Four Non-Negotiables of Defensible Differentiation

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What is Differentiation?
(Making Sure We’re on the Same Page…)

What is Differentiation?
(Making Sure We’re on the Same Page…)

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(Making Sure We’re on the Same Page…)

SHHHH/SaRe... 1. Pick a column
  2. Write or think silently
  3. Be ready to share when time is called

Write a definition of differentiation you feel clarifies its key intent, elements, and principles.

Explain to a new teacher what differentiation is in terms of what a teacher would be doing in the classroom—and why. Your definition should create an image of differentiation in action in a real setting.

Develop a metaphor, analogy, or visual symbol that you think represents and clarifies what’s important to understand about differentiation.
Sternberg’s Three Intelligences

Analytical  Practical  Creative

Differentiation
Is a teacher’s response to learner’s needs
Guided by mindset and general principles of differentiation

Respectful tasks  Quality Curriculum  Flexible grouping  Continual assessment  Bldg. Community

Teachers can differentiate through

Content  Process  Product  Affect/Environment

According to students’

Readiness  Interest  Learning Profile

Through a variety of instructional strategies such as:

RAFTS...Graphic Organizers...Scaffolding Reading...Cubing...Think-Tac-Toe...Learning Contracts...Tiering...Learning/Interest Centers...Independent Studies...Intelligence Preferences...Orbitals...Complex Instruction...4MAT...Web Quest & Web Inquiry...ETC.

Differentiation is a sequence of common sense decisions made by teachers with a student-first orientation

Adam Hoppe, 2010
A strong teaching strategy is one that ensures each student learns what he or she should learn by establishing clear goals, assessing persistently to see where each student is relative to the goals, and adjusting instruction based on assessment information—so that each student can learn as much as possible as efficiently as possible.

**Differentiation is NOT a set of strategies...**  It’s a way of thinking about teaching & learning

*Strategies are tools to accomplish the goals of DI.*
*They no more differentiation than a hammer and a saw are the house they help to build.*

---

**Think about it........**

• How do these definitions mesh with yours?

• What else would you add to the definitions?
Quality DI

Begins with a growth mindset, moves to student-teacher connections, & evolves to community.

Paving the Way

MINDSET ➔ CONNECTIONS ➔ COMMUNITY ➔ to Learning

The Predictive Power of Mindset

Fixed

• Success comes from being smart
• Genetics, environment determine what we can do
• Some kids are smart—some aren’t
• Teachers can’t override students’ profiles

Growth

• Success comes from effort
• With hard work, most students can do most things
• Teachers can override students’ profiles
• A key role of the teacher is to set high goals, provide high support, ensure student focus—to find the thing that makes school work for a student
Note key attributes of Captain Sullenberger’s thinking during the time he was making decisions about the problem he encountered and was acting on those decisions.

What do you find to be the most compelling thing he has to say? Why does it strike you as the most important?

How would you characterize him as a pilot based on this interview segment?

What does any of this have to do with teaching?

Host: We entered all of the flight data into a computer (speed, location, landing distance, etc.)

Sir, the computer said you couldn’t land the plane successfully.

Captain Sullenberger: Then I’m glad a computer wasn’t flying the plane.
**Teacher Mindset**

Shapes Student Self-Perception

Who

TALK ABOUT IT...
How does teacher Mindset impact who, where, what, & how we teach?

Coverage vs. Whatever It Takes

How

What

I teach what I believe you can learn

Mindset

Builds or Erodes Group Trust

Where

What are the implications of mindset for differentiation??

People CAN Change Their Mindset

Question:

In what ways do your faculty and school support development of a fluid teacher and student mindset?

