

# Differentiating Instruction in the High School Classroom



Presented by: Mr. Lew Stonaker  
For Plumsted Township High School  
Day 2 -February 1, 2017

# LETS TALK ABOUT IT!



# High preparation strategies we will focus on today:



## Tiered Assignments



## RAFT's

(Role, Audience, Format, Topic)

# Tiered Assignments

In a heterogeneous classroom, a teacher uses varied levels of activities to ensure that students explore ideas at a level that builds on their prior knowledge and prompts continued growth. Student groups use varied approaches to exploration of essential ideas.

# Tiered Assignments

## Rationale for Use

- Blends assessment and instruction
- Allows students to begin learning where they are
- Allows students to work with appropriately challenging tasks
- Allows for reinforcement or extension of concepts and principles based on student readiness
- Allows modification of working conditions based on learning style
- Avoids work that is anxiety-production (too hard) or boredom-producing (too easy)
- Promotes success and is therefore motivating

# What Zone Am I In?

## Too Easy

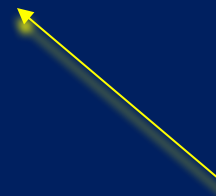
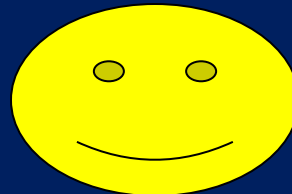
- I get it right away...
- I already know how...
- This is a cinch...
- I'm sure to make an A...
- I'm coasting...
- I feel relaxed...
- I'm bored...
- No big effort necessary...

## On Target

- I know some things...
- I have to think...
- I have to work...
- I have to persist...
- I hit some walls...
- I'm on my toes...
- I have to re-group...
- I feel challenged...
- Effort leads to success...

## Too Hard

- I don't know where to start...
- I can't figure it out...
- I'm spinning my wheels...
- I'm missing key skills...
- I feel frustrated...
- I feel angry
- This makes no sense...
- Effort doesn't pay off...



THIS is the place to be... THIS is the achievement zone...

# Tiered Assignments

## Guidelines for Use

- Be sure the task is focused on a key concept or generalization essential to the study
- Use a variety of resource materials at differing levels of complexity and associated with different learning modes
- Adjust the task by complexity, abstractness, number of steps, concreteness, and independence to ensure appropriate challenge
- Be certain there are clear criteria for quality and success



# When Tiering:



## Adjust---

- Level of Complexity
- Amount of Structure
- Materials
- Time/Pace
- Number of Steps
- Form of Expression
- Level of Dependence



# **IDENTIFY OUTCOMES**

WHAT SHOULD THE STUDENTS KNOW, UNDERSTAND, OR BE ABLE TO DO?

