



# Celebrating Diverse Learners

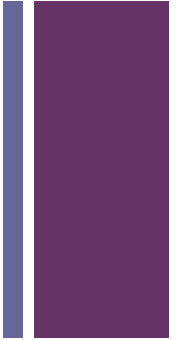


Differentiating Instruction in  
Response to Student  
Readiness, Interest and  
Learning Profile

Jane Jarvis, University of Virginia



# Guiding questions



- What is differentiated instruction?
- What is NOT differentiated instruction?
- Why should we differentiate instruction?
- What are some strategies I can use to apply differentiated instruction in my own classroom or school?

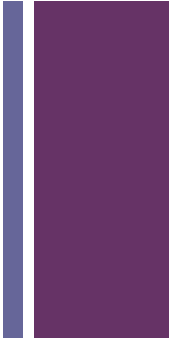
# + Why differentiate?



- Think about a gifted student you know for whom “one size fits all” teaching does not work.
- What needs does this student display that make one size fits all approach ineffective?



# Gifted students are diverse!



- Many varieties of twice exceptional
- Different levels of motivation
- Different rates of growth
- Different interests
- Non-traditional profiles of gifts
- English Language Learners
- Low income backgrounds
- Diverse cultural and ethnic backgrounds
- Varying levels of independence
- Lacking background knowledge
- With talents in subject areas other than ours



“Nothing is more unequal than the unequal than the equal treatment of people with unequal needs.”



# What do we know about student differences and learning?



- When students work at a moderate level of challenge, learning (**growth**) is optimal.



DIFFERENTIATION BY READINESS

- When students work in an area of interest, **motivation** and engagement are maximized.



DIFFERENTIATION BY INTEREST

- When students work in ways that are comfortable for taking in, making sense of, and showing their understanding of information, learning is more **efficient**.



DIFFERENTIATION BY  
LEARNING PROFILE

- When students feel safe, comfortable, and respected as individuals, learning is more likely to occur.



POSITIVE LEARNING  
ENVIRONMENT



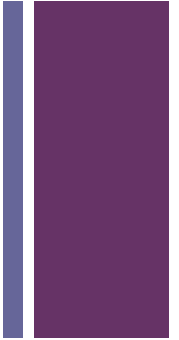
If we know all that, why DON'T we differentiate instruction?

*“When we put our students’ needs first, we differentiate.*

*When the teacher’s needs come first, we don’t differentiate.”*



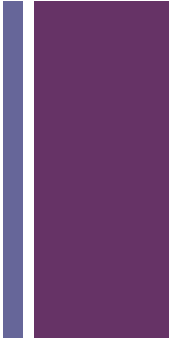
# + Differentiation is not...



- Simply “different” activities or assignments
- Individualized assignments for each student
- Static ability grouping
- Allowing some students access to the important ideas while others work on basic skills
- Reactive adjustment after a lesson or activity doesn’t work for some learners
- A particular strategy or set of strategies
- A new idea!



# + Differentiation is...

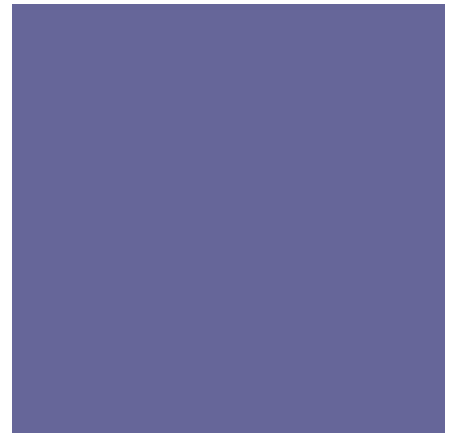


- A teacher's proactive response to dimensions of student difference that are meaningfully related to learning
- A framework for designing learning opportunities that is grounded in a set of core, underlying principles
- A philosophy of teaching that permeates all aspects of the learning environment and experience



When we first begin to *believe* anything, what we believe is not a single proposition, it is a whole system of propositions. Light dawns gradually over the whole.

Wittgenstein



# Differentiation

is a teacher's  
response  
to

*Learner Differences*

Readiness

Interest

Learning Profile

guided  
by

*Principles of Effective Differentiation*

High Quality  
Curriculum

Ongoing  
Assessments

Flexible Grouping  
Strategies

Respectful and  
Challenging Tasks

Positive  
Classroom  
Community

applied  
to

*Elements of Curriculum and Instruction*

Content

Process

Products

Affective Environment

*Through the use of...Instructional strategies*

# A Continuum of Differentiated Instruction

## NO DIFFERENTIATION

Class works as a whole on most materials, exercises, projects.

