

## Reaching All Learners Through Differentiated Instruction

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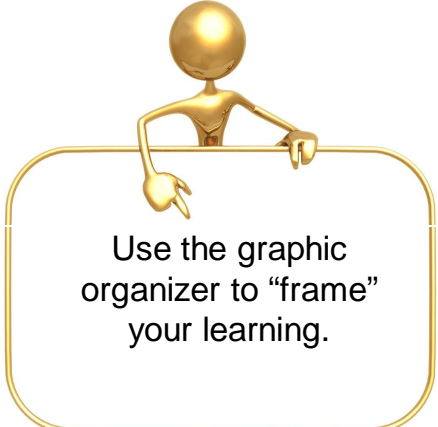
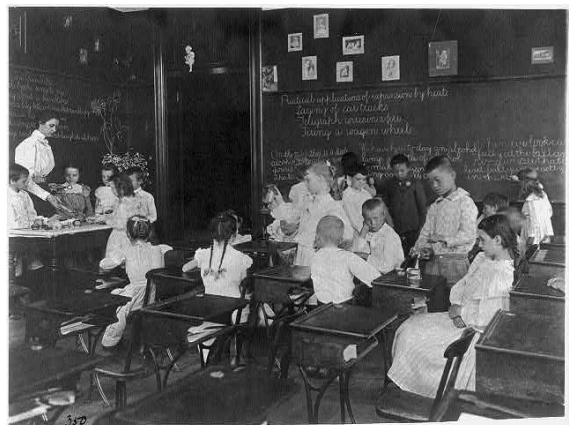
DI Wiki: [DI4All.wikispaces.com](http://DI4All.wikispaces.com)

## Howdy do!

- Highlight 2-3 squares that are important to your learning.
- Move around the room to collect signatures – don't sign a page more than twice.

## Where are you now?

- “Differentiated instruction is new to me.”
- “I have read about differentiated instruction but not implemented it in my classroom.”
- “I have attended a workshop on differentiated instruction and tried to implement pieces in my classroom.”
- “I use differentiated instruction regularly in my classroom.”



Use the graphic  
organizer to “frame”  
your learning.

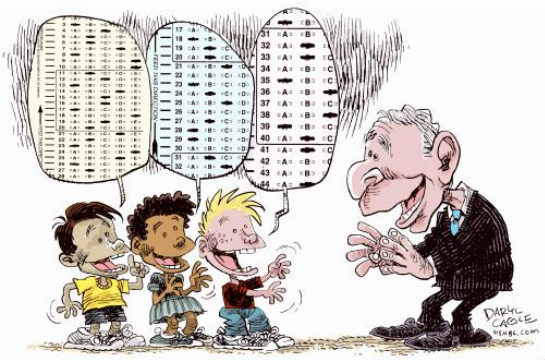
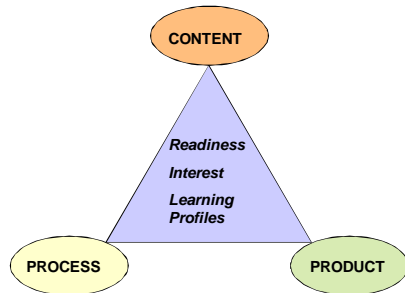
## Keys to Differentiation

There are two  
keys to  
differentiation:

1. Know your kids
2. Know your content



## Differentiate What?



“When we differentiate, we give students tools to handle whatever comes their way – differentiated or not. This is why differentiated instruction and standardized testing are not oxymoronic.”

Rick Wormeli. *Fair Isn't Always Equal: Assessing and Grading in the Differentiated Classroom*. (2006)

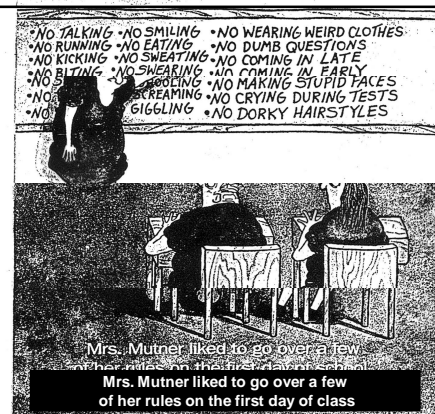
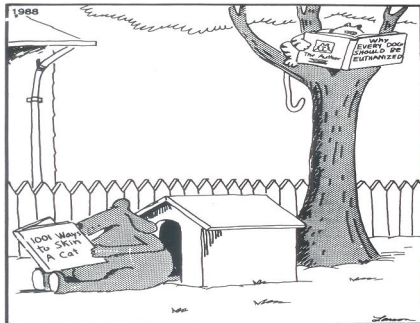
## Looking at a Differentiated Classroom



