

Differentiated Instruction

- A) Why?
 - History and philosophy
- B) What?
 - Models and methods
- C) How?
 - Six practical classroom strategies

(The challenges of exceptionality)

- Peer relations
- Teacher relations
- Asynchrony
- External validation
- Feeling "above" the process
- Boredom/disengagement
- Intentional underachievement

"The majority of gifted young people in my study state frankly that for substantial periods in their school careers they have deliberately concealed their abilities or significantly moderate their scholastic achievement in an attempt to reduce their classmates' and teachers' resentment of them."

- Miraca U.M. Gross, Originally published in *Understanding Our Gifted*, Winter 2000.

A) The WHY

A Brief History of Gifted Education...

- Theories of superiority (Plato, eugenics)
- One-room school house
- Specialization (1st "gifted" program 1918)
- 1950s-1980s
 - (from *The Gifted Movement--Forward or on a Treadmill?* Abraham Tannenbaum, 1988)
 - Ability grouping
 - Ability-based methods "SRA"
- 1980s - 2000
 - Full Inclusion Movement vs. TAG = parallel systems
 - Differentiated Instruction
- 2000+
 - Vertical vs. Horizontal learning
 - Differentiated Instruction meets Special Ed

Differentiated Instruction...

- Is a "sometimes" strategy
- Varies widely from classroom to classroom
- Is Adaptable
- Is Integrative
- Is Practical

- Our Goal: Total Staff Proficiency by June 2007

Current major models of "gifted" education

- Acceleration
- Pull-out programs (TAG)
 - Qualification criterion
- Alternative schools
- Differentiated instruction

B) The WHAT

Differentiated Instruction:

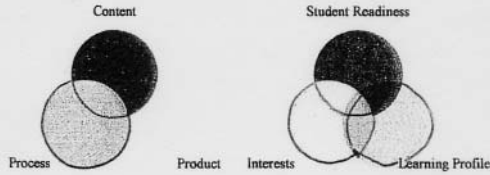
"A flexible approach to teaching in which the teacher plans and carries out varied approaches to content, process, and product in anticipation of and in response to student differences in readiness, interests, and learning needs." (Carol Ann Tomlinson, 1995, p. 10)

- Flexible
- Varies
 - 1) Content 2) Process and 3) Product
- Because of student differences in
 - 1) Readiness 2) Interests and 3) Learning Profile

Definition (continued)

What are you changing?

Why are you changing it?



Tic-Tac-Toe: Positive and Negative Numbers

(Daily-work oriented; able to be tiered)

Write three story problems that require knowledge of evaluating, adding or subtracting positive and negative integers.	In a paragraph, what happens when you add a positive and a negative? Why does $6 + -5 = 1$? Why does $7 + -7 = 0$?	As I've explained in class, I always think of positive and negative numbers like gambling. What is another analogy? Explain your analogy and give examples.
Create 5 number sentences with the answer -3.	Draw a picture of these 3 problems with answers: $-8 + 3 =$ $15 + -2 =$ $0 + -5 =$	Create a grid and graph these quantities visually on graph paper: -19, 10, -8, 6, -1, 2, 12, -5, 0 (For example, if your grid is based on fruit, you could show -17 bananas.)
Draw a number line based on an underground ladder. Draw a number line based on a football field with lines of scrimmage.	Place these numbers on a number line: -17, 17, -5, 1, 3, -8, 0	Build a model number line with classroom manipulatives. Take a picture of it with the mini polaroid camera, and be prepared to explain your representation.

True or False?

- Myth: DI is all about long-term projects.
- Reality: DI works for a wide range of educational tasks.
- Myth: DI is a lot more work for me.
- Reality: DI is ultimately much simpler than fully individualized instruction.
- Myth: I'll have to recreate my whole curriculum.
- Reality: 1) DI teachers don't differentiate everything. 2) Many projects can easily be retooled. 3) You have an on-site coach!



Pick-a-Project: Life Cycle of a plant

(Designed for non-readers K/1/2)

Verbal-Linguistic: Tell a partner the four stages of a plant's life.
Logical-Mathematical: Put the four sequencing cards with the stages of plant life in the right order.
Visual-Spatial: Draw the four stages of a plant's life cycle on a provided chart.
Body-Kinesthetic: Act out the following stages: seed, germination, growth, bloom.
Musical-Rhythmic: Create a chant or a clapping game about the life cycle of a plant with a partner or by yourself.
Interpersonal: Work with a partner to compare the life-cycle of a flower and a tree on a sheet of big paper.
Intrapersonal: If you were a plant which stage would you want to be in and why? Draw a picture.
Naturalist: Go outside and try to find plants in different stages of development. Take the digital camera and get photos to make a class book.

C) The HOW

(A sampling...)

- Tic-Tac-Toe
- Pick-a-Project
- Cube-it
- Stations and Centers
- Tiered
- Most Difficult First

Cube-it: A Series of Unfortunate Events

Book Portfolio Project



Describe it What do you think the Baudelaire orphans look like? Draw pictures of the three of them. Choose 2 quotes from the book to support your interpretations of each character and write page numbers with your quotations.	Compare it Create a Ven diagram. Label the left circle "Unfortunate Events" and the right circle "Harry Potter." What are some similarities between the two fantasy books we've read? What are some differences?
Associate it Create a timeline of the events we know about the Baudelaire from the first two books. Begin when Violet is a baby, and continue until the end of "Book the Second."	Analyze it How are the characters changed through the course of the two books, for better and for worse? Choose <i>three</i> of the following characters -- Violet, Klaus, Sunny or Count Olaf -- and write a paragraph on each one.
Apply it Lemony Snicket uses a particular writing style in which he tries to convince the reader <i>not</i> to read his stories. Write me a letter in Snicket style in which you try to convince me NOT to read this book portfolio.	Argue for or against it Create a propaganda flier from the point of view of the Baudelaire or Count Olaf. Convince your reader why your side deserves the Baudelaire fortune. Include at least 5 quotations from the book with page numbers.