In what way do your faculty & school encourage development of a fixed teacher and student mindset?
Paving the Way

MINDSET  ➔  CONNECTIONS  ➔  COMMUNITY

to Learning

Teacher-Student Connections Bridge the Risk of Learning

Connecting with Kids

Talk at the door
Early interest assessments
Small group instruction
Dialogue journals
Student conferences
Open room days
Ask for student input
Invite examples, analogies, experiences
Seek student input on class
Use Socratic or student-led discussions
Share your own stories

Listen
Seek varied perspectives
Share own interests, questions, plans
Start class with kid talk
Go to student events
Watch before & after school, at lunch
Keep student data cards
Take notes during class
Attend extracurricular activities
Build curriculum on student culture & interests
Teachers discover that they need to develop and maintain personal relationships with the students they teach—because for most students, meaningful interaction with a teacher is a precursor to academic learning.


MINDSET ➔ CONNECTIONS ➔ COMMUNITY

to Learning

How Community Evolves over Time
Building Community

- Establishes the framework for a responsive classroom
- Each student’s need for a “next step”
- Responsibility for own growth
- “We’ve got your back” mentality
- Competition against self (vs. others)
- Fair as each student getting what he/she needs to succeed
- Working like colleagues
- Begins with teacher mindset
- Extends to student belief in one another
- Supports the belief that we win or lose together
- Ensures security/safety necessary for academic growth
- Enables students to work as a team
- Provides the teacher with “teammates” too
How We Came to Be...Us

Because my teacher treats me with respect, I feel a sense of dignity in this place.
Because my teacher treats every one of us with respect, we are respectful of one another.
Because my teacher sees our possibilities, I am beginning to see them too.
Because my teacher says sweat makes winners, we're learning to sweat.
Because my teacher works hard for me, I want to work hard for her.
Because my teacher won't settle for less than our best, we aim high more often.
Because my teacher says we are responsible for one another, we help one another succeed.
Because my teacher helps us see ourselves through her eyes, we see hope in ourselves.
Because my teacher is a great coach, we are a great team.

There is no textbook or pacing guide or set of instructional strategies that can substitute for a teacher’s belief in and connection with students...
But high quality curriculum can play a key role in fluid mindset, connections, and community!

Quality DI

Is rooted in meaningful curriculum.
THINK ABOUT IT….

What do/should teachers/curriculum developers do to make sure curriculum is sound? That it feeds young brains appropriately?

Planet MI Task

<table>
<thead>
<tr>
<th>V/L</th>
<th>L/M</th>
<th>M/R</th>
<th>B/K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write a story about your planet</td>
<td>Make a chart that compares your planet to Earth</td>
<td>Make up a song about your planet</td>
<td>Make up or adapt a game about your planet (Saturn ring-toss, etc.)</td>
</tr>
</tbody>
</table>

Beware of Twinky DI
QUALITY CURRICULUM: THE SHORT VERSION

Engagement + Understanding = Success

Quality Differentiation

“Teaches Up” and ensures “Respectful Tasks” (based on essential understandings, equally engaging, requiring high level thought for all students).

A NON-NEGOTIABLE OF DI

Our goal should always be to create the richest, highest quality curriculum we know how to create...

Then, differentiate to enable the largest possible number of students to succeed with it.

Differentiation should always be about lifting up—never about watering down!!

TEACHING UP!!
“Teaching up” is strongly connected to both teacher & student “mindset…”

How does that work?

### Novel Think-Tac-Toe: Basic Version

**Directions:** Select and complete one activity from each horizontal row to help you and others think about your novel. Remember to make your work thoughtful, original, and detailed.