## **THINK ABOUT YOUR STUDENTS**

PRE-ASSESS READINESS, INTEREST, OR LEARNING PROFILE

## **INITIATING ACTIVITIES**

USE AS COMMON EXPERIENCE FOR WHOLE CLASS

**GROUP 1  
TASK**

**GROUP 2  
TASK**

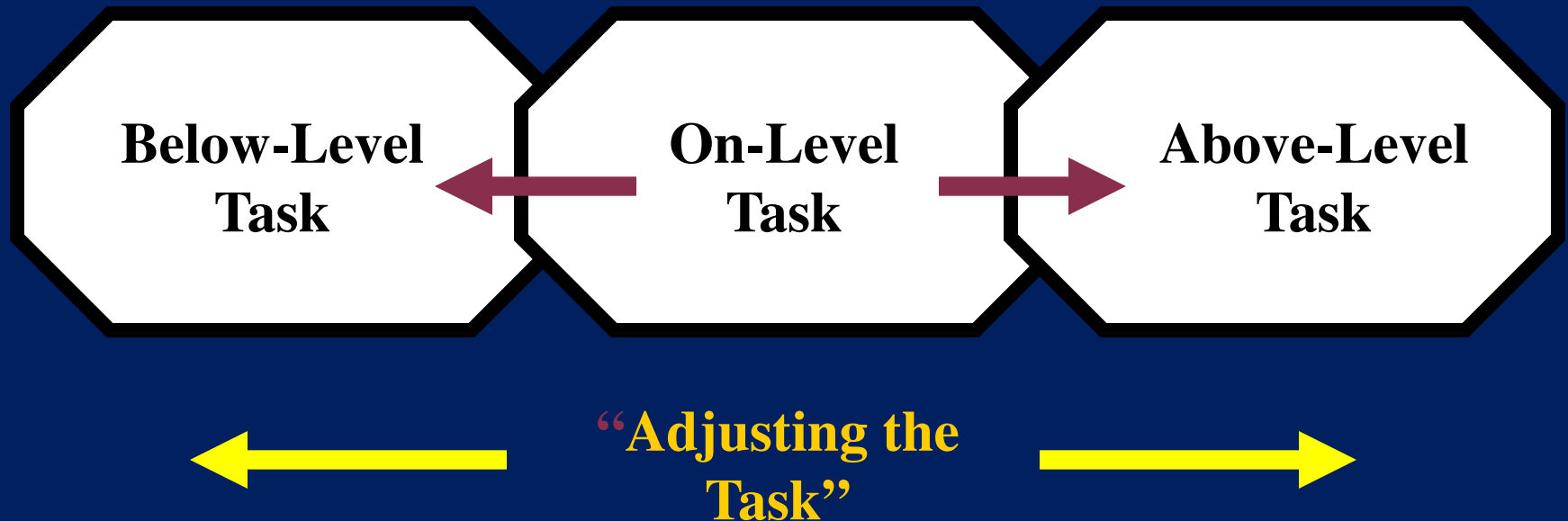
**GROUP 3  
TASK**

# Planning Tiered Assignments

Concept to be Understood  
OR

Skill to be Mastered

Create or use existing on-level task first then  
adjust up and down.