## All Differentiation Begins with Assessment

*“The assessment process reveals what a student understands, knows and can do.”*

## Differentiation by Interest



## BRAIN RESEARCH SHOWS THAT...

Eric Jenson, *Teaching With the Brain in Mind*, 1998

Choices content, process, product groups, resources environment	vs.	Required no student voice restricted resources
Relevant meaningful connected to learner deep understanding	vs.	Irrelevant impersonal out of context only to pass a test
Engaging emotional, energetic hands on, learner input	vs.	Passive low interaction lecture seatwork
Increased intrinsic MOTIVATION	<b>EQUALS</b>	Increased APATHY & RESENTMENT

## Differentiation Using LEARNING PROFILE

- Learning profile refers to how an individual learns best - most efficiently and effectively.



- Teachers and their students may differ in learning profile preferences.

## What kind of learner are you?



## Readiness

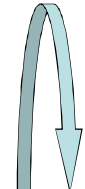
- How do I know what my students know?



- How do my students know what they know?

What's the point of differentiating in these different ways?

Readiness



Growth

Interest



Motivation

Learning Profile



Efficiency

Thinking about...



## Strategies

- RAFTS
- Cubing
- Learning Contracts/Learning Menus

## RAFT



**Role** of the student. What is the student's role: reporter, observer, eyewitness, object?

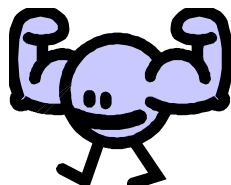
**Audience.** Who will be addressed by this raft: the teacher, other students, a parent, people in the community, an editor, another object?

**Format.** What is the best way to present this information: in a letter, an article, a report, a poem, a monologue, a picture, a song?

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

## STRONG VERB!!

- Persuade!
- Support!
- Argue!
- Object!
- Critique!
- Predict!
- Demonstrate!!



PEANUTS/Charles Schulz

THOMAS PAINE SAID, "THESE ARE THE TIMES THAT TRY MEN'S SOULS"

WHAT WAS HE TALKING ABOUT?



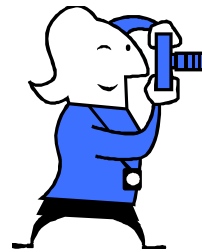
## RAFT Activities

	Role	Audience	Format	Topic
Language Arts & Literacy	Semicolon	Middle Schoolers	Diary entry	I Wish You Really Understood Where I Belong
	N.Y.Times	public	Op Ed piece	How our Language Defines Who We Are
	Huck Finn	Tom Sawyer	Note hidden in a tree knot	A Few Things You Should Know
Science	Rain Drop	Future Droplets	Advice Column	The Beauty of Cycles
	Lung	Owner	Owner's Guide	To Maximize Product Life
	Rain Forest	John Q. Citizen	Paste Up "Ransom" Note	Before It's Too Late
History	Reporter	Public	Obituary	Hitler is Dead
	Martin Luther King	TV audience of 2010	Speech	The Dream Revisited
	Thomas Jefferson	Current Residents of Virginia	Full page Newspaper Ad	If I Could Talk to You Now
Math	Fractions	Whole Numbers	Petition	To Be Considered A Part of the Family
	A word problem	Students in your class	Set of Directions	How to Get to Know Me

Format based on the work of Doug Buehl cited in *Teaching Reading in the Content Areas: If Not Me Then Who?* Billmeyer and Martin, 1998

## First Step in Designing RAFTS

is...



...FOCUS!

Learning Goals:  
*Knows, Understands,  
Be able to Dos*

## Literature Example

**Concept:** Perspective

**Lesson Topic:** Point of View in *To Kill a Mockingbird*

**Know:** Definition of Point-of-view

**Understand:** Truth can look different from different perspectives.

**Do:** Rewrite a scene from a perspective other than the narrator's.

## Grade 6 Social Studies RAFT

Students will

**Know:**

Names and roles of groups in the feudal class system.

