Designing unique lessons tailored to the needs of your students!

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Your most important challenge as a teacher is figuring out how you will maintain high expectations and yet provide for individual differences (strong support).

Who are diverse learners?

- Students with auditory deficits
- Students with limited English proficiency
- Students with short attention spans
- Students with strong visual memories
- Students living in foster homes
- Students with physical disabilities
- Students reading 2-5 years below grade level
- Students suffering from loss of a parent

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What differentiated instruction is NOT

▸ NOT "Individualized instruction"
▸ NOT chaotic
▸ NOT just another way to provide homogeneous grouping.
▸ NOT just giving more work to advanced students.

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Differentiated Instruction is...

- Proactive and pre-planned
- Rooted in Assessment
- Provides Multiple approaches to content, process, and product.
- Student Centered
- A Blend of whole-class, group, and individual instruction.

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How would you address the needs of…

- Students who are identified as struggling or having a disability
- Students from different cultural backgrounds
- Students who are English Language Learners (ELLs)
- Student who are mathematically gifted
- Students who are unmotivated or need to build resilience

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Differentiation Requires

Change from: Teaching students as a unit To: Responding to them as individuals

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Connect the Content to the Learner

- Use a variety of methods to engage students.
- Visual/graphic organizers
- Provide manipulatives
- Share examples and nonexamples
- Provide supplementary material in students native language to aid understanding

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Differentiation Techniques (whole –class instruction)

- Parallel Tasks (activity)
  - Which of the tasks to you thing would be more difficult, why?
- Open Questions (activity)
  - How would you solve each of these tasks? Can you think of at least two different strategies or answers for each task?
- Give an example of an open question that you can use with your students?

Tiered Lessons

- Address the same learning goals
- Require students to use reasoning
- Be equally interesting to students
- Vary in degree of assistance, complexity of the task

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Tiered Lesson

- Activity
  - Use words, pictures, model, or numbers to find the solution (provide cuisenaire rods, fraction bars, grid paper)

- What aspects of a tiered lesson was addressed in this task?

Differentiating using Problem Solving

- Problem-based approach to teaching is the best way to teach mathematics while attending to the range of students in your classroom.

- With problem-based approach to teaching math differentiation is already built in.

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Differentiating Instruction requires:

- Planning lessons around meaningful content
- Recognizing each students readiness, interest and approach to learning
- Connecting content and learners by modifying content, process, product and learning environment

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Four classroom elements for differentiating instruction:

- Content: What you want each student to learn
- Process: How students engage in thinking about content
- Product: How students demonstrate what they know
- Learning Environment: Logistics, physical configuration, classroom culture

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Think-Pair-Share

▸ What are some ways students can demonstrate their understanding of the content?

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Exit Ticket

▶ Why is teaching mathematics through problem solving a good way to differentiate instruction and reach all students?

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