Group pacing

Group grading standards

Implied or stated philosophy that all of the students need same teaching/learning

*Etc.*

## MICRO DIFFERENTIATION

Adjusting questions in discussion

Encouraging individuals to take an assignment further

Implied variations in grading experiences

Students pick own work groups

If students finish work early, they can read, do puzzles, etc.

Occasional exceptions to standard pacing. May not need to show work, do all math problems.

Occasional adjustments in grading to reflect student effort and/or ability

*Etc...*

## MACRO DIFFERENTIATION

Articulated philosophy of student differences.

Planned assessment/compacting

Variable pacing is a given

Moving furniture

Planned variation content/input

Planned variation in process/sense-making

Planned variation in product/output

Consistent use of flexible groups

Individual goal setting, assessment (grading)

Grading to reflect individual growth/process

Mentoring

*Etc...*

•More reactive

•More dependent on student response

•More fixed

•More closed

•More proactive

•More dependent on teacher coaching

•More fluid

•More open

**Differentiated Instruction is a proactively planned, interdependent system marked by**

**A Positive  
Community of  
Learners**

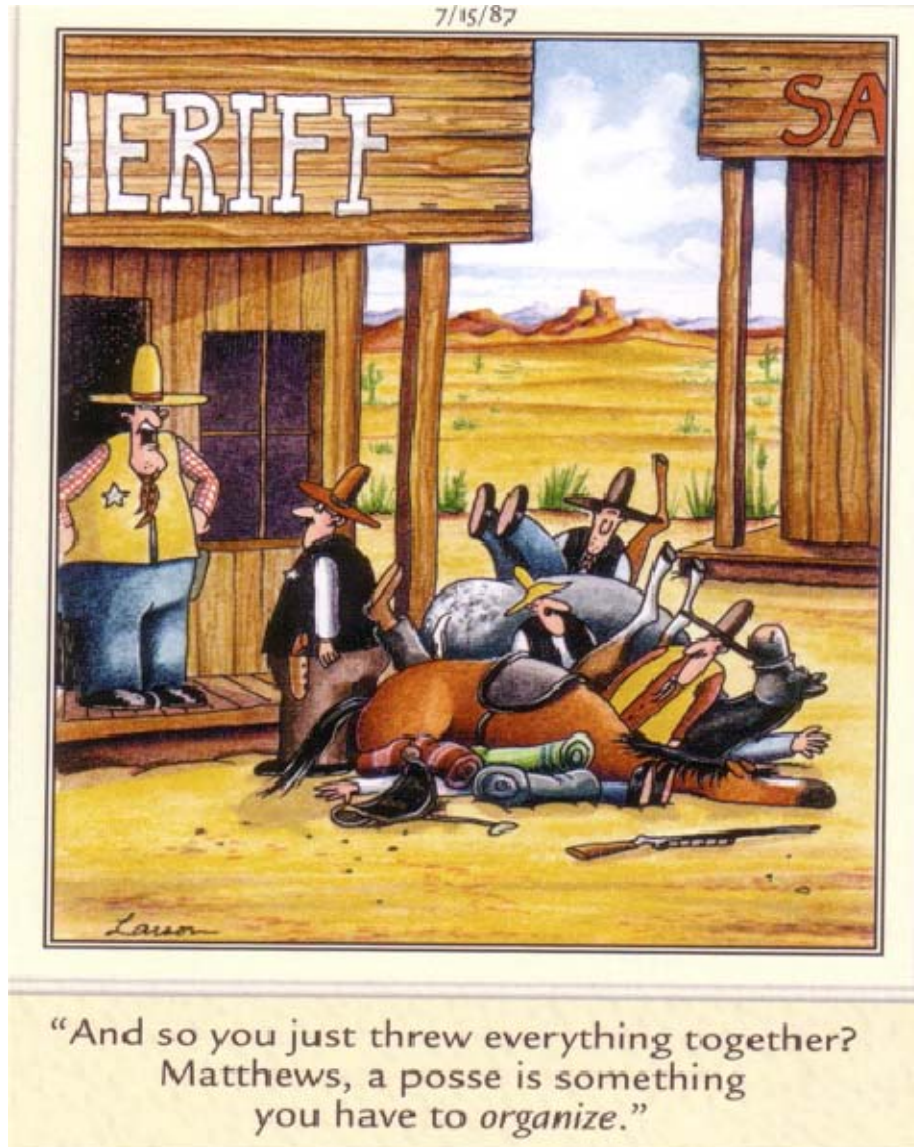
**Focused, High-  
Quality  
Curriculum**

