

Differentiation of Instruction: Tiered Assignments and Making Math Groups

1. The first thing I do is to assess my students and find a basic level of understanding for every child. I try to use a tool that will show me an understanding of curriculum areas that have been covered and are going to be covered. I do whole group.
2. Then I take the information that I have used and I break my class into groups that have children with varied levels of development in them. I do this so that the children can learn from one another. (I have also found that children who are often low in reading are not low in math concepts, but need help with reading directions and word problems). I try to keep an even number of low, medium and high students per group as much as possible.
 - a. I always teach the concept whole group before I send the children to centers to work independently.
3. When I plan to teach a new concept in math, I develop at least three different ways to teach it. I create a center that the children can do hands-on, one on one with the teacher and concrete with a transfer of information to paper.
4. When I create a center, I break every concept down into easy, medium and hard. It may seem like a lot of extra work, but it really does make a huge difference when it comes to their level of understanding. (A helpful hint is to put the task in baggies and label them easy, medium and hard.) The children then have a free choice as to which level they feel the most comfortable doing. I also make more than what we actually should need to complete a task. This enables a child that picked something that was too easy to do a harder task and a child that picked something that was too hard the opportunity to pick an easier task.
 - a. Easy – this level often has a smaller task to complete and less inquiry goes into finding the correct answer.
 - b. Medium – this level has an average workload and involves some higher level thinking skills to come to a correct answer.
 - c. High – this level involves a lot of higher level thinking skills, math concepts that take organizational skill and often have a slightly larger workload than the medium group to complete.

Remember: Making the medium and high groups do more work is not differentiating the curriculum. You have to give them more of a challenge to complete the same task and often they need little more work to keep them engaged at that level.

5. I always provide manipulatives for the children to use when figuring out the math problems. Whether it is pattern blocks for puzzles, counters for addition or subtraction or rulers to do approximation of measurement. The children enjoy using the manipulatives and I try to use one that link with the topic that we are studying the week of the centers (Rainforest, for example, I use frogs, insects, spiders and lizards as counters for subtraction worksheet.)

6. I feel the most important center is the teacher center. The children come to me in their group and we review the concept, work the concept and use higher level thinking skills to solve problems about the concept. The children answer questions, provide questions for the group and work with a task hands-on while I assess their understanding.
My weekly schedule with rotating math groups:
Monday: Whole group instruction of a new task that need to be taught or re-taught.
Tuesday, Wednesday, and Thursday: Rotating Centers
 - a. Teacher Directed Center
 - b. Hands-on Center where something is created
 - c. Paper Review Center with manipulative

7. I re-evaluate the children and the work on Friday. I may give them a written assignment, let them “work” in math centers and rotate around to see if they understand the concept and we may plan a board game to check comprehension. I always make sure that I provide another opportunity to re-teach or review the information as needed.

Helpful Hints:

Stick to one curriculum area to base all centers and differentiation, unless you are reviewing for a semester assessment. This keeps the focus clear and the topic the same. The children seem to transfer the information better when they know that they are working on the same topic all week.

- Don't plan too far ahead – as you may need to re-teach.
- Use Ziploc baggies (you may request from parents at the beginning of the year.)
- Don't be afraid to challenge your children. “ They will rise to the occasion.”
- Keep the groups organized, make one child the leader of the group and make them responsible for the group as a whole. Not only does it provide an opportunity for them to grow in leadership position, but it also provides you with a quiet, uninterrupted space of time to work in your small group. (The leader has to be the only child that is allowed to interrupt you group to ask a question.) The group leader is changed once a month.
- Assessment isn't just paper and pencil.
- Try to incorporate literature into your centers if at all possible
- Incorporation of a common topic that you are studying in other areas of the week can be helpful for thinking of tasks that can have the students do.
- Always make sure that the differentiated tasks are complete by the Thursday before you need them. They are often time consuming and you usually won't have time to teach and create the centers in the same week.

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