<table>
<thead>
<tr>
<th>Character</th>
<th>Setting</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a pair of collages that compare you and a character from the book. Color, cut, and paste details from the book onto your collages so viewers understand your thinking.</td>
<td>Make a model of a key place in your life, and an important one in the novel. Use a Parade magazine for material. Be sure to include the most important events in each place.</td>
<td>Make a timeline. The first should illustrate and describe at least 6 shifts in settings in the novel. The second should explain and illustrate how the mood changes with the change in setting.</td>
</tr>
<tr>
<td>Write a bio-poem about yourself and another about a main character in the book so your readers see how you and the character are alike and different. Be sure to include the most important events in each poem.</td>
<td>Interview a key character from the book to find out what lessons have been learned. Use the novel theme. Find at least 6 that fit to be shared.</td>
<td>Find several songs you think reflect an important message from the book. Prepare an audio collage. Write an exhibit card that helps your listener understand how you think these songs express the book’s meaning.</td>
</tr>
</tbody>
</table>

### Novel Think-Tac-Toe: Advanced Version

**Directions:** Select and complete one activity from each horizontal row to help you and others think about your novel. Remember to make your work thoughtful, original, insightful, and elegant in expression.

<table>
<thead>
<tr>
<th>Character</th>
<th>Setting</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write a bio-poem about yourself and another about a key character in the book so your readers see how you and the character are alike and different. Be sure to include the most important events in each poem.</td>
<td>Write a mini-paper about yourself and another about a key character in the book so your readers see how you and the character are alike and different. Be sure to include the most important events in each poem.</td>
<td>Make a model or a map of a key place in your life, and in important one in the novel. Find a way to help viewers understand both what the places are like and why they are important in your life and the characters’.</td>
</tr>
<tr>
<td>Write a key character from the book in a newspaper 20 years after the novel ends. Write the piece. Where has the character been? What’s happened? Write about the reaction.</td>
<td>Write a profile. Write and illustrate a full and useful profile of an interesting character from the book with emphasis on personality traits and mode of operating. While you’re at it, profile yourself too.</td>
<td>The time and place in which people find themselves and when events happen shape those people and events in important ways. Find a way to convincingly prove that idea using this book.</td>
</tr>
<tr>
<td>Research a town/place you feel is equivalent to the one in which the novel is set. Use maps, sketches, population and other demographic info to help you make comparisons and contrasts.</td>
<td>Research a town/place that is equivalent to the one in which the novel is set. Use maps, sketches, population and other demographic info to help you make comparisons and contrasts.</td>
<td>Find out about famous people in history or current events whose experiences and lives reflect the essential themes of this novel. Show us what you’ve learned.</td>
</tr>
<tr>
<td>Create a multi-media presentation that fully explains the theme from the novel. Use a combination of elements (example painting, music, poetry, photography, drama, sculpture, calligraphy, etc.) in your exploration.</td>
<td>Create a multiple-choice question about the novel’s theme with answers that reflect the views of the main character. Write the passage.</td>
<td>Find several songs you think reflect an important message from the book. Prepare an audio collage. Write an exhibit card that helps your listener understand how you think these songs express the book’s meaning.</td>
</tr>
</tbody>
</table>
However we conceive it, every lesson plan should be, at its plan at its heart, motivational plan. Young learners are motivated and engaged by a variety of conditions. Among those are:

- novelty
- cultural significance
- personal relevance or passion
- emotional connection
- product focus
- choice
- the potential to make a contribution or link with something greater than self

Where is the Meaning Meter in your school or classroom? What’s your evidence? Why does it matter?
Teachers Must Distinguish Between:

- Enduring Understandings
- Important to Know and Do
- Worth Being Familiar With

Planning a Focused Curriculum Means—At the Very Least—Clarity About What Students Should...

- **KNOW**
  - Facts
  - Vocabulary
  - Definitions

- **UNDERSTAND**
  - Principles/generalizations
  - Big ideas of the discipline

- **BE ABLE TO DO**
  - Processes
  - Skills
KNOW

Facts, names, dates, places, information

- There are 50 states in the US
- Thomas Jefferson
- 1492
- The Continental Divide
- The multiplication tables
- Procedural information (how to...)