**Ongoing  
Assessment**

**Flexible  
Instructional  
Arrangements**

**Respectful Tasks**

# +Questions or comments?





# Focused, High-Quality Curriculum

## **KNOW**

- Facts
- Vocabulary
- Definitions
- Dates
- Algorithms

## **UNDERSTAND**

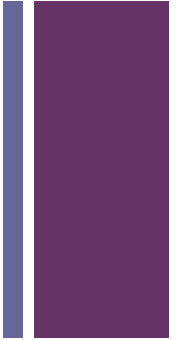
- Principles
- Generalizations
- Big ideas of the discipline
- Conceptual ideas

## **BE ABLE TO DO**

- Processes
- Skills of the discipline, basic skills, skills of production, skills of independence
- Habits of mind



# High Quality Curriculum...



- ...should be UNCOVERED rather than covered (McTighe)
- ...is authentic to the discipline
- ...challenges students to engage with essential ideas, concepts, principles, and truths within and across discipline

Cultural diversity in Australia is influenced by public opinion, media portrayals, government policies and the impacts of globalisation

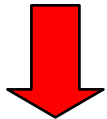
Australian citizenship involves recognising global perspectives and balancing majority rule against respecting minority interests



## On-going Assessment: A Diagnostic Continuum

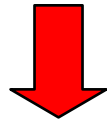
← *Feedback and Goal Setting* →

**Preassessment**  
(Finding Out)



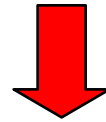
*Pre-test*  
*Graphing for Greatness*  
*Inventory*  
*KWL*  
*Checklist*  
*Observation*  
*Self-evaluation*  
*Questioning*

**Formative Assessment**  
(Keeping Track & Checking -up)



<i>Conference</i>	<i>Exit Card</i>
<i>Peer evaluation</i>	<i>Portfolio Check</i>
<i>3-minute pause</i>	<i>Quiz</i>
<i>Observation</i>	<i>Journal Entry</i>
<i>Talkaround</i>	<i>Self-evaluation</i>
<i>Questioning</i>	

**Summative Assessment**  
(Making sure)



*Unit Test*  
*Performance Task*  
*Product/Exhibit*  
*Demonstration*  
*Portfolio Review*