# THE TEACHER'S CHALLENGE

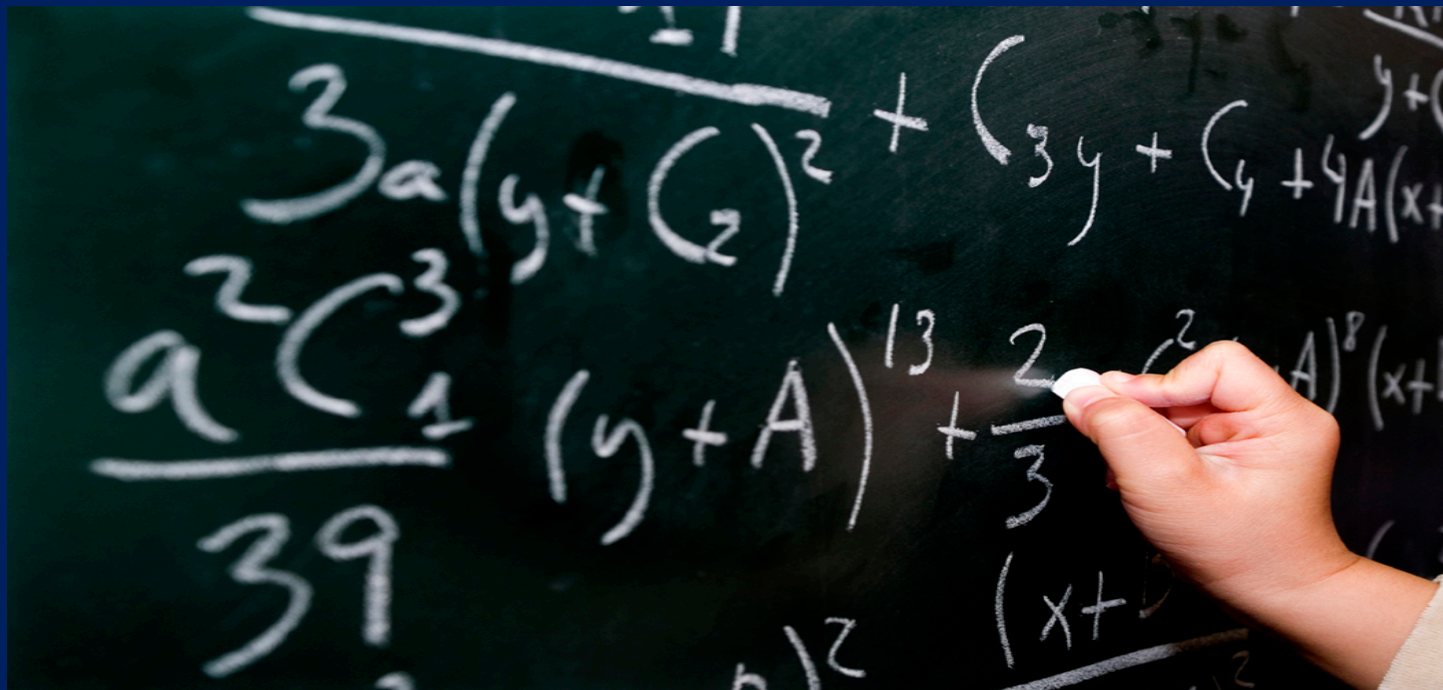


## Developing- “Respectful Activities”

- Interesting
- Engaging
- Challenging

# EXAMPLE OF A TIERED ASSIGNMENT #1 MATH

Key Concept: Students will use linear equations to solve real-world problems.



# Tier #1

Students in this tier are given the student pages for **determining position in two dimensions**, i.e. pages 55 and 56. They should complete all of the questions on those pages. Select one of the GPS applications from pages 61 and 62 for students in this tier to complete.

# Tier #2

Students in this tier are given the student pages for determining position in two dimensions, i.e. pages 55-58. Students should submit written solutions for questions 5-9. Depending on the ability level of the students, have students complete student pages 59 and 60 on **determining position in three dimensions** or select one of the GPS applications from pages 61 and 62 for them to complete.

# EXAMPLE OF A TIERED ASSIGNMENT #2 LA

Students will work with Shakespeare's *Romeo and Juliet* to understand characterization and how it unlocks understanding of theme and plot.





# Tier I

1. Describe Romeo Montague. ♦ How do we meet Romeo (what is he doing)? ♦ What type of family are the Montagues? ♦ What are Romeo's friends like--Mercutio--Benvolio?
2. Describe the Capulet family. ♦ How old is Juliet Capulet? ♦ What do we find out about her family?
3. Who is Paris? ♦ What role does he play in the story?
4. What is Verona like as it is described in the beginning of the play?
5. Why don't the Capulets and Montagues like each other? ♦ What facts do you find out about their hate for each other?

Be ready to describe these details to the rest of the class using textual citations to support your answers.

# Tier II

1. Analyze the feud that takes place in the play between the Capulets and the Montagues. ♦ What tone does the feud set for the entire play?
2. Romeo seems to be a lovesick young man while Juliet seems to be more level headed. ♦ Using a Venn Diagram, compare and contrast these two young people being sure to show common traits the two share.
3. Analyze Verona as an appropriate setting for tragedy to occur.

Be ready to describe these details to the rest of the class using textual citations to support your answers.

# Tier III

1. How would you stage Act I of *Romeo and Juliet*? ♦ What would you emphasize? ♦ What text leads you to your choices? ♦ Would you choose a modern setting or do you like the traditional Elizabethan setting? ♦ What are the positive reasons to support each?
2. Research classic tragic form (according to Aristotle in the *Poetics*). ♦ What do you see that works according to classic tragedy in *Romeo and Juliet*?
3. Observe several films of *Romeo and Juliet*. ♦ Evaluate the beginning based on how accurately they portray the lines in Shakespeare. ♦ Which seems to work best? ♦ Advise your teacher as to the most accurate initial cutting (beginning of the play) to show the class. ♦ Recommend the video that the class should watch as well.

# EXAMPLE OF A TIERED ASSIGNMENT #3 SS

Students will use understanding of the Dust Bowl to evaluate a photograph at different levels of complexity



All students will answer these questions on Dust Bowl photograph.

*Knowledge:*

Describe what you see in the photograph. Include as much detail as possible.

*Comprehension:* Compare and contrast your home to the home you see in the photograph. What is similar and what is different?