**Understand:**

Roles in the feudal system were interdependent. A person's role in the feudal system will shape his/her perspective on events.

**Be Able to Do:**

Research

See events through varied perspectives

Share research & perspectives with peers



## Feudal System Raft

cont'd

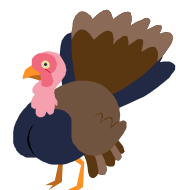
Role	Audience	Format	Topic
King	The Subjects	Proclamation	Read My Lips, New Taxes
Knight	Squire	Job Description	Chivalry, Is it for You?
Lord	King	Contract	Let's Make a Deal
Serf	Animals	Lament Poem	My So Called Life
Monk	Masses	Illuminated Manuscript	Do As I Say, Not As I Do
Lady	Pages	Song	ABC, 123

Following the RAFT activity, students will share their research and perspectives in mixed role groups of approximately five. Groups will have a "discussion agenda" to guide their conversation.

Kathryn Seaman

Imagine you are a turkey writing to a farmer in the form of a letter and you are begging the farmer to choose some other turkey for Thanksgiving dinner.

(Persuade!)





Dear Farmer Bob:

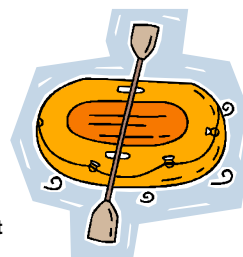
I understand you are about to chose a turkey for this year's feast. Well, you can pass right by my coop. I have been really sick – chicken pox! Those chickens came to visit us last week to brag about being safe for a while this month, and before you know it, I got sick. You certainly do not want your family to catch this disease, so choose another turkey. I think Sam in coop 5 looks healthy and fat this year. I am so sick I am losing weight daily so I could never feed you and your wife and your seven kids. Maybe next year!

Sincerely,  
Tom Turkey



## 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
- Be set up in many ways: keep one column consistent while varying the other columns in the RAFT grid

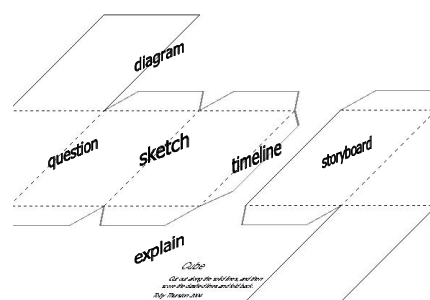


## Cubing



1. Describe It  
Look at the subject closely (perhaps with your senses in mind).
2. Compare It  
What is it similar to? What is it different from?
3. 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.
4. Analyze It  
Tell how it is made. If you can't really know, use your imagination.
5. Apply It  
Tell what you can do with it. How can it be used?
6. Argue for It or Against It  
Take a stand. Use any kind of reasoning you want– logical, silly, anywhere in between.

## Example



## Cubing Fractions



Each student at a table rolls two dice a designated number of times. The 1<sup>st</sup> dice/cube tells students what to do with a fraction.

- 1 Order/compare all the fractions from the smallest number to the largest.
- 2 Add 2 rolled fractions together.
- 3 Subtract 2 rolled fractions.
- 4 Divide 2 rolled fractions.
- 5 Multiply 2 rolled fractions.
- 6 Model 2 rolled fractions using circles or bars of paper.

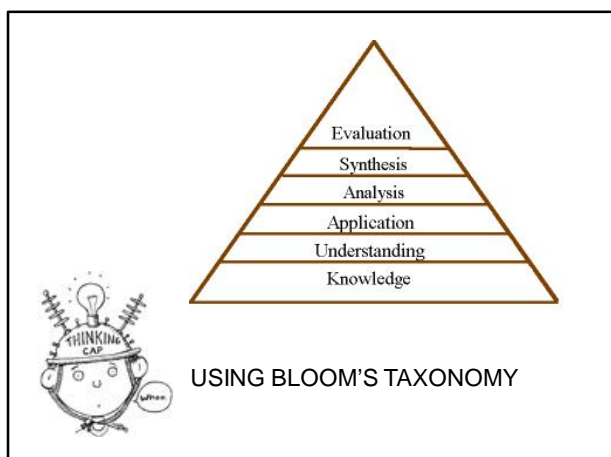
\* The 2<sup>nd</sup> cube/dice contains the fraction which can vary in complexity based on student number readiness.