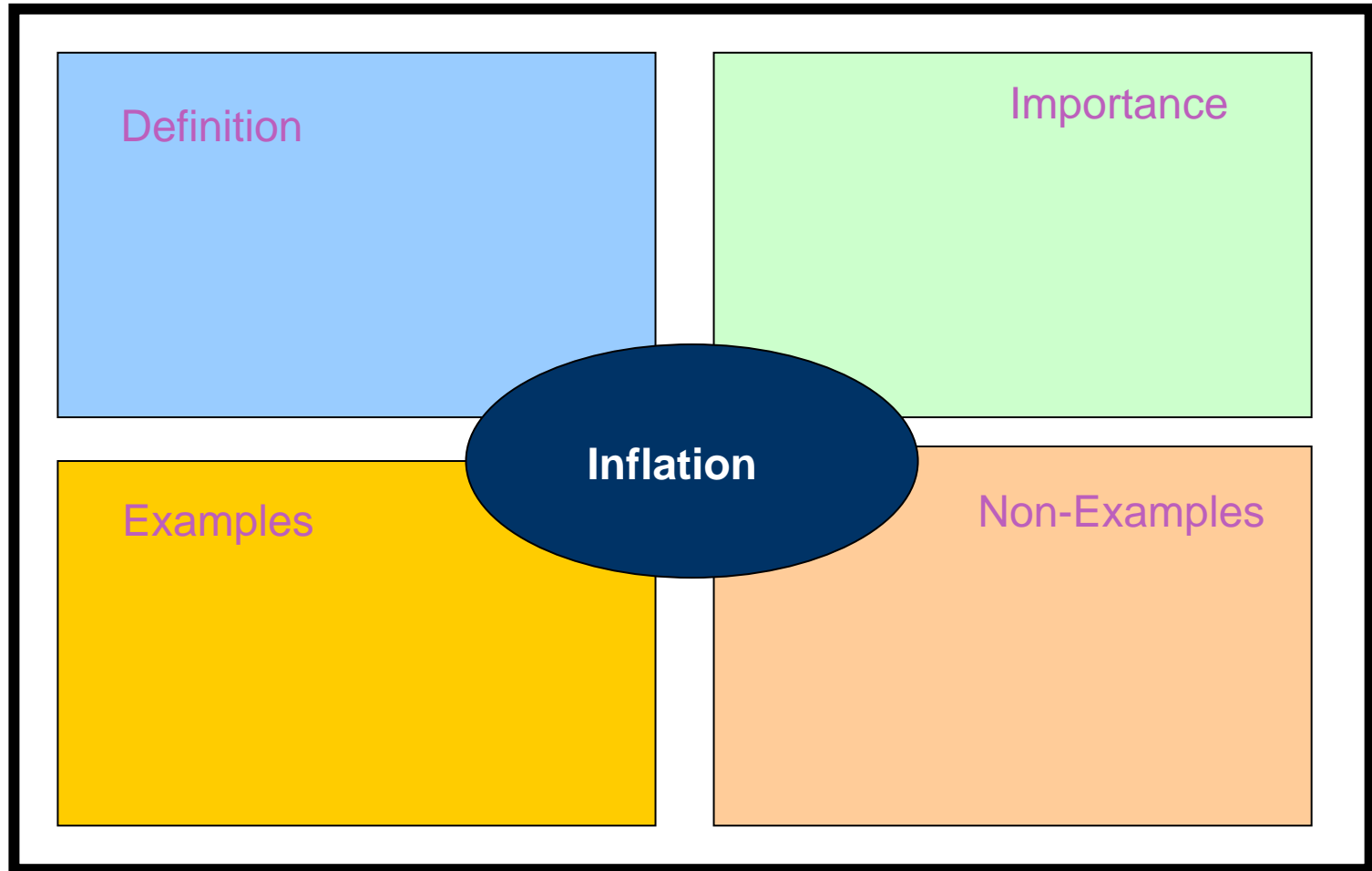
# Pre-assessment for Writer's Voice Unit

Name \_\_\_\_\_

1. What is “writer’s voice”?
2. Give an example of a sentence written with a strong writer’s voice.
3. Look at what you wrote for question 2.  
What is it that gives this sentence a strong writer’s voice?



**Directions:** Complete the chart to show what you know about \_\_\_\_\_.  
Write as much as you can.



Useful for pre-assessment & formative assessment of readiness in many grades & subjects

# + Exit Cards: Poetry

Name: \_\_\_\_\_

- What is a “Conceit”?
- Briefly explain the Conceit used in the poem, “The Flea,” as well as in one other poem we’ve read this week.
- Why do you think these poets used this technique?

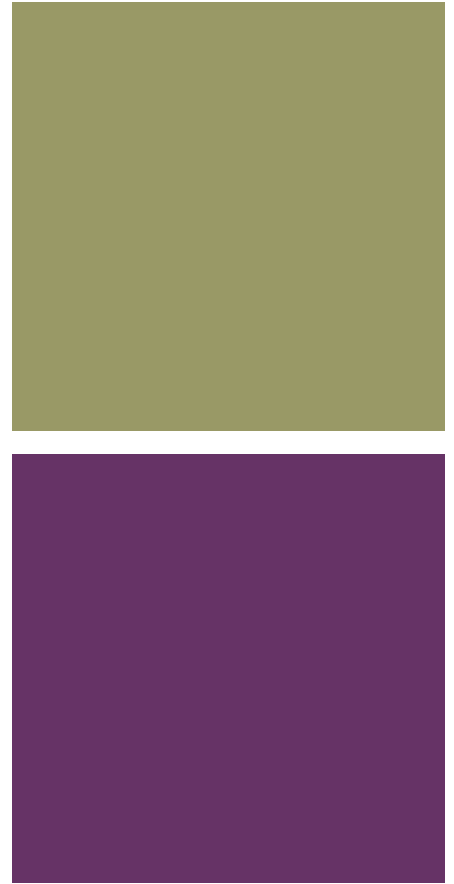
# + Exit Cards: History

Name:

- Name 3 factors that contributed to the United States' involvement in WWII.
- Briefly explain what you believe to be the most significant of these factors and tell why.

