Differentiate in 3D: Meet Middle School Students’ Readiness, Interest, and Learning Preference Needs

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Workshop Driving Questions
- What is differentiation? What’s its relationship to equity?
- How can we discover student needs – both as a group and as individuals?
- How can teachers differentiate for student readiness, interest, and learning preference?

Responding to Evidence from Assessment

Assessment: Students were given 3 word problems and asked to set up and solve each.

Evidence from Results: Some students “got it” by setting up and solving all 3 correctly. Some students made errors in either set-up or in solving. Some students made many errors in set-up and solving.

Task for Pattern 1
You solved all of these equations correctly. Now make up 3 equations for others to solve: 1 that is harder than those you just solved, 1 that is at about the same level, and 1 that is easier.

Task for Pattern 2
[This #] of the equations that you solved are incorrect. Find the incorrect solutions and fix them.

Task for Pattern 3
The highlighted portions of each equation show where you made errors. Determine what those errors were & fix them.

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SO....

...what IS Differentiation, really???
Patterns in **Readiness**

**Assessment:** Students were given 3 word problems and asked to set up and solve each.

**Patterns**

- **Pattern 1:** “Got it” (set-up and solved all 3 correctly)
- **Pattern 2:** “Made Some Errors” (in either set-up or in solving)
- **Pattern 3:** “Made Many Errors” (in set-up and solving)

**Task for Pattern 1**
You solved all of these equations correctly. Now make up 3 equations for others to solve: 1 that is harder than those you just solved, 1 that is at about the same level, and 1 that is easier.

**Task for Pattern 2**
[This #] of the equations that you solved are incorrect. Find the incorrect solutions and fix them.

**Task for Pattern 3**
The highlighted portions of each equation show where you made errors. Determine what those errors were & fix them.

*Adapted from Wiliam (2011). Embedded Formative Assessment*

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Patterns in **Interest**

**Polygons** - Sarah Hagan and Kelly Freehill

**Role** | **Audience** | **Format** | **Topic**
--- | --- | --- | ---
A square | A rectangle | A love song | What they have in common and why they should be together
A trapezoid | A kite | A letter | Why they feel left out of the parallelogram family
An irregular polygon | A rectangular polygon | A persuasive essay | Convincing the audience to become a rebel in the polygon world
A quadrilateral | A triangle | A how-to guide | How to become a quadrilateral

From Doubet & Hockett (2015): *Differentiation in the Middle and High School: Strategies to Engage All Learners*. Alexandria, VA: ASCD.

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Patterns in **Learning Preference**

**Algebra** - Nanci Smith

**Understanding Goals:**
- All forms of equations of lines represent the same line.
- Given an equation of a line in one form, any other form can be generated.

**Knowledge Goal:**
- Forms of equations of lines: general, standard, point-slope, vertical, and horizontal.

**Skill Goals:**
- Find other forms of equations of lines given one form.
- Find the strengths, weaknesses, and applications of each form of equation.

<table>
<thead>
<tr>
<th>Analytical</th>
<th>Practical</th>
<th>Creative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare and contrast the various forms of equations and lines. Create a flow chart, a table, or any other product to express your ideas to the class. Label all parts of your chart or table to make relationships clear. Be sure to consider the advantages and disadvantages of each form and represent these in your product.</td>
<td>Decide how and when each form of the equation of a line should be used. When is it best to use which form (discuss data in terms of real-world scenarios)? What are the strengths and weaknesses of each form? Find a clear and authentic way to present your conclusions to the class.</td>
<td>Put each form of the equation of a line on trial. Prosecutors should try to convince the jury that a form is not needed, while the defense should defend its usefulness. Enact your trial with group members playing various forms of the equations, the prosecuting attorneys, and the defense attorneys. The rest of the class will be the jury, and the teacher will be the judge.</td>
</tr>
</tbody>
</table>

From Doubet & Hockett (2015): *Differentiation in Middle and High School: Strategies to Engage All Learners*. ASCD.
Talk with an Elbow Partner

What ideas were affirming?
Which were challenging?
What ideas would you add?

Workshop Driving Questions

- What is differentiation? What’s its relationship to equity?
- How can we discover student needs—both as a group and as individuals?
- How can teachers differentiate for student readiness, interest, and learning preference?