In addition to the first two questions, student pairs will each receive one of the following questions based on academic readiness level.

**Tier 1:**

*Analysis:* This photograph was taken during the Great Depression, if we could hear the people talking about their life, what would they be saying?

## **Tier 2:**

*Analysis:* This photograph was taken during the Great Depression. From what you see in the photograph, explain how you think this room might be used by the family and why.

## **Tier 3:**

*Evaluation:* Assess the Great Depression's social and economic impact on this family from the evidence in the photograph.



# EXAMPLE OF A TIERED ASSIGNMENT #4 SCIENCE

Students will use understanding of the Laws of Motion to complete the assigned activities.



### Tier I: *Low Scorers*

These students will investigate Free Fall rides. They should read all material presented, including following the information in the sidebars to other sites. They should also perform the weightless water trick. This material deals mainly with Newton's Third Law of Motion.

### Tier II: *High Scorers*

These students will investigate Roller Coaster rides. They should read all material presented, including following the information in the sidebars to other sites. In addition, they should do the Design a Roller Coaster activity and follow this additional link for another activity:

[www.glenbrook.k12.il.us/gbssci/phys/mmedia/index.html](http://www.glenbrook.k12.il.us/gbssci/phys/mmedia/index.html)

# EXAMPLE OF AN ASSIGNMENT TIERED BY INTEREST

Students have been studying force and motion. They have covered topics such as properties of moving objects, Newton's Laws, action/reaction, inertia, and friction. They are now working with the principles of flight. This lesson uses the book, **Origami Rockets, by Lew Rozelle, ISBN: 0-312-19944-9**. I would suggest that the teacher choose the designs ahead of time, e.g. Basic Floater, Basic Glider, Basic Zoomer, Basic Soarer.

Each group will use the design plans to construct the appropriate flying device. Upon completion of the design, the students should test it to be sure it conforms to specifications and expectations. Students should test the model flying forward, backward, by dropping and by tossing, recording the results. Students should gather a variety of data, such as length of time in air, distance flown, etc. Data from groups with the same design may pool their data to create a larger database. Students should identify principles of lift, thrust, and drag.



Tier I: ***Floaters***   Tier II: ***Gliders***   Tier III: ***Zoomers***   Tier IV: ***Soarers***

# EXAMPLE OF AN ASSIGNMENT TIERED BY LEARNING STYLE

Concept: Students work with geometric shapes and develop spatial sense. This would be the fourth or fifth lesson in a unit on geometry where the first few lessons have covered various geometric shapes, as well as slides, flips, turns, congruence, and symmetry.

## Tier I: ***Kinesthetic Learners***

Pairs of students use brightly colored paper to make several simple origami designs. The teacher would provide guidance when necessary. When students are finished, have them unfold the figure(s), find any congruent figures, and identify lines of symmetry. Students share the origami figures and have classmates try to construct them.

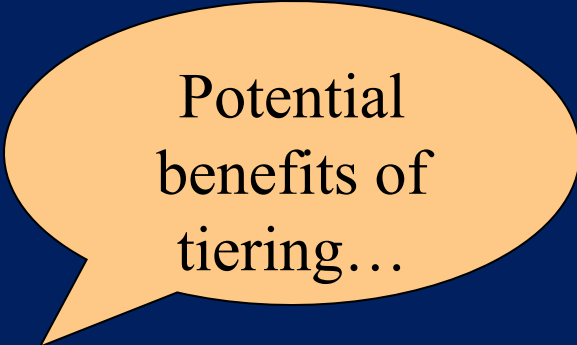
## Tier II: ***Visual Learners***

Pairs of students work with pictures of items from nature, such as butterfly, sunflower, rainbow, snowflake, and starfish. Students find any congruent figures and identify lines of symmetry for each item. Students color the pictures to help show the lines of symmetry. Students cut out the figures and have classmates find the lines of symmetry.

