

Differentiated Instruction

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Brief History

Differentiated instruction is not a new phenomenon in education. The one-room schoolhouses of the past found a way to meet the needs of students working in a wide range of abilities. The contemporary approach to differentiating has been shaped by the growing research on learning – drawing on the best practices from special education, gifted education, and multi-age classrooms, as well as recent research on the brain and multiple intelligences.

Carol Ann Tomlinson, Professor of Educational Leadership, Foundations and Policy at the University of Virginia's Curry School of Education, is a recognized leader in the area of differentiated instruction. In her words, "a differentiated classroom provides different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn" (Tomlinson, 2001).

Central Issues

Preparation of Pre-service teachers:

The area of pre-service education marks the beginning of the problems new to profession teachers' face when trying to incorporate differentiated instruction in the classroom. Patricia Renick (1996) found that regardless of how much university preparation regular educators received in differentiated instruction, their preparation was typically "washed" out by their student teaching experiences.

Tony Mason (1999), conducted a study to determine the extent to which teacher education programs prepared teachers to work with diverse groups of students. Teachers in the study discovered a mismatch between what they actually needed to teach students of different ethnic or racial backgrounds and what skills their pre-service programs had prepared them for.

Tomlinson's (1999) research found that in general teacher education programs are not preparing tomorrow's teachers for the increasing diversity of students. In most cases, teachers had one survey course on exceptional learners which focused on the traits of the learners and not on the methods for teaching. Teachers also reported that education professors, supervisors, and master teachers rarely encouraged the new teachers to differentiate their instruction, but rather to "keep students all together".

Providing Access to the General Curriculum:

For students with disabilities, IDEA 1997 provides that all students, regardless of their abilities, must be given the opportunity to become involved with and progress in the general education curriculum. Differentiation of the curriculum is one way to provide that access through the creation of multiple pathways to student learning.

What it is and what it is not:

- Differentiated instruction is *proactive*. The teacher assumes that students have differing needs and therefore plans a variety of ways for learners to express learning.
- Differentiated instruction is more *qualitative* than quantitative. Simply adjusting the quantity of the assignment is usually less effective than adjusting the nature of the assignment to match student needs.
- Differentiated instruction is *rooted in assessment*. Throughout the unit teachers use a variety of methods to assess students' developing readiness levels, interests, and modes of learning. Learning experiences are then designed based on their best understanding.
- Differentiated instruction provides *multiple approaches* to content, process, and product. Teachers offer different approaches to what students learn, how they learn it, and how they demonstrate what they've learned. Commonly, all of

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these are designed to achieve the student's greatest potential.

- Differentiated instruction is *student centered*. An important premise of differentiated instruction is that learning experiences are most effective when they are engaging, relevant, and interesting.
- Differentiated instruction is a *blend* of whole-class, group, and individual instruction.
- Differentiated instruction is *dynamic*. Students and teachers are learners together and require ongoing collaboration in order to monitor progress of the student and adjust the learning activities as needed. Differentiation is not seen by the teacher as just another strategy, but a way of life in the classroom.

Flexible Grouping

A critical component of differentiated instruction is the appropriate use of grouping strategies. When cooperative learning is implemented correctly, five defining elements are present; a) positive interdependence, face-to-face promotive interaction, c) individual and group accountability, d) interpersonal and small group skills, and e) group processing (Johnson & Johnson, 1999). Research conducted by Marzano, Pickering, and Polluck found that "organizing groups based on ability levels should be done sparingly" (2001).

Homogeneous grouping of students has very different effects for different students. Low ability students perform worse when in groups with other low ability students. However, high and medium ability students benefit from working with peers with the same ability level. It is important to note that utilizing a practice of flexible grouping is best and should be used to meet the needs of all students for a variety of purposes.

Leading Scholars

Carol Ann Tomlinson: Leading the way to explore differentiated instruction with numerous

books, articles, conference presentations, and video resources available through ASCD.

Grant Wiggins & Jay McTighe: *Understanding by Design*. These authors are leaders in the area of assessment and instruction and the "backwards" design of student centered learning based on what we know about the individual student.

Patricia Wolfe: Pat as well as other researchers has brought the science of brain research into the classroom to provide teachers with ideas for improving instruction.

Eric Jensen: Eric has brought the latest research on the brain into the classroom with a specific focus on learner differences. Emotion, memory, and relationships are all critical elements to student success in the classroom.

Howard Gardner: Leading researcher in the area of multiple intelligences.

References

Articles and Books:

Barth, R. S. (2001). *Learning by heart*. San Francisco, CA: Jossey-Bass.

Johnson, D. W., & Johnson, R. T. (1999). *Learning together and alone: Cooperative, competitive, and individualistic learning*. Boston, MA: Allyn & Bacon.

Manson, T. J. (1999). *Cross-ethnic, cross-racial dynamics of instruction: Implication for teacher education*. (ERIC Document Reproduction Service No. ED 429 141 No. UD032861). Clarksville, TN: Austin Peay State University.

Renick, P. R. (1996). *Study of differentiated teaching methods used by first-year special educators*. Paper presented at

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the Midwestern Educational Research Association, Chicago. IL.

Education Service Center, Region XIII: G/T
Website: <http://www.esc13.net/gt/>

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

- This site is maintained by the Service Center's G/T specialist with the most current resources for all teachers.

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms*. (2nd. ed.). Alexandria, VA: Association of Supervision and Curriculum Development.

CAST ...is a not-for-profit organization that uses technology to expand opportunities for all people, especially those with disabilities:
<http://www.cast.org/ncac/DifferentiatedInstruction2876.cfm>

Resources

Websites:

Association of Supervision and Curriculum Development: www.ascd.org

- This website offers a variety of materials on differentiation including; online workshops, books, study guides, and videos.

The Learning Brain: A Monthly Newsletter on the Leading Edge of Mind/Brain Research
<http://www.learningbrain.com/>

- This website is supported by Eric Jensen and his associates. Online resources as well as an extensive catalog of materials can be found here.

Division of Exceptional Learners:
Gifted/Talented Tiered Curriculum Project:
http://ideanet.doe.state.in.us/exceptional/gt/tiered_curriculum/

- This link has sample lessons for teachers to download and use immediately or as a model for their own lessons.

- Annotated bibliography with links to learn more about differentiated instruction.

Conferences