Differentiation

is a teacher’s proactive response to learner needs
shaped by mindset
and guided by general principles of differentiation

Teachers can differentiate by adjusting

- **Content**
  - The “stuff” that students grapple with to reach the learning goals

- **Process**
  - How students take in and make sense of the content

- **Product**
  - How students show their knowledge, understanding, and skill

according to patterns in student

- **Readiness**
  - Where a student is in his or her group of learning goals at a certain point in time

- **Interest**
  - Passions, affinities, kinships that motivate learning

- **Learning Profile**
  - How a student prefers or seems to learn best

using a variety of strategies.

Community =
Differentiation’s Affective Foundation

Tomlinson, 2014
Interest Pre-Assessment

Design a Pie Chart to show what you’re interested in. Make at least 5 sections; represent your interests in decimals, fractions, and percents.

From Doubet & Hockett (July, 2015). Differentiation in Middle and High School: Strategies to Engage All Learners. ASCD.

Pie Charts to be used later to introduce Percentages and Probability

JFHMS – 7th Grade

Pie Charts using Paper Plates – Also a Pre-Assessment on Percentages in 6th Grade

Community is not just about Teacher and Student; rather, it’s about Students and their Peers

BUILDING COMMUNITY
**Fast Facts!**

1. Use the index cards to provide the following information about yourself:
   - 4–(i^4) words to describe you
   - 2+(2-3)+4 of your favorite activities outside of school
   - 300 x 10^2 of your favorite books
   - 8^4+1 things you plan to do after high school

2. Next, in your quad, compare your answers to the number solutions for each prompt. Make any necessary revisions.

3. As a group, create a four-way Venn Diagram that depicts the similarities and differences among you. (Remember that your cards are a “hands-on” tool!!)

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**Inventory Questions**

**Attendance Questions** (answered aloud rather than in writing):
- Use a simple question for efficiency (e.g., Dogs or cats? Ice cream or cake? TV or video games? Favorite food? Favorite game?).
- Use a more complex question if it holds the potential to serve as a lesson “hook” (e.g., Who’s the person you most admire? or introduce a discussion of heroes in stories or How do you like to spend your free time? to generate a data set).

**Individual Questions**
1. If you were a contestant on a “survival” reality show and were allowed to bring only one item with you to the island, what would you bring and why?
2. If you could invite three people—living or dead—to your house for dinner, whom would you invite and why?
3. What do you wish your teacher knew?

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**The “Line Up”**

**Directions:**
- I will call up a small group of participants.
- You will line up in alphabetical order according to your last name. You’ll need to talk to each other and help each other in order to be able to do this.
- I will give you further directions once you are lined up.

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*From Doubet & Hockett, *Differentiation in the Elementary Grades* (2017) and *Differentiation in Middle and High School* (2015)*
There’s no such thing as a neutral learning environment – for every kid, it’s either positive or negative

~David Sousa – Brain Researcher

Talk with an Elbow Partner

What ideas do you like? Which might you use? How might you adapt them to better suit your classroom?

Workshop Driving Questions

- What is differentiation? What’s its relationship to equity?
- How can we discover student needs – both as a group and as individuals?
- How can teachers differentiate for student readiness, interest, and learning preference?
Differentiation is a teacher’s proactive response to learner needs and guided by general principles of differentiation. Teachers can differentiate by adjusting according to patterns in student readiness, interest, or learning preference.

Readiness refers to where a student is in his or her grasp of learning goals at a certain point in time. It varies from lesson to lesson and skill to skill and is best gauged by recently-gathered evidence that is relevant to the learning goals.

Ability is a proclamation about a student’s overall capacity as a learner or human being. It is often treated as static or fixed across subjects, skills, or time and is usually inferred from standardized test scores. It involves or implies comparisons to other students.

Formative Assessment and Readiness

3 Kinds of Patterns

- Readiness: Where a student “is” in his or her grasp of learning goals at a certain point in time.
- Interest: Passions, affinities, and kinships that motivate learning.
- Learning Preference: How a student prefers or seems to learn best.

Using a variety of strategies.

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“Differentiation is the recognition, articulation, and commitment to plan for student differences.”