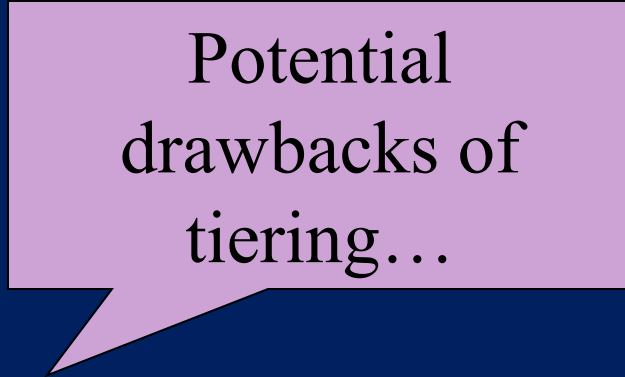
# TEIRED CURRICULUM PROJECT



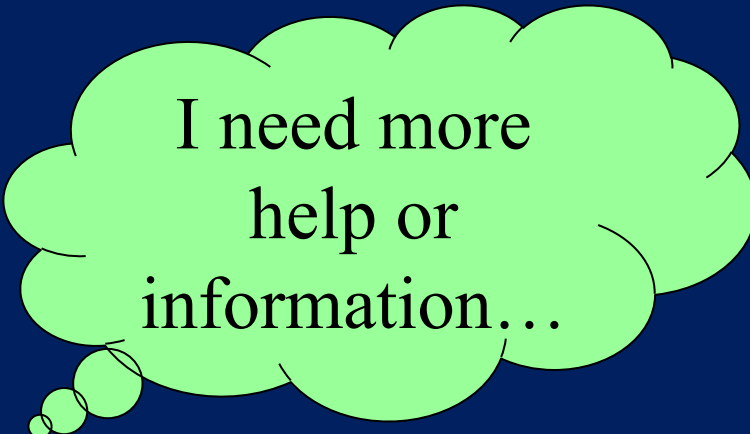
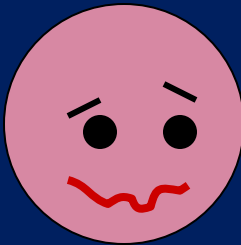
# The Voices in my Head...



Potential  
benefits of  
tiering...



Potential  
drawbacks of  
tiering...

