Try it and be willing to alter and extend.
Implementing Differentiated Instruction: Additional Considerations

- Teacher support
- Professional development
- Adequate planning time
Resources

• Assessment:
  – Curriculum-based measurement
    www.studentprogress.org

• National Center on Accessing the General Curriculum (NCAC):
  www.cast.org/ncac/

• Access Center:
  www.k8accesscenter.org