Carol Tomlinson

Ongoing Classroom Assessment

Fuel for effective teaching & learning

Strategy: Show Your Cards

- Students create cards labeled with their own words for how they “feel” at different levels of confidence.
- Teacher prompts students to use cards in response to questions/prompts at pivotal points in a lesson for a quick visual of students’ self-assessment.
- All students, regardless of card color, need to be ready to explain their thinking if/when called upon.

Quick Self-Assessment Checks

Response Cards on Desks (red/yellow/green)

Thumbs up, Thumbs down, Thumbs sideways

How many bars do you have (as in cell phone signal)?
Strategy: Stoplight Method

Students respond to a content-based question and then place their response on the color that reflects how “sure” they are.

Examples:
- Red: “I’m not at all sure of my answer.”
- Yellow: “I am a little unsure of my answer.”
- Green: “I am very sure my answer is correct.”

Strategy: Show What You Know

Each student is assigned a number.

Students place their sticky note responses in the box with their number.

ULTIMATE Goal of Formative Assessment

From Differentiation in the Elementary Grades (Doubet & Hockett, 2017, ASCD)
But simply using an Exit Slip does not guarantee success....

Rather, it’s about the questions we ask ON the exit slips!

Be Sure to...

What should someone “be sure to do” when [solving the kind of problem we have been working on this week]?

He/she should be sure to...

...because...

SAMPLE “Customize-able” PROMPT

MISUNDERSTANDINGS

• One misunderstanding someone might have about [e.g., how to solve this problem] is ______________

• Here’s what I might say to that person to help them better understand the “truth”:

From Doubet & Hockett (July, 2015). Differentiation in Middle and High School: Strategies to Engage All Learners. ASCD.

Name: __________________ Date: _______

△ What was the point of today’s lesson?

□ What’s all “squared away” for you?

○ What from today’s lesson can’t you quite wrap your head around yet?

Rebecca Yaple – Norfolk, VA

From Doubet & Hockett (July, 2015). Differentiation in Middle and High School: Strategies to Engage All Learners. ASCD.
Linear Equations

3: Provide **three** ways in which we can solve a system of linear equations.
2: Write **two** questions you have about solving systems of linear equations.
1: Solve this one system of equations using the method of your choice. Then, explain why or why not another method would also work.

\[
\begin{align*}
x - y &= 11 \\
2x + y &= 19
\end{align*}
\]

Jennifer Monk

Systems of Equations

Solve this system of equations using any of the three methods we have studied:

\[
\begin{align*}
16x - 10y &= 10 \\
-8x - 6 &= 6
\end{align*}
\]

Indicate which method you used and explain WHY you chose that method.

What is one way that this system of equations could be used in the real world?“

Jennifer Monk

Congruence

<table>
<thead>
<tr>
<th>Definition</th>
<th>Attributes of Congruent Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Draw and Explain 2 Examples:</th>
<th>Draw and Explain 2 Non-Examples:</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

Talk with an Elbow Partner

What ideas do you like? Which might you use? How might you adapt them to better suit your classroom?
Workshop Driving Questions

- What is differentiation? What’s its relationship to equity?
- How can we discover student needs – both as a group and as individuals?
- How can teachers differentiate for student readiness, interest, and learning preference?

Assess, Then What?

We’ll watch five videos of classrooms that show teachers formatively assessing and then “doing something” with the results. The examples differ in “prep time” required from the teacher.

Classroom 1: My Favorite “No”

- What does this teacher do to check for individual understanding?
- Does her approach yield usable results?
- What techniques will you “borrow”? What techniques do you question?

https://www.teachingchannel.org/videos/class-warm-up-routine

My Favorite “No!”

- Teacher poses an opening question (OR an exit question from the previous day OR student responses posted to a discussion board the night before, etc.)
- Teacher chooses a common and critical error in student work to highlight
- Teacher rewrites the response/error (in her own handwriting) at the beginning of class and explains to students that it’s her “Favorite No” because 1) it highlights a key learning point that many students confuse, and 2) it features some “good math” along with the mistake
- The teacher leads the class in discussion of what’s been done correctly in the problem, and then moves to an error analysis
- All students complete a similar problem to show that they can avoid the mistake, or “favorite no,” in their future work.
What if they are in different places...?