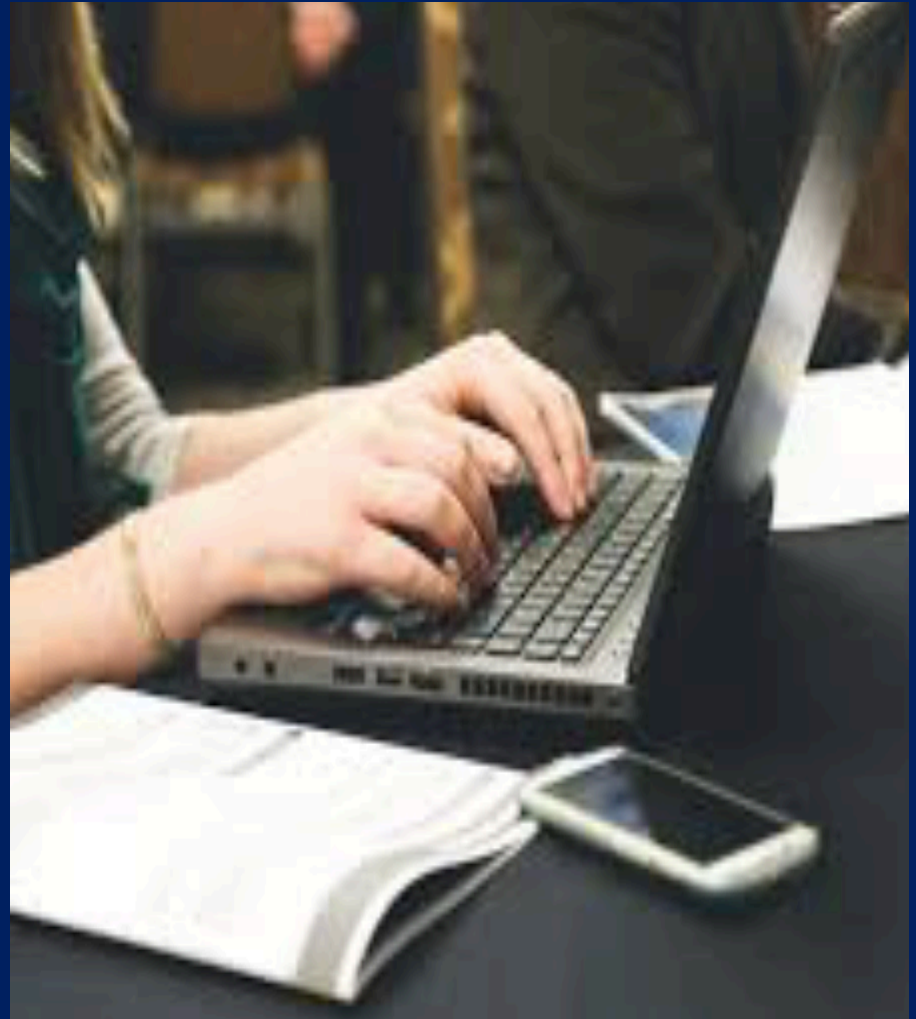


I need more  
help or  
information...



# Your Turn

Create at least one tiered assignments that could be used in your class during the next several weeks. Design one assignment based on student readiness and identify how you are going to place your students as well. Your other assignments can be tiered by interest or learning style or you can choose to do another one based on readiness.



**Be ready to share your assignments with your colleagues**

# RAFT



R	A	F	T

Doug Buehl cited in: Teaching Reading in the Content Areas: If Not Me Then Who Bill Meyer & Martin, 1998

# RAFT



**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 drawing, a pictogram, 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?

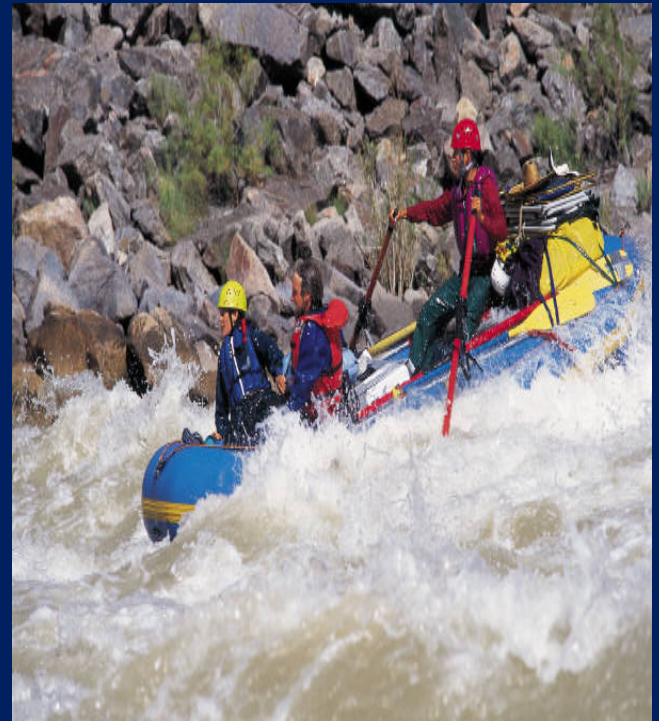
# A RAFT is...



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

# 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 or more columns consistent while varying the other columns in the RAFT grid



# RAFT:

[illegible]



# RAFT Possibilities

Role	Audience	Format	Topic
Writer	Self	Journal	Issues relevant to the text or time period
Artist	Peer group	Editorial	
Character	Younger students	Brochure/booklet	
Scientist	Government	Interview	
Adventurer	Parents	Video	Topic of personal interest or concern for role or audience
Inventor	Fictional character	Song	
Juror	Committee	Cartoon	
Judge	Jury	Game	
Historian	Judge	Primary documents	Topic related to essential question(s) and KUDs
Reporter	Animals	Critique	
Rebel	Objects	Biographical sketch	
Therapist		Newspaper article	
Journalist		Poem	
Teacher		Paragraph	
		Others??	