“The only man who behaved sensibly was my tailor; he took my measurement anew every time he saw me, while all the rest went on with their old measurements and expected them to fit me.”

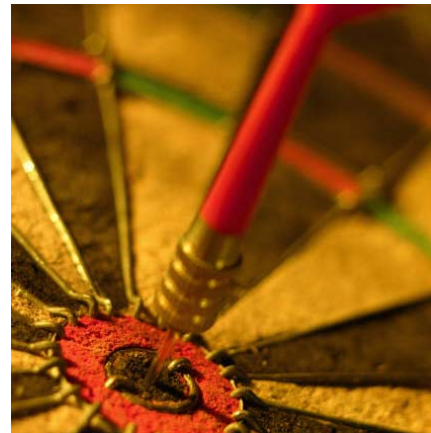
+ George Bernard Shaw





## Differentiation by Readiness

- ✓ In the context of quality curriculum
- ✓ In response to student assessment data
- ✓ Involving the student in decision-making
- ✓ Attending to student interest and learning preferences
- ✓ With appropriate support for success at a new level



# + What zone am I in?



## Too Easy

- I get it straight away
- I already know how...
- This is basic
- I'm cruising
- I feel relaxed
- I'm bored
- This takes very little effort

## On Target

- I know some things
- I have to think
- I have to work
- This takes persistence
- 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 this out
- I'm missing key skills or knowledge
- I'm running on the spot
- I feel frustrated
- I feel angry
- This makes no sense
- Effort doesn't pay off



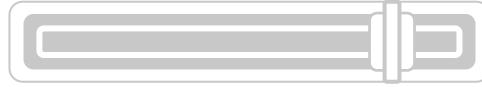
**1. Foundational**



**Transformational**

Information, Ideas, Materials, Applications

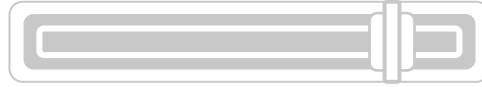
**2. Concrete**



**Abstract**

Representations, Ideas, Applications, Materials

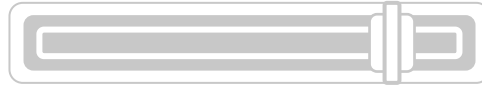
**3. Simple**



**Complex**

Resources, Research, Issues, Problems, Skills, Goals

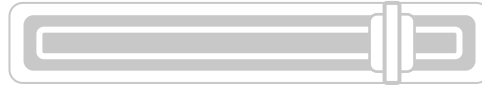
**4. Single Facet**



**Multiple Facets**

Directions, Problems, Application, Solutions, Approaches, Disciplinary Connections

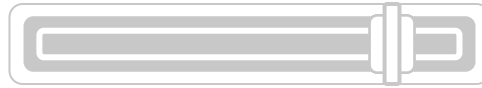
**5. Small Leap**



**Great Leap**

Application, Insight, Transfer

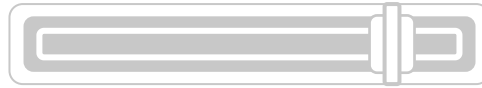
**6. More Structured**



**More Open**

Solutions, Decisions, Approaches

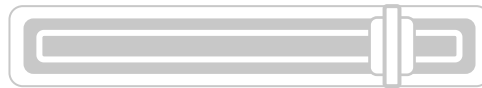
**7. Clearly Defined Problems**



**Fuzzy Problems**

In Process, In Research, In Products

**8. Less Independence**



**Greater Independence**

Planning, Designing, Monitoring

**9. Slow**



**Quick**

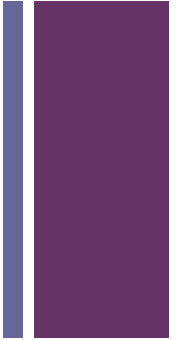
Pace of Study, Pace of Thought

**The Equalizer**





# Varied Journal Prompts



- A.** Write a step-by-step set of directions, including diagrams and computations, to show someone who has been absent how to do the kind of problem we've worked with this week.
- B.** Write a set of directions for someone who is going to solve a problem in their life by using the kind of maths problem we've studied this week. Explain their problem first. Be sure the directions address their problem, not just the computations.