UNDERSTAND

Essential truths that give meaning to the topic
Stated as a full sentence
Begin with, "I want students to understand THAT..."
(not HOW... or WHY... or WHAT)

- Multiplication is another way to do addition.
- People migrate to meet basic needs.
- All cultures contain the same elements.
- Entropy and enthalpy are competing forces in the natural world.
- Voice reflects the author.

BE ABLE TO DO

Skills (basic skills, skills of the discipline, skills of independence, social skills, skills of production)
Verbs or phrases (not the whole activity)

- Analyze
- Solve a problem to find perimeter
- Write a well supported argument
- Evaluate work according to specific criteria
- Contribute to the success of a group or team
- Use graphics to represent data appropriately
A Powerful Activity

is one in which

Students make or do something
Using essential knowledge and essential skills
In order to arrive at or explore an essential understanding.

The knowledge and skills are in service of understanding, NOT ends in themselves!

Creating common learning goals

We have to know where we want all students to end up before we can think intelligently about how we want them to get there!

Differentiation is seldom about different outcomes for different kids. It's about different ways to get kids where they need to go.
In a Differentiated Classroom...

The teacher may vary the KNOWS & DOs with caution and based on evidence that a student needs to learn backwards as well as forward to catch up—or that a student needs to move ahead in order to keep learning.

The UNDERSTANDS are the constant fulcrum on which effective differentiation pivots for all students.

In Other Words: KUDs Matter Because

They create clear learning goals
Allow us to align goals, assessments, teaching, and learning tasks
They allow us to incorporate standards AND make meaning for students
They give us a basis for differentiation.
Who needs which K’s & D’s
How do we ensure that every student gets meaningful access to the U’s
They tell us what strugglers should invest in
They give us a platform for extending for advanced students

As a result of this lesson, students should:

Know:
Counting
More/Less

Understand:
I can talk about how I am thinking.
I can make a plan to help me count things.

Be Able to:
Count
Show results
Explain a plan for counting

Grade K
Counting (Skill)

Counting/Math Center

Task 1 Find a way to count and show how many people are in our class today.
How did you get your answer?

Task 2 Find a way to show how many people are in our class.
How many absent today?
How many are here today?
How do you know?

Task 3 Find a way to show how many boys are in our class today.
How many boys are absent today?
How many girls are here today?
How many girls are absent today?
Prove you are right.
3 Quality DI

Is guided by on-going assessment (for planning and feedback—not grades).

The Common Sense of Differentiation

Absolute clarity about the learning destination

Persistently knowing where students are in relation to the destination all along the way

Adjusting teaching to make sure each student arrives at the destination (and, when possible, moves beyond it)
WHAT CAN BE ASSESSED?

**READINESS**
- Skills
- Content Knowledge
- Concepts/Principles

**INTEREST**
- Current Interests
- Potential Interests
- Talents/Passions

**LEARNING PROFILE**
- Areas of Strength and Weakness
- Learning Preferences
- Self Awareness

On-going Assessment: A Diagnostic Continuum

- **Feedback and Goal Setting**
  - Pre-assessment (Finding Out)
  - Formative Assessment (Keeping Track & Checking-Up)
  - Summative Assessment (Making sure)

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

  - Exit Cards
  - Portfolio Check
  - Quiz
  - Journal Entry
  - Self-evaluation
  - Windshield Check

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

Remember to check for prerequisite skills

Some Roles of Assessment in DI

HELPING US KNOW WHO KIDS ARE SO WE CAN TEACH THEM BETTER...