Lynne Beauprey, Illinois


Thursday, January 8, 1998 5D

PEANUTS/Charles Schulz





## CUBING



**Directions:**

- § Work with 2 partners to complete the whole plant cube.
- § Roll the dice to see who does each part of the cube.
- § Share your work with your partners. Get their "stamp of approval".

List and Define the parts of a plant. Check your spelling, write in sentences.

Draw and Label a plant and all its parts. Tell the job of each part.

Compare each part of a plant to something it is like in your life to show how the things are alike.

Re-design a plant to make sure all its needs are met, but in a "new and better" way. Use words to explain.

Prove that every part of a plant is necessary for the plant to survive. Use words and pictures to show what would happen if any part of the plant got sick.

Build a plant and show how its parts provide for all 5 of its needs.

\*After the cubing activities, the teacher leads a closure discussion around the question, "What did we learn about why a plant is made the way it is?"



## Think Dots:

### Grade 2 Math

Students will tell and write time to the quarter hour, using analog and digital clock.

Think Dots Version 1: Time


<p>?ā</p> <p>How many fives are in the number 60?</p>	<p>?āā</p> <p>If it is 5:15pm, how many minutes after 5 is it?</p>	<p>?āāā</p> <p>How many minutes are in quarter after 2:00?</p>
<p>?āM ?&gt;&gt;</p> <p>A soccer player has practice at 6:00pm. Draw what the clock face would look like if soccer practice were an hour and fifteen minutes.</p>	<p>?āM ?&gt;</p> <p>How many minutes are in quarter till 3:00?</p>	<p>?āMM ?&gt;&gt;&gt;</p> <p>Create an interesting word problem using the times 4:00pm and 5:15pm.</p>

The Think Dots could be used the following ways:  
Anchor Activity, Pre-assessment, Review, Post-assessment

Dawn LaCassale

### ThinkDOTS: Vocabulary Review


<p><b>Connect it</b></p> <p>An automobile manufacturer wants to use this word as the name for its newest car. They have asked you to design the car- if this word were a car, what would it look like? Draw a picture.</p>	<p><b>Define it</b></p> <p>What is this word's definition?</p>
<p><b>Use it</b></p> <p>Create a concrete poem using this word as the poem's subject.</p>	<p><b>Collage it</b></p> <p>Create a collage of words and images which represents this word. Do not put the word or the definition on the front of the collage, write them on the back.</p>
<p><b>Evaluate it</b></p> <p>In your opinion, is this word a "good" word or a "bad" word? In other words, is this word useful? Does it do a job that no other word can do?</p>	<p><b>Personify it</b></p> <p>Give this word a personality- what do you think this word would be like if it were a person? Find another word from our list that you think would either be this word's perfect match or worst enemy, and explain your rationale.</p>



## Cubing and Variations

**Application:**

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

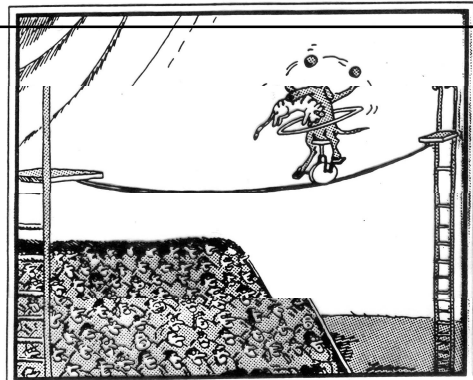


## Learning Contracts

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

Strategy: Learning Contracts



High above the hushed crowd, Rex tried to remain focused. Still, he couldn't shake one nagging thought: He was an old dog and this was a new trick.

## Designing a Differentiated Learning Contract

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

Differentiating Instruction: Facilitator's Guide, ASCD, 1997



## Learning Menus

Like contracts, menus take a number of forms that begin with **an agreement between student and teacher**.

The teacher grants certain choices about how the students will either learn (process) or show their learning (product).

Strategy: Learning Menus

Let's Create!

*Applying strategies to your  
classroom practice!*