My Favorite “No-s”

- Form small groups according to the patterns of common errors students are making
- Give them a sample of student work to examine, evaluate, and correct
- Provide a way of each group checking their accuracy (answer key, a recording – audio or visual)
- Ask each individual student to solve a new problem or problems (to make sure they can correct their errors independently)

Classroom 2: Error Analysis

- What might you have students examine in order to analyze work for misconceptions, errors, etc.
- How could you adapt this strategy to respond to differences in student readiness?

Students’ Task Directions

You are the teacher and have to assess this work.

- What do you like about Ava’s work?
- What errors did Ava make?
- How might her work be improved?

https://www.teachingchannel.org/videos/students-learn-from-mistakes-ccssmdc
Classroom 3: Stations

- In this clip you will see a teacher and co-teacher addressing readiness needs by pulling small groups.
- How do students seem to feel about working with the teachers? What management techniques make this possible?

Adjusting Math Tasks for Student Readiness

- Task for Pattern 1: You solved all of these equations correctly. Now make up 3 equations for others to solve: 1 that is harder than those you just solved, 1 that is at about the same level, and 1 that is easier.
- Task for Pattern 2: [This #] of the equations that you solved are incorrect. Find the incorrect solutions and fix them.
- Task for Pattern 3: The highlighted portions of each equation show where you made errors. Determine what those errors were & fix them.

Adjusting Tasks for Student Readiness

- Greater Leap from what is familiar
- Smaller Leap from what is familiar
- More Expert-Like
- More Novice-Like
- More Abstract
- More Concrete
- Multiple Facets
- Fewer Facets
- “Fuzzy”/Open Problems or Tasks
- Well-Defined Problems or Tasks
- Loosely-Structured Process
- Highly-Structured Process

Talk with an Elbow Partner

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3 Kinds of Patterns

- **Readiness**
  Where a student “is” in his or her grasp of learning goals at a certain point in time

- **Interest**
  Passions, affinities, and kinships that motivate learning

- **Learning Preference**
  How a student prefers or seems to learn best

Interest and Learning Preference

Providing students with choices to demonstrate grasp of learning goals (how-to’s, templates, and examples).
Motivation occurs when we have a kinship with . . . or interest in . . . or passion for what we are attempting to learn.

*Piaget, 1978*

**Brain Research and Interest**

Giving Choices Increases

Exit Slips for Determining Interest

**Rank and Relate**

1. Rank the following [topics, people, events] that we've studied in order of how interesting they are to you (5 = most interesting; 1 = least interesting).
2. How are the topics that you ranked #1 and #5 related or connected to each other?

**This Just In!**

1. Restate the most interesting thing you have learned this week as either a news headline or a billboard sign.
2. Explain what made this interesting to you.

**Rank and Relate**

1. As we continue our lesson tomorrow, would you rather learn about ________ by
   - Watching ________?
   - Reading ________?
   - Listening to ________?

**What is Making Things Click?**

1. What happens in this class that helps you learn (for example, strategies, the way ideas are presented, your grouping configurations, etc.)?
2. What's one thing I (your teacher) could do to improve [this class, this unit, this topic] for you?

Two Kinds of Interest

**PERSONAL INTEREST**
- Interests of personal value that students bring to the classroom
- Developed over time
- Activated internally
- Beyond the teacher’s control
- Arises in part from situational interest
- Important for “holding” students

**SITUATIONAL INTEREST**
- Interests that arise in or from a situation
- Spontaneous or “in-the-moment”
- Activated by the environment
- Within the teacher’s control
- Precedes personal interest
- Important for “hooking” students

*From Doubet & Hockett (2017). Differentiation in the Elementary Grades: Strategies to Engage and Equip All Learners. ASCD.*
Sometimes Choices are Low Prep

Interest Inquiry Groups

Interest Groups
- Students choose from the following ad options:
  - Fashion (clothing “club” subscriptions)
  - Sports (season tickets)
  - Game Systems
  - Phones
- In pairs or groups of 3 with others who chose same option, students analyze the ads - and fine print - to determine which is the better deal.

“4 - Corners” Strategy
- Use four general areas of interest to group students for work on tasks that directly relate to these areas of interest.
- Post each choice in a corner (or display choices from a screen), and ask students to report to their chosen corner.
- Students can subdivide into pairs or trios to keep groups manageable.
- Have materials or instructions waiting at each corner.