(Pre-assessment)
At My Best...
Thinking about your strengths and best features, please answer the following:
1. A positive thing people say about me is:
2. When I’m feeling great at school, it’s probably because:
3. A dream I have for myself is:
4. A thing I like spending time on is:
5. Something that captures my imagination is:
6. The best thing about my family is:
7. My strength as a learner is:
8. What I can contribute to the classroom is:
9. A thing I wish people knew about me is:
10. I’m proud of:

Strength-Based Assessments
Typical Assessment Info.
• Average IQ
• Average reading
• Achievement
• Above average math
• Computation
• Missed 10 days of school this quarter
• 2 in-school suspensions
• this quarter
Strength-Based Assessment
• Likes mechanical things
• Reads magazines about motorcycles
• Wants to learn more about computers
• Seen as a big brother to neighborhood kids
• Wants to travel some day
• Likes to talk about ideas

MATH INVENTORY
NAME ___________________ DATE __________
1. How do you feel about math?
2. Do you think you are good in math? Why?
3. What are your best areas in math?
4. What are your weakest areas in math?
5. Do you think it is important to be good in math? Why?
6. What do you think are characteristics of students who are good in math? Why?
7. What do you do when you come to a math problem you can’t solve?
8. How do you use math outside of class?
9. What do you usually do after school when you get home?
10. Do you most like to do when you have free time? Why?
11. What else should I know about you to teach you effectively this year?
Some Roles of Assessment in DI

HELPING US KNOW ABOUT KIDS’ INTERESTS SO WE CAN BUILD ON THEM TO SUPPORT MOTIVATION TO LEARN

(Pre-assessment of interest)

Puzzle
This puzzle is about you, your interests and things that you like to do. On each piece write things that you like to do in your free time and things that you would like to study in class. You can divide the areas if you need more pieces.

An example of pre-assessment of student interest

Genre Survey

Name:
Date:

Directions:
• Please put a star ⭐ next to the most exciting genre.
• Please put a smiley face 😊 next to OK genres.
• Please put down arrows ▼ next to genres you think are yucky.

1. HISTORICAL FICTION
2. FANTASY
3. MYSTERY
4. COMEDY
5. FICTION ABOUT 2nd AND 3rd GRADERS
6. OUTDOOR ADVENTURE
7. ANIMAL STORIES
8. SCIENCE FICTION

Jess McGinnis, Foothills School, Boise, ID (Grade 2-3)
Directions: Complete the chart to show what you know about equations. Write as much as you can.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Information</th>
<th>Examples</th>
<th>Non-Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fractions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

• Teacher models symmetry/asymmetry once with whole-class using two shapes.
• Teacher conducts individual assessments with a bag of shapes.
• Students tell teacher “yes” or “no” to “Does this have symmetry?” and explain why.

“[We] were ALL amazed by the results of our symmetry pre-assessment. We had made assumptions about kids that were not true! Vocabulary really played a role in the ‘tell me why’ part of it. We all ran across more than one kid about whom we made assumptions as to which ‘group’ they would be in, and we were WRONG. So often, we as teachers group kids on the fly and say, ‘I know my students’. The pre-assessment made us face the fact that without this [pre-assessment] information we really didn’t ‘know’ our students.”

- Kindergarten Teacher,
  Evanston/Skokie District 65

So Far...

Insights

Questions

Keep Thinking!
1. Favorite subjects in school
   - Math - purple
   - Science - red
   - Reading - blue
   - Writing - orange

2. Least favorite subjects in school = hair color
   (you can design fun hair)

3. If you are a boy, use shorts.
   If you are a girl use the pants.
   Make the color pants with your favorite color.

From Mr. Wasserman’s 5th grade classroom, Henrico County Schools, VA
Learning Profile Pre-Assessment

4. Strongest multiple intelligence area = shirt color
- Intrapersonal - white
- Interpersonal - red
- Musical - blue
- Kinesthetic - black
- Logical mathematical - yellow
- Verbal/linguistic - purple
- Visual/spatial - orange
- Naturalist - green

5. Learning preference = shoe color
- Visual - white
- Auditory - black
- Kinesthetic - brown

From Mr. Wasserman's 5th grade classroom, Henrico County Schools, VA

Learning Profile Pre-Assessment

6. If you prefer to work alone on project, put on stripes. If you prefer to work in groups, draw polka dots on your shirts.
7. If you like to be challenged and learn new and difficult things, design a hat for yourself.

