All Means ALL:

Classrooms that Work for Advanced Learners

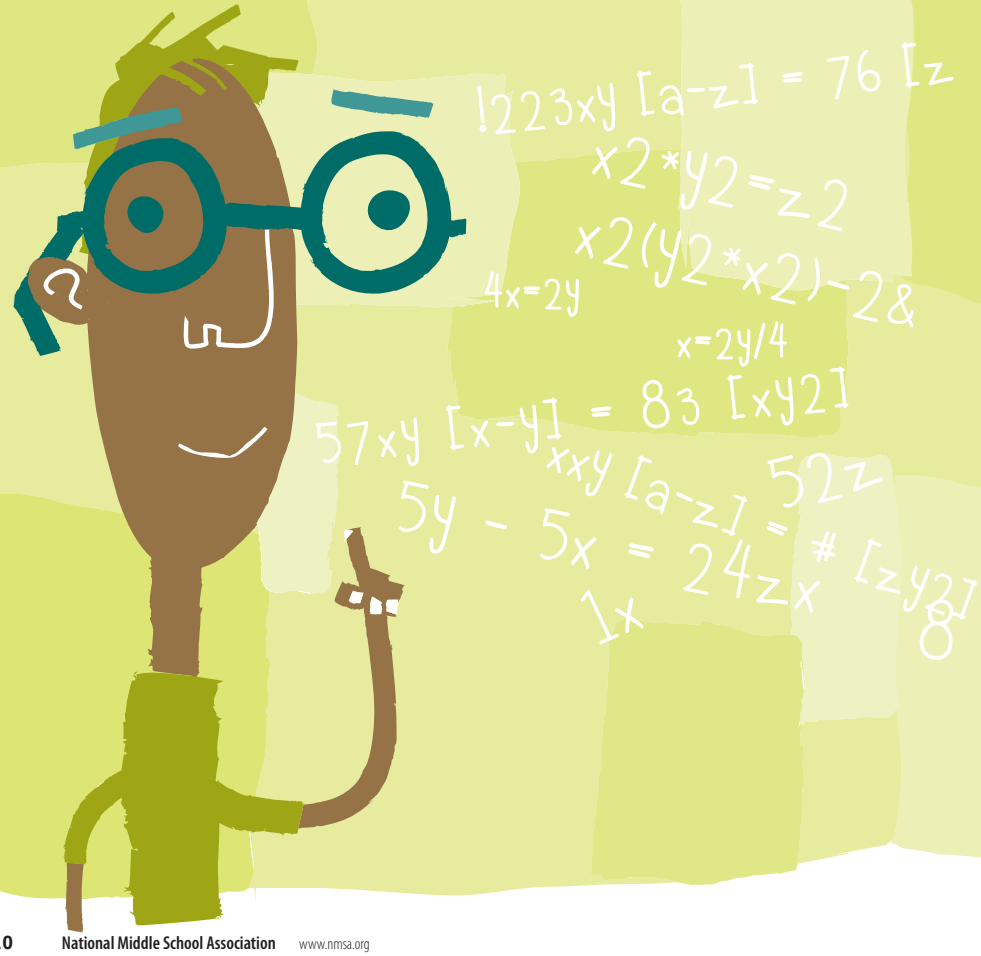
Meeting the needs of all learners means all, including those who learn rapidly or are inherently curious about the world, eating up everything we offer—books, history, geometry proofs, science experiments. Some of these students make themselves known immediately. Others, especially during their middle school years, prefer to hide their talents, their academic interest and enthusiasm, and their abilities.

Regardless of whether they are students who need us to draw them out or students whose abilities are immediately apparent, we have a responsibility to help them reach their full potential.

Sometimes we are so overwhelmed by the needs of struggling learners that we believe we don't have time for the gifted, talented, high achieving, and high potential students. But they are just as desperate as any other students for good teachers to help them progress. Middle school is a turning point for them, too.

Schools can be structured in many ways to meet the needs of these top students. Part of a continuum of services might include honors or accelerated classes, co-enrollment with the high school, pre-IB (International Baccalaureate) or pre-AP (Advanced Placement) programs that coordinate with high school offerings, multi-age classes, grade acceleration, magnet schools, or honors clusters or teams.

But teachers in most middle schools meet these students in heterogeneous classes where there's a wide range of abilities, interests, learning styles, and special education needs. Cluster grouping is one approach that helps narrow the range. Effective cluster grouping places four to eight high achieving and gifted students in a heterogeneous class that does not include special needs students who require significant attention from the classroom teacher. This number of students ensures that students feel more comfortable doing advanced work and the teacher is more willing to provide it, since there isn't just one student who needs it.



By Susan Rakow

Providing Challenge and Choice

Whether in a clustered classroom or a fully heterogeneous one, all teachers can use strategies to help differentiate instruction for gifted, high achieving, and high potential learners. When applied consistently, these strategies help all students make progress throughout the school year.

The three components of curriculum that should be adjusted are content, process, and product. Content is the actual material being learned. The process is the way the students are engaging with the material, such as whole class instruction, small group work, online instruction, and independent projects. The product is how the students demonstrate what they have learned. Each approach that follows incorporates one or more of these and helps meet the two most basic needs of these students: challenge and choice.

Pre-Assessment: Who Knows What?

The cornerstone of any attempt to meet the needs of diverse learners is to find out what they are interested in, how they learn best, and what they already know. This is the purpose of pre-assessment.

Administer an interest inventory or a learning styles inventory to all students at the beginning of the school year. Questions can include: What sports do you play? Do you prefer to work alone or with a group? What musical instruments do you play? What do you enjoy learning about? What do you do with your free time? If you had to put together your new desk, would you rather hear the instructions, read the instructions, or watch someone do it and then follow their model?

