

Multiple Learning and Teaching Approaches that Respond to their Diversity

Research & Resources in Support of This We Believe



NMSA Research Committee

RESEARCH SUMMARY

Each young adolescent is unique, with a particular cultural, experiential, and personal background and a distinctive array of learning styles, interests, talents, and skills. No single teaching method will work for every student; in fact, no single method will work for any one student every day. Instead, research points to the positive impact on student achievement of using varied and appropriate strategies for learning and teaching (Cawelti, 1995; Epstein & Mac Iver, 1992; Russell, 1997).

Given this need for variety in teaching and learning approaches, what does work for students ages 10-15? According to research, young adolescents learn best when students and teachers *together*

- Decide what and how to study, because students learn best when they have some control over their learning (Beane, 1997; Tomlinson, 1999; Wiggins & McTighe, 1998)
- Enhance and accommodate diverse skills, interests, abilities, and talents (Tomlinson, 1999)
- Establish a culturally responsive classroom environment in which students and teachers: understand the diverse cultural backgrounds represented in the classroom; communicate acceptance and positive attitudes about cultural diversity; and build on cultural diversity through day-to-day teaching and learning activities to promote pride, motivation, and improve parents' perceptions of school (Gay, 2000; Shumow & Harris, 1998; Villegas, 1991)
- Build on multiple intelligences (Armstrong, 1994; Gardner, 1983; Gardner & Hatch, 1989)
- Pay attention to learning styles (Dunn & Dunn, 1978; 1987) as student strengths to be built upon and as justification for using a variety of methods (Rosenshine, 1971)
- Connect new learning to prior knowledge and understanding (Bruning, Schraw, & Ronning, 1999)
- Engage in hands-on activities in meaningful contexts (Eggen & Kauchak, 2001; Needels & Knapp, 1994)
- Draw on the community as a resource for learning. Service learning "connects schools and communities in a deliberate effort to construct learning opportunities for youth" (Honig, Kahne, & McLaughlin, 2001, p. 1011). Research shows that service learning can improve student achievement (Melchior, 1997); enhance self-confidence, self-esteem, and self-worth (Conrad & Hedin, 1982; Hamilton & Fezel, 1988); diminish rates of school suspension, school dropout, and school failure (Allen, Philliber, Herrling, & Kuperminc, 1997); decrease alienation and discipline problems among young adolescents (Calabrese & Schumer, 1986).



Teachers should also

- Integrate literacy across the curriculum, using strategies applicable across content areas to enhance learning from texts and using content-specific strategies to improve comprehension (see, for example, Bean, Singer, Sorter, & Frazee, 1986 [World History]; Morrow, Pressley, Smith, & Smith, 1997 [Science]; Siegel & Fonzi, 1995 [Math]).
- Work in collaboration with one another across areas of expertise to adapt teaching and learning approaches given individual student needs. For example, general education teachers can invite special education teachers into the regular classroom to offer suggestions about how best to adapt instruction for students with disabilities (Heward, 1996).
- Communicate and collaborate with families because students benefit from that cooperation, demonstrating higher rates of attendance, improved academic achievement, and an increased willingness to do homework (Cameron & Lee, 1997; Lopez & Scribner, 1999).

Learning and teaching approaches must be varied given the diversity of all types that are represented within any group of middle grades students and the greater likelihood for student success — academic, social, personal, and moral - when those approaches recognize and address students' needs, interests, and talents.

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Multiple Level and Teaching Approaches (continued)



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Wiggins, G., & McTighe, J. (1998). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development

ANNOTATED REFERENCES

Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.

Tomlinson's oft-cited work on differentiating instruction for students of varying needs, abilities, and interests is a vital resource for those who seek to adapt teaching to students, instead of trying to adapt students to teaching. Tomlinson drew on her work with teachers and in classrooms across the country to develop her description of a differentiated classroom's key elements:

- The teacher focuses on the essentials (concepts, principles, and skills)
- The teacher attends to student differences (experiences, culture, gender, prior knowledge)
- Assessment and instruction are inseparable (assessment is diagnostic)
- The teacher modifies content, process, and products given students' varying points of readiness, interests, and learning profiles
- All students participate in respectful work, e.g., all students are expected to grow and to have support for their continued growth
- The teacher and students collaborate in learning
- The teacher balances group and individual norms, helping each student be the best he or she can possibly be
- The teacher and student work together flexibly, using materials, space, grouping strategies, and instructional strategies in differing ways. (pp. 9-14)

Tomlinson describes differentiated learning classrooms in detail, offering examples, strategies, and recommendations for moving toward differentiation and away from traditional, teacher-centered approaches.



Wiggins, G., & McTighe, J. (1998). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.

Wiggins and McTighe build on their extensive experience with classroom assessment to develop an “education for understanding” (p. 3) supported by backward design. The backward design process includes three stages:

- (1) Identify desired results: What should students know, understand, and be able to do?
- (2) Determine acceptable evidence: How will we know if students have achieved the desired results?
- (3) Plan learning experiences and instruction: What enabling knowledge and skills will students need to perform effectively? What activities will equip students with the needed knowledge and skills? What materials and resources are best suited to accomplish these goals? (pp. 9-13)

The book includes examples, design templates, descriptions of methods for helping students achieve understanding, and addresses the role of students' misunderstandings in making decisions about teaching.

RECOMMENDED RESOURCES

Fertman, C. I., White, G. P., & White, L. J. (1996). *Service learning in the middle school: Building a culture of service*. Columbus, OH: National Middle School Association.

Harmin, M. (1994). *Inspiring active learning: A handbook for teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

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