Adjusting Algebra Problems to Appeal to Student Interest

<table>
<thead>
<tr>
<th>Interest</th>
<th>Problem Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>A sample of ten middle school students was asked to count the number of writing utensils that they own. Their responses are represented in the following set of numbers: 5, 4, 2, 10, 6, 14, 8, 5, 1, 8</td>
</tr>
<tr>
<td>Video Games</td>
<td>A sample of ten middle school students that play video games was asked how many hours they spend playing each week. Their responses are represented in the following set of numbers: 5, 4, 2, 10, 6, 14, 8, 5, 1, 8</td>
</tr>
<tr>
<td>Social Media</td>
<td>A sample of ten middle school students that use Facebook was asked how many status updates they post each week. Their responses are represented in the following set of numbers: 5, 4, 2, 10, 6, 14, 8, 5, 1, 8</td>
</tr>
<tr>
<td>Sports</td>
<td>The girl’s basketball coach was frustrated with the amount of players fouling out. For the next five games, the coach kept a record of every time a player committed a foul. The numbers below represent each player’s total amount of fouls over a five-game period: 5, 4, 2, 10, 6, 14, 8, 5, 1, 8</td>
</tr>
</tbody>
</table>

Bottom Line: Student Interests Matter

...Student interests are anything but tangential to learning. They are conduits to motivation, relevance, and understanding. They even affect whether a struggling student will remain in school or become one of the increasing number of dropouts.

~Sousa and Tomlinson in *Differentiation and the Brain*

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Tri-Mind

- A STRATEGY FOR DESIGNING INSTRUCTIONAL TASKS AND ASSESSMENTS THAT CONTAIN ANALYTICAL, PRACTICAL, AND CREATIVE ELEMENTS

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Some Choices take More Time to Prepare

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**Tri-Mind: Math Problem-Solving**

**Objective:** Students will understand that skilled mathematicians can solve problems, explain how to solve problems, and model problems

- **Analytical**
  - Solve the problem. Then, give someone else step-by-step directions for how to solve it. Include how the person can tell if they're right.

- **Creative**
  - Solve the problem. Then, come up with another problem like it for someone else to solve. Use different numbers and a different situation.

- **Practical**
  - Solve the problem. Then, come up with a list of practical tips (Do’s and Don’ts) for solving this kind of problem.
Tri-Mind Example – Geometric Sequences (Heather Waller)

<table>
<thead>
<tr>
<th>Analytical</th>
<th>Task Options (Choose One)</th>
<th>Creative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Present a step-by-step approach to identifying common differences/ratios and extending arithmetic/geometric sequences to at least seven terms for your classmates. Include examples with your steps.</td>
<td>• Think of some times you have used arithmetic and geometric sequences in your everyday life.</td>
<td>• Create a new arithmetic and geometric sequence that extends to at least seven terms.</td>
</tr>
<tr>
<td>• Include a defense of your approach that argues for its soundness</td>
<td>• Explain <em>why</em> you used these sequences and <em>why</em> it was helpful and important to use this process.</td>
<td>• Come up with a context or story about where this sequence comes from or means.</td>
</tr>
<tr>
<td>• Make sure to define the types of sequences and the terms common difference and common ratio.</td>
<td>• Make sure to define the sequence types, identify the common difference/ratio for your sequences and what these terms mean, and extend the sequences to at least seven terms.</td>
<td>• Design a visual to clarify the terms in your sequence.</td>
</tr>
</tbody>
</table>


The PROFILER

• A FRAMEWORK FOR DEVELOPING ASSIGNMENT CHOICES GEARED TOWARD VARIOUS MULTIPLE INTELLIGENCE PREFERENCES REPRESENTED IN THE CLASSROOM.

• A WAY OF CONNECTING STUDENTS TO THE WORKING WORLD AS WELL AS WITH ROLES OR AUDIENCES FOR THEIR WORK.