Maths Example



# Varied Journal Prompts

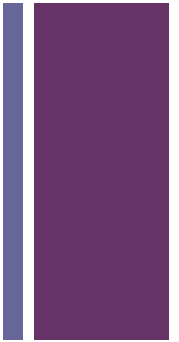
- A.** A classmate had to leave the room today just as the lab experiment was reaching a conclusion. Please write that student a note explaining what happened in the lab, why it happened, and what practical use there is in the real world for what the experiment shows us. You're his/her only hope for clarity! Be as helpful as possible.
- B.** Select a key or critical element in the experiment today. Change it in some way. What will happen in the experiment with that change? Why? What principle can you infer? Be sure you choose something useful, insightful, and intellectually or scientifically meaningful.



Science Example



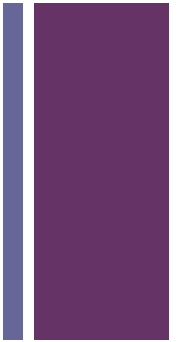
# Other readiness examples...



- Students are assigned different texts or articles that cater for different reading levels but explore the same information, concepts or big ideas (e.g. all texts contain irony). All students are then equipped to participate in a group discussion.
- ‘Tiered’ lessons or assignments: Students are assigned to different versions of a task. Each version offers a different level of scaffolding or support.
- Students are offered different graphic organizers for note-taking, some of which are more structured than others.



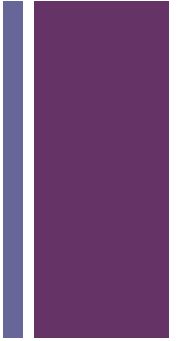
# Differentiation by Interest



- To enhance motivation
- Clear learning goals; Not simply “fun” activities
- Can be effectively employed in concert with readiness and learning profile differentiation
- Should both capitalize on existing interests and expose students to potential new interests
- Can be used to help students convert a passion into developing professional expertise
- Assessment is key!



# Interest examples



- Different representative topics related to a common concept (e.g. principles of rotational motion can be investigated through gymnastics, surfing, or automobiles)
- Interest groups or centers
- Independent projects as anchor activities or ongoing work
- Opportunities for mentorships in the “real world”
- Excellent for asking students to explore different perspectives on a single topic (e.g. taking on the roles of different leaders and citizens from different countries to explore multiple perspectives on World War II)

# + Self Portrait RAFT (Art)

## Know:

- Characteristics of self portrait
- Appropriate use of artistic materials
- Principles of Design
- Definition of artistic expression

## Understand:

- Each artist has a personal style.
- Personal style reflects the individual's culture, time, and personal experiences.
- Use of materials and style are related.

## Be Able to Do:

- Analyze an artist's personal style and use of materials.
- Create a facsimile of an artist's personal style and use of materials.



# + Self Portrait RAFT

Role	Audience	Format	Topic
Norman Rockwell	Masses	Illustration	What You See is What You Get
Van Gogh	Self	Oil Painting	Can I Find Myself In Here?
Andy Warhol	Someone you want to know the true you	Photograph	Now you see Me, Now you Don't
Rueben	Self	Oil Painting	Props Make the Person
Goya	School	Charcoal	On the Side, but Central



# Jacksonian Democracy: Tiered Social Studies RAFT

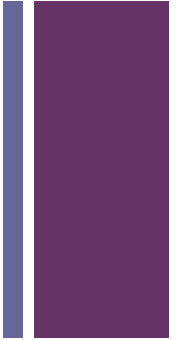


*Learning goals are to review vocabulary, people, and essential questions related to the chapter. The teacher assigns choices based on **readiness** in analysis of text.*

	<i>Role</i>	<i>Audience</i>	<i>Format</i>	<i>Topic</i>
<i>Concrete</i>	Andrew Jackson	Supporters	Conversation	Why I believe in the spoils system
<i>Concrete</i>	Democratic Party	Frontier settlers & farmers	TV commercial	Why Jackson is the man you want as president
<i>Mod</i>	Martin van Buren	Voter	Q and A transcript	Questions about the economy and state's rights
<i>Mod</i>	Expansion of voting rights	National bank issue and economy	Venn diagram or graphic organizer	Which of us was most important in causing the Whig Party to form?
<i>Hard</i>	John C. Calhoun	Future citizens	Prediction in a diary entry	How the nullification crisis foreshadowed issues that would divide the nation and lead to war.
<i>Hard</i>	Southern citizens	Northern politicians	Argument or debate	Why these tariffs on manufactured goods are unfair to our region!