Identify or collect from existing data information about each student's reading and writing levels in all content areas. If the responsibility for gathering this information is divided among grade level team members, students don't end up completing four writing samples or filling out six interest inventories during the first two days of school.

Teachers should be aware of any student who has been identified as gifted in a specific academic area, in a cognitive ability, or in the visual or performing arts. Criteria for this designation vary by state and district; this is different from the consistent federal guidelines for identifying special education students.

This pre-assessment gives teachers a general overview of students' academic and personal starting points. The next step is to be more teacher- and content-specific. At least two weeks before instruction about a specific unit begins, teachers should give students a pre-assessment covering the content of that unit.

Often teachers misuse the K-W-L technique (What do you Know? What do you Want to know? What have you Learned?) for this purpose by doing it as an oral whole-class activity on the first day of a unit. While it is a great way to engage students' interest in a topic, it is not an effective pre-assessment. The students who know the most stop talking after they offer two or three answers, even if they know more (it's socially "uncool" and teachers ask "can we hear from anyone else?") while students who don't know anything about the topic say "he took my answer" or remain silent. Teachers get a false "read" of the class's knowledge base. In addition, doing this activity on the first day of an already-planned unit gives them no time to adjust for individual learners' needs.

Instead, pre-assessments should be

1. Written.
2. Individual.
3. Focused on the key information, concepts, and skills of the unit, including the embedded state and local standards.
4. Relatively short.
5. Assessed only for instructional planning and grouping (not graded).
6. Returned to students only at the end of the unit when they can assess their own growth.

Other effective pre-assessments can be specially constructed pre-tests, post-tests, journals, incomplete graphic organizers, or open-ended questions. It is often useful to add "What else can you tell me about your experiences with this topic and what you know about it?"

Once teachers have a good idea of the starting point for each student, they can select the appropriate materials, pacing, and instructional approaches. This is the foundation of middle school philosophy and differentiation of instruction: start with the student.

Tiered Assignments

Tiered assignments, both in class and for homework, are a great way to differentiate instruction when all students need to work on the same content or material. This might include differentiated journal prompts, comprehension questions at different levels of Bloom's Cognitive Taxonomy, or a range of sophistication in math problems.

For example, when students are reading The Gettysburg Address, teachers can develop two sets of questions. One set is for struggling readers or more concrete thinkers with little background knowledge. These questions might emphasize the first three levels of Bloom's taxonomy (remember, understand, apply) and some key vocabulary words. A second set is for advanced readers or more abstract thinkers. These questions might emphasize the higher levels of Bloom's taxonomy (analyze, evaluate, create) and include a question about the oratorical devices that made this speech memorable.

Both groups get the same number of questions. The whole-class discussion that follows can include all students so everyone benefits from shared insights and knowledge, and encourage critical thinking.

Menus of Activities

Another approach is to create a menu of choices for learning activities ranging from reading the basal social studies text and creating an outline of its content to analyzing primary source material. Each activity in the menu is assigned a point value and all students must complete the same number of points. Making a basic map may be worth 5 points. Making a map of contemporary Europe and contrasting it with what that same map looked like in 1900 would be worth 20 points. The key is that point values are determined by cognitive complexity, not just quantity or amount of time needed.

Through thoughtful coaching by the teacher, all students can learn new material on the assigned topic. Struggling learners may be required to master certain skills needed for state assessments while those who already have those skills may work toward above-grade level proficiency. The emphasis is on meaningful work for all students connected to the unit's essential questions.

Orbital and Independent Study

While differentiation is definitely not individualized education, opportunities for independent and orbital studies may be appropriate. For example, in a language arts unit on folk tales, fairy tales, and myths, a student with a lot of background might do an orbital study on Rafe Martin's book *Birdwing* (Scholastic 2007). This novel extends Grimm's fairy tale of "The Six Swans" in which six brothers are cursed and turned into swans. Their sister bravely breaks the spell, but one brother, Ardwin, is left with a birdwing. How he faces his difference, how the author has spun his ideas from the original tale, whether the moral is consistent with Grimm's intention—all can be part of the students' study. Significantly advanced students can explore Joseph Campbell's *Hero with a Thousand Faces*.

While orbital studies extend a given topic, independent study may replace a topic. If students have mastered the goals, objectives, and concepts of this unit and have no interest in the topic, they might substitute in-depth study of a topic of interest such as science or history.

21st Century Technology

We are lucky that today, computer and other media technologies provide unique opportunities for student learning. There are online courses at both the high school and college levels for advanced learners. There are Web quests, podcasts, and video lectures from some of the greatest thinkers and teachers of our time. These experiences extend the boundaries of our classrooms and the learning of our students.

Some Cautions

Differentiation is an approach to teaching and learning, not just a strategy. It has a profound impact on the classroom community. Students must understand that not everyone in the classroom does the same thing at the same time, but everyone gets what they need.

It's not OK to make the top students into junior teachers. It has the opposite effect of what is often intended; rather than build compassion and caring, it creates arrogance and resentment. In addition, often gifted students don't know how they know what they know or how to explain their leaping insights to more structured learners.

Differentiating instruction for advanced learners takes time and resources. Teachers should reach out and ask for help from gifted coordinators, gifted intervention specialists, online resources in the gifted community or in a content area, or from teachers in higher grade levels.

The Rewards

When we apply these strategies in our classrooms, we are delighted to see students blossom beyond our wildest dreams. We see students reach up to accept challenges because they see others doing it. We exemplify the ideals of middle schools and ensure that all our students are learning every day. MG

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