From Mr. Wasserman's 5th grade classroom, Henrico County Schools, VA

Try it on for Size

Take a few minutes to:
1) Talk about these examples of pre-assessment vs. ways in which you design and use pre-assessment in your classroom
2) Think about ways in which you might expand use of pre-assessment to benefit student success.
3) Your questions about the relationship between pre-assessment, curriculum, and differentiation.
Some Roles of Assessment in DI

HELPING US KNOW HOW TO TEACH BETTER TOMORROW...

(Formative or On-going Assessment)

An Informal Formative Assessment Strategy

- The teacher poses a thought question that probes the essence of what students should understand for the lesson/learning experience.
- Students write (sketch, rehearse) their answers silently for about two minutes,
- The teacher explains the “order of answering” so there is no lag time,
- Students read their answers in the designated order,
- The teacher keeps a running record (plus, check, minus—1,2,3,4) of the degree to which each student’s response shows understanding.

Exit Cards: Science

Name:

- Draw and write or label an explanation of why the seasons change.
- What are two questions you still have about what makes the seasons change?
3-2-1 Card

Name:

• **3 things I learned** from the friction lab...
• **2 questions** I still have about friction are...
• **1 way you see friction working in the world around you**...

Windshield Check

• CLEAR – “I get it!”
• BUGS – “I get it for the most part, but I still have a few questions.”
• MUD – “I still don’t get it.”

**Alternative Methods:**
Dip Stick Check—Tank Full, Half Full, Need Oil
Weather Report—Sunny Skies, A Few High Clouds, Fog & Smog

Some Roles of Assessment In DI

HELPING KIDS KNOW THEMSELVES BETTER AS LEARNERS SO THEY CAN OWN THEIR LEARNING ...

(Formative or On-going Assessment)
3-2-1 Reflection

After reading over my rough draft, I can make 3 revisions I can make to improve my draft:

2 resources I can use to help improve my draft:

1 thing I really am proud of in my first draft:

Name:

Date:

<table>
<thead>
<tr>
<th>Readers’ Theatre Reflection</th>
<th>Needs Work</th>
<th>OK</th>
<th>Great!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>I read too fast. I misunderstood.</td>
<td>Sometimes I was too quiet or I missed things.</td>
<td>I read in just the right pace.</td>
</tr>
<tr>
<td>Articulation</td>
<td>My words were slurred and hard to understand.</td>
<td>Sometimes my words were slurred but sometimes they were clear.</td>
<td>My words were clear and easy to understand.</td>
</tr>
<tr>
<td>Fluency</td>
<td>My reading was choppy. Sometimes my reading was choppy but sometimes I was smooth.</td>
<td>My reading was smooth.</td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td>I was too quiet. I was too fast.</td>
<td>Sometimes I was too fast or I read but sometimes I was just right.</td>
<td>My reading was just right.</td>
</tr>
<tr>
<td>Expression</td>
<td>I didn’t use any expression.</td>
<td>Sometimes I used expression but sometimes I didn’t.</td>
<td>I used lots of expression.</td>
</tr>
<tr>
<td>Following</td>
<td>I lost my place twice or more.</td>
<td>I lost my place once.</td>
<td>I followed along the whole time.</td>
</tr>
<tr>
<td>Listening &amp; Respect</td>
<td>I moved around a lot. I didn’t listen to others.</td>
<td>I moved around once. I followed sometimes. I interrupted once.</td>
<td>I listened respectfully. I didn’t interrupt others.</td>
</tr>
</tbody>
</table>

PEER COMMENTS:

Jene McGinnis, Foothills School, Boise, ID (Grade 2-3)

Try it on for Size

Take a few minutes to:

1) Think about these uses of formative assessment vs. the way you use it in your classroom.

2) Times, places, and ways you might expand or refine your use of formative assessment to benefit student achievement.