Stations and Centers

Centers

- Permanently devoted to a school skill:
 - Listening Center, Math Center, Science Center
- Content changes, but not overall skill.
- For example, we always have a science center, but when we studied Ancient Greece it was about Archaeology, and when we studied *The Book* it was about navigation.

Stations

- Topic-based learning stations that break-down one particular lesson.
- Analogy: PE
- For example, when we studied fractions, we had four stations around the room devoted to understanding fractions better, and we spent 2 class periods moving through them.

Centers or Stations: Poetry

- ART:** Create word collage poetry using the newspaper and magazine headlines provided. (Your poem needs to have a theme, and you should be able to explain it to me.) *If you finish early, you can decorate your manuscript.*
- MATH:** Work with your group to determine the rhyme scheme of one of the 5 poems provided at the station. Write out the rhyme scheme using letters A-D (as we've discussed.) Then, with your group, create your own silly or serious poem using the same rhyme scheme. *If you finish early, check the work of the previous groups.*
- COMPUTER:** Work with a partner on the computers, and go to the five bookmarked pages on your browser. Read about all of the poets with your partner. Choose one of them and work with your partner to write "bullet points" about him or her on a 3 X 5 card. Put your card in the class author box. *If you finish early, read some of your author's poetry together.*
- WRITING:** Choose one of the following forms of poetry – cinquain, haiku or limerick – and use it to write about your favorite month. When you're done, cut your poem out and put it on the poster near the month you chose. *If you finish early, write a different kind of poem for the board.*
- LISTENING:** Put on a walkman and listen to the poetry tapes provided, while reading the poetry. What makes reading poetry aloud different than reading other writing? Brainstorm with your group traits of a good poetry reading and a bad one. Use the chart provided to record your groups' ideas. *If you finish early, take turns using your rules to recite the same poems badly and well!*

Tiered Religion Quiz: The 7 Sacraments

Complete one question from each row. 48 points possible.

Row 1 = 12 points each Row 2 = 14 points each Row 3 = 16 points each.

1. Name the seven sacraments.	2. Describe the seven sacraments. What are the rituals associated with them?	3. Name the seven sacraments, and write about your ideas of what might be appropriate symbols for each of the sacraments. Why did you pick each symbol?
4. What are the three sacraments of initiation?	5. What are the three sacraments of initiation? What does "initiate" mean? What is an example of another kind of initiation?	6. What are the three sacraments of initiation? Why are there 3 sacraments of initiation, instead of just one?
7. Which two sacraments do we think of as "vocational"?	8. What are the vocational sacraments, and what do these two sacraments have in common? What's different about them?	9. What are the two vocational sacraments? How is a vocation different from a job? Can a job be a vocation? Explain.

Cooperative Tiered Assignment (daily work)

(Alternatives to answering chapter questions)

Sample: Social Studies Chapter 7: Family Structures

Your group will answer ONE of the following:

- 1) Create a Ven diagram showing the similarities and differences between Japanese and American families.
- 2) Survey 20 people in the school. How many people are in their families? How old are the people in their families? Where do their grandparents live? Use a matrix to keep your data organized.
- 3) What do you think are the benefits to Japanese family structure as compared with American? What are the drawbacks? Write a paragraph to summarize your ideas.

Sample: Science Chapter 12: The Skeletal System

The individuals in each group will answer ONE of the following. Be prepared to then share with a member of each other group.

- 1) Label this model of the skeletal system. Color the 5 largest bones red. Color the 5 smallest bones (or examples of those bones) blue.
- 2) Tyrone broke his tibia playing basketball. Where is this bone? Write a narrative of the steps the ER doctor went through to set his bone. Why will the doctor follow these steps?
- 3) Compare the human skeleton to an insects exoskeleton. How are they the same? How are they different? Build a ven diagram to record your ideas.

Most Difficult First

- Appeals to teachers and students sense of fairness and reason.
- Easy application in math problem sets, spelling, vocabulary – anything progressive.
- How does it work?
 - Student can choose to do the whole assignment (1-25 odds) or he/she can choose to do the most difficult first.
 - The teacher chooses the MDF (last five problems, for example.)
 - Student tries the first one – if he gets it right, can keep going. If he gets it wrong, do the regular assignment.
 - If MDF is right, full points. If MDF is wrong, proportionally scored AND cannot do MDF next time its offered.
 - So, in the example, the full assignment was 13 problems, the MDF was 5. Both are worth the same number of points. So missing 1/5 is a 80%, where as missing 1/13 is 92%.
 - You can certainly customize this – give no points for the homework if any are wrong, ask them to make-up the full homework if any are wrong, etc...
- The main idea is simply not to *always* require students to do pages of work that they have mastered. (Sometimes I think we are all asked to do that...)

Your learning specialist, your friend...

- Monthly meetings (or more) for personal curricular development
 - First one schedule on my door, we'll set a standing meeting.
- Monthly 30-min staff development at faculty meetings
- Class visits and curriculum in 1/4/7 (?)
- Column in Dragon Post
- Observation and support, coaching, alternative strategies...
- Advocacy and support