MS Profiler: Measures of Central Tendency

**Songwriter**: An educational website has hired you to 1) choose a popular tune that would appeal to middle schoolers and 2) create accompanying lyrics that would help students remember what mean, median, and mode are, and when it might be best to use each one *(Musical)*

**Screenwriter**: Write a humorous screenplay for a television learning channel in which the mean, median, and mode of a set of data (as numbers) are discussing how and when they would be most useful. Your “characters” should engage in arguments about which measure of central tendency is the best and why *(Linguistic)*

**Newspaper staff**: Choose a set of data about your school (absenteeism, school lunch purchases, etc.) and create a series of graphs depicting the mean, median, and mode of the data to better illustrate the issue to students, teachers, admin, and parents. Your captions should explain what each MCT can and cannot depict *(Spatial)*

**Blogger**: Write an entry reflecting on your week and the decisions you made/conversations you had. Discuss when you had to use mean, median, and mode in order to make decisions or to help others do so. Be sure to discuss your thought process – how you knew when to use each mode – *(Intrapersonal)*

From Doubet & Hockett (2015). *Differentiation in Middle and High School: Strategies to Engage All Learners*. ASCD.
### Equivalent Fractions

**Developed with Teachers at Amistad Dual Language School – NYC**

<table>
<thead>
<tr>
<th>ROLE</th>
<th>AUDIENCE</th>
<th>FORMAT</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>1/8</td>
<td>Picture with captions</td>
<td>I don’t care if you LOOK bigger, I AM bigger</td>
</tr>
<tr>
<td>1/2</td>
<td>2/4</td>
<td>Text Message</td>
<td>Can you believe we’re twins?</td>
</tr>
<tr>
<td>1 3/5</td>
<td>8/5</td>
<td>Conversation</td>
<td>I think we’re the same. Let’s see…</td>
</tr>
</tbody>
</table>

**From Doubet & Hockett (in press)**

*Differentiation in the Elementary Grades: Strategies to Engage and Equip All Learners.* ASCD.

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### Algebra RAFT

<table>
<thead>
<tr>
<th>Role</th>
<th>Audience</th>
<th>Format</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>Variable</td>
<td>Email</td>
<td>We belong together</td>
</tr>
<tr>
<td>Scale / Balance</td>
<td>Students</td>
<td>Advice column</td>
<td>Keep me in mind when solving an equation</td>
</tr>
<tr>
<td>Variable</td>
<td>Humans</td>
<td>Monologue</td>
<td>Please see all that I can be</td>
</tr>
<tr>
<td>Variable</td>
<td>Algebra students</td>
<td>Instruction manual</td>
<td>How and why to isolate me</td>
</tr>
<tr>
<td>Algebra</td>
<td>Public</td>
<td>Passionate plea</td>
<td>Why you really do need me!</td>
</tr>
</tbody>
</table>

**Jann Leppien, MT, '09**

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### LEARNING MENUS

**LEARNING MENUS OUTLINE A VARIETY OF INSTRUCTIONAL OPTIONS TARGETED TOWARD IMPORTANT LEARNING GOALS. STUDENTS SELECT AND COMPLETE THE ASSIGNMENT OPTIONS THAT MOST APPEAL TO THEM.**

*Book: pp. 253-262*

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**Last’s delicious fractions restaurant menu**

- **Appetizer**
  - Bruschetta - Whole class discussion about writing word problems for fraction division
  - Sirloin Steak - Lesson 8.5 writing word problems
  - Herb-encrusted breaded Fish - Chapter 8 Review/Test

- **Side dishes (Choose two)**
  - Green beans - Dividing fractions worksheet
  - Lightly Roasted Asparagus - Enrichment 8.5
  - Roasted Rosemary Potatoes - Khanacademy video on dividing fractions
  - Whipped potatoes - Pie picture worksheet (in pairs)
  - Tricolor Salad – Standards practice 8.5

- **Dessert (Choose one)**
  - Chocolate mouse - Use Scratch to code a model for a dividing fractions problem
  - Ice cream Sundae - Write a worksheet of dividing fractions problems based on food/sport/music
  - Fruit salad - Design a poster explaining how to divide fractions
  - Pecan Pie – Design a PowerPoint presentation explaining how to divide fractions.

*From Doubet & Hockett, *Differentiation in the Elementary Grades* (2017)*
One Student’s Plea

“Please, please, please try to just shake it up sometimes. Give us a variety of work and activities and don’t just stick to the same type of lesson everyday.”

Annual Student Survey of Academic Experience, Authentic Education, Hopewell NJ

Talk with an Elbow Partner

What ideas do you like? Which might you use? How might you adapt them to better suit your classroom?

“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
Lorna M. Earl – Corwin Press, Inc. – 2003 – P86-87

Many Featured Examples from...

Educational Leadership – ASCD – October 2016

All are available at www.KristinaDoubet.com