# Differentiation by Learning Profile



- To increase efficiency of learning
- Learning profile comprises multiple interacting factors
- Aided by teacher assessment, observation, and student self-assessment
- Should be considered fluid and flexible rather than fixed
- Can be effective in concert with interest and readiness differentiation
- Can be used to help students move out of their “comfort zone”

# Responding to Learning Profile



## Group Orientation

Self-Orientation

Adult Independent/Self-Orientation

Group/Peer Orientation

Combination

## Cognitive Style

Creative/conforming

Essence/facts

Whole to part/part to whole

Expressive/controlled

Non-linear/linear

Inductive/deductive

People oriented/task or object oriented

Concrete/abstract

Collaboration/competition

Interpersonal/introspective

Easily distracted/long attention span

Group achievement/personal achievement

Oral/visual-spatial

Reflective/action-oriented

## Learning Environment

Quiet/noise

Warm/cool

Still/mobile

Flexible/fixed

"Busy"/"Spare"

## Style of Thinking/Processing

Analytic

Practical

Creative

Verbal/linguistic

Logical/mathematical

Spatial/visual

Bodily/kinesthetic

Musical/rhythmic

Interpersonal

Intrapersonal

Naturalistic

Existential



# It's a Matter of Balance

In Academically Diverse Classrooms, It's Helpful to  
Ensure that Students have Balanced Opportunities to  
Work Along these Continua

Conformity → Creativity

Part to Whole → Whole to Part

Competition → Collaboration

On-Demand  
Response → Reflective  
Response

Individual  
Emphasis → Group  
Emphasis

Independence → Helpfulness

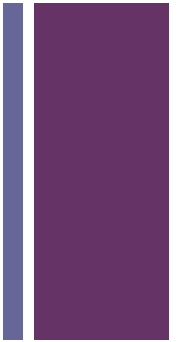
Information → Feeling

Controlled → Expressive

Written Expression → Multi-Mode  
Expression



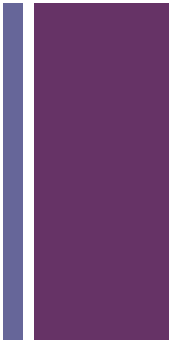
# Learning profile examples



- Mixed learning profile groups
- Differentiated products that allow for a range of modes of expression (e.g. photographic essay, series of interviews, debate, digital stories)
- Creative, Analytical, and Practical takes on a common task
- Opportunities to work independently, in small groups, in whole groups
- Different graphic organizers
- Using different “hooks” to introduce a unit of study



# Accessing content: Orchestra

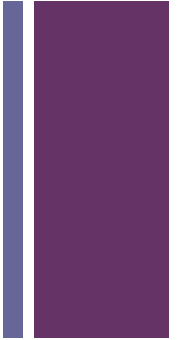


- Listen to a recording of a piece several times before referring to the sheet music
- Beginning with the sheet music and learning to play the piece sequentially
- Learning about the history of the piece and its composer before hearing or reading the music





# Intelligence preference: Climate change

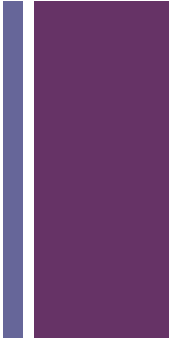


Based on what we have learned about climate change, work in a group of three to design a sustainable, low-energy house that provides thermal comfort in the face of future temperature increases.

One group member is responsible for for the design of the house.

One group member is responsible for a cost-benefit analysis of the house's strengths and potential concerns.

One group member is responsible for researching how and where to access appropriate materials and markets.



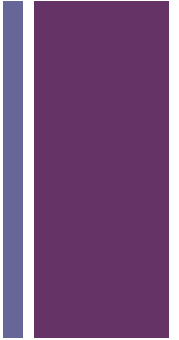
Now it's your turn!







# Reflection



What can you take away and apply?

What would you like to know more about?

What are some of the challenges you or the teachers you work with are likely to face in differentiating instruction for gifted students?

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