# Mathematics Raft

<u>Role:</u> Who are you?	<u>Audience:</u> To whom is this written?	<u>Format:</u> What form will it take?	<u>Topic:</u> What is the topic?
A vertical line	A horizontal line	Advice column	How not to be so flat?
Origin (0, 0)	Any other coordinate	Riddle	Why I am so special?
Linear Equation	Itself	Journal	Why do I always take the straight and narrow path?
Positive Slope	Negative Slope	Marriage Proposal	Our differences make us alike.

# Language Arts Raft

Role	Audience	Format	Topic
Huck Finn	Jim	Letter	What I Learned on the Trip
Billy Colman	Family	Eulogy	My Love for Little Ann and Old Dan
Comma	Sentences	Thank You Note	Glad I Could Be of Service
Prepositional Phrase	Author	Persuasive Speech	How I Can Help You Express Yourself
Juliet	Self	Diary	My Short Romance
Grendl	Beowulf	Letter	You Need to See My Side of the Story

# U.S. History Raft

Role	Audience	Format	Topic
President Franklin D. Roosevelt	His wife, Eleanor Roosevelt	Conversation	Why I issued Executive Order 9066
Neighbor of a Japanese American family	An uncle in New York City	Friendly Letter	What I think about the situation with the Japanese Americans
Young Japanese American girl or boy	Future generations of Americans	Poem of at least 8 lines	Why people should be judged on their merit, not their race, religion, or the way they look.
Guard at an internment camp	Writing in a personal diary	Diary entry of at least 8 sentences	Describing daily life in the internment camps

# Science Raft

Role	Audience	Format	Topic
Airplane passenger seated by a window looking at another moving plane in the adjacent gate Perspectives: 1.The airline passenger 2.An airline worker on the tarmac 3.A second passenger in the adjacent plane	A person who has never flown in an airplane before	A letter	Describe the relative motion of an object within a local frame of reference Describe motion from different perspectives as described in the “Role.”
Baseball – recently pitched Perspectives: 1. Pitcher 2. Ball 3. Batter	A person listening to a baseball game on the radio	Radio sports commentary	
Rain drop Perspectives: 1. Rain drop 2. Puddle	A child playing in the rain	Post cards (one from raindrop and one from puddle)	

# Sample RAFT Strips

	Role	Audience	Format	Topic
Language Arts	Semicolon	Middle School	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				
History				
Math				

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

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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				
Math				




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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
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Math	Fractions	Decimals	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

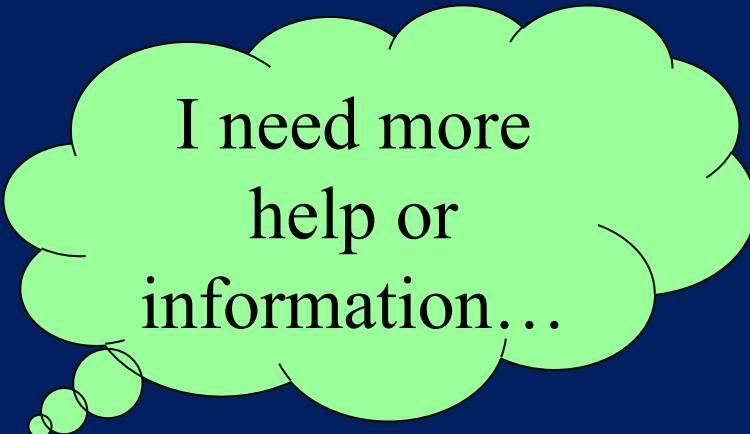
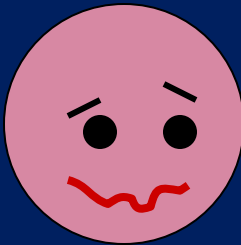
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I need more  
help or  
information...

# Your Turn

Create at least one RAFT that could be used in your class during the next several weeks. When completed then you can use the remaining time to work on either additional RAFT's or to work on Tiered Assignments, Choice Boards or Learning Contracts. The only thing you can't do is **nothing.**



**Be ready to share your assignments with your colleagues**

# CLOSURE AND EVALUATION



Thank you for your attention. Have a great evening!

*"To give anything less than your best is to sacrifice the gift"*

– Steve Prefontaine