3) Questions you have about formative assessment, its relationship to curriculum, and/or its relationship to differentiation.
Some Roles of Assessment in DI

SEEING WHO GOT WHERE WE NEEDED THEM TO GET...

(Summative Assessment)

A Planet Show & Tell
An Example of a Differentiated Summative Assessment

<table>
<thead>
<tr>
<th>Use computer to make a drawing showing how rotation and revolution work to create day and night and seasons</th>
<th>Paint a picture showing how rotation and revolution of Earth works to create day and night and seasons</th>
<th>Construct a model that shows how rotation and revolution of Earth works to create day and night and seasons</th>
<th>Create a book or a puppet show that shows how the rotation and revolution of the Earth works to create day and night and seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make labels for the sun, earth, day, night, orbit to attach to your creation. Be ready to explain orally.</td>
<td>Write sentences that identify and explain each part of your drawing or model and show how each part works.</td>
<td>Write a paragraph that explains the Earth’s rotation, revolution, day, night, and seasons</td>
<td>Write a poem that explains the Earth’s rotation, revolution, day, night, and seasons</td>
</tr>
</tbody>
</table>

“Differentiation is making sure that the right students get the right learning tasks at the right time. Once you have a sense of what each student holds as ‘given’ or ‘known’ and what he or she needs in order to learn, differentiation is no longer an option; it is an obvious response.”

Assessment as Learning: Using Classroom Assessment to Maximize Student Learning
Lorin M. Earl
Corwin Press, Inc. – 2003 – pp. 86-87
Assessment & Differentiation...

- It's about guiding students, not judging them.
- It's about informing instruction, not filling grade books.
- It's about before, during, & after—not just after.
- It's about teaching for success—not gotcha teaching.

What's Different?

Teaching in the Dark is Questionable Business

So Far...

Comments | Ideas

Keep Thinking!
4 Quality DI
Addresses student readiness, interest, and learning profile.

What’s the Point?
Readiness → Growth
Interest → Motivation
Learning Profile → Efficiency

Some Ways to Address Student Readiness
- Books/materials/resources at different readability levels
- Highlighting texts
- Materials in a student’s first language
- Content digests
- Small group instruction
- Additional segments of a subjects (e.g. math, reading)
- Peer teaching
- Varied homework assignments
- Pacing adjustments
- Mini-workshops
- Books on tape
- Models of quality at the student’s readiness level
- Experts of the day
- Skills-based learning centers
- Computer tutorials
- Learning contracts
- Tiersing
- Contemporary Lecture
Electricity

**Description**

Electricity is one kind of energy.

**Kinds of Electricity**

There are two kinds of electricity, static and current. Static electricity is on electric charge that does not move. Current electricity is the movement of electrons.

**Electric Circuits**

There are two kinds of electric circuits: a series circuit is one in which current can follow only one path, and a parallel circuit is one in which current can follow more than one path.

**Producing Electricity**

A generator is a machine that changes mechanical energy into electrical energy. A dry cell uses a chemical paste, carbon rod, and zinc to produce a flow of electrons. A wet cell uses acid and water, which react with metal plates, to produce a flow of electrons.

**Using Electricity**

Electricity is an important source of light and heat. Electrical energy can be changed to mechanical energy. Fuses and circuit breakers are safety devices designed to help use electricity safely.

**Measuring Electricity**

The amount of electricity used is measured in kilowatt-hours.

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**Word Jars**

- Words that tickle my ears!
- Words that warm my heart!
- Words that make me feel smart!
- Words that can calm my ears!
- Words that make me wonder!
- Words I've heard someone say!

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**Personal Agenda**

**Agenda for ________**

**Starting date:______**

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**Task**

- Complete a Hypercard Stack showing how a volcano works.
- Read your personal choice biography.
- Practice adding fractions by completing number problems and word problems on pages 101-106 of the workbook.
- Complete research for an article on why volcanoes are where they are for our science newspaper. Write the article and have the editor review it with you.
- Complete at least 2 spelling cycles.

**Special Instructions**

- Be sure to show scientific accuracy.
- Keep a reading log of your progress.
- Come to the teacher or a friend for help if you get stuck.
- Watch your punctuation and spelling! Don't let them hurt your great skill at organizing ideas.

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*Remember to complete your daily planning log.
*Remember I'll call you for conferences and instructions sometimes.
**Math Ticket**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Problem of the Day</th>
<th>Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangram Ex (p. 14#1)</td>
<td>Complete the odd # problems from the POD board.</td>
<td>Complete the blue task cards</td>
</tr>
<tr>
<td>Tangram Ex (p. 11#9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geoboard Pentagon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geoboard Hexagon</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Math Writing</th>
<th>Math with Legs</th>
<th>Teacher Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*Explain in clear step by step way how you:</td>
<td>When you are called</td>
</tr>
<tr>
<td></td>
<td>*Solved your problem of the day or solved your Tangram/Geoboard challenge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Use pictures and words to teach someone how to do one of your five math tasks</td>
<td></td>
</tr>
</tbody>
</table>

**Try it on for Size**

1) Which of these ideas could you use in your classroom—or commend to colleagues to use in theirs—to benefit student success?

2) What questions do you struggle with when you look at these examples?

**SHADES OF MEANING**

Linda Eiler
Name: _____________________________

My Question or Topic is: _________________________________________

To find out about it, I will:

I will draw: ______________________________
I will read: ______________________________
I will write: ______________________________
I will look at/listen to: ____________________

How I will share what I learned is:

I will finish by: __________________________
Writing Bingo

Try for one or more BINGOs this month. Remember, you must have a real reason for the writing experience! If you mail or email your product, get me to read it first and initial your box! Be sure to use your writing goals and our class rubric to guide your work.

<table>
<thead>
<tr>
<th>Recipe</th>
<th>Thank you note</th>
<th>Letter to the editor</th>
<th>Directions to one place to another</th>
<th>Rules for a game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invitation</td>
<td>Email request for information</td>
<td>Letter to a pal, friend, or relative</td>
<td>Skit or scene</td>
<td>Interview</td>
</tr>
<tr>
<td>Newspaper article</td>
<td>Short story</td>
<td>FREE</td>
<td>Your choice</td>
<td>Grocery or shopping list</td>
</tr>
<tr>
<td>Advertisement</td>
<td>Cartoon strip</td>
<td>Poem</td>
<td>Instructions</td>
<td>Greeting card</td>
</tr>
<tr>
<td>Letter to your teacher</td>
<td>Proposal to improve something</td>
<td>Journal for a week</td>
<td>Design for a web page</td>
<td>Book Think Aloud</td>
</tr>
</tbody>
</table>

Front-Loading Vocabulary

WHAT?
- Teach the few vocab words on which the topic pivots (6-8)
- Teach them before the unit begins (to students who need them)
- Keep them in plain sight throughout the unit
- Refer to them often during the unit and afterwards as relevant
- Teach root words and derivatives as possible

WHO?
- English language learners
- Students with learning disabilities
- Students who have trouble with words
- Students who benefit from direct instructional contact with the teacher
- Students with generally weak academic vocabulary
- Students who don't know the words on the pre-assessment

Try it on for Size

Take a few minutes to:
1) Select one of these strategies to include in lesson plans. How would you use it? Why? Who might benefit?
2) Summarize your thinking with a colleague.
3) Talk together about unanswered questions related to use of the strategy of about differentiation in general.
Owning Student Success

Creating a Positive Environment

Studying Students

Connecting with Students

- In one subject---
  In the subject in which your students seem to vary most
  In the subject with which you are most comfortable
- In one class—
  In the class that seems to need it most
  In the class with which you are most comfortable
- With one element—
  products, journal prompts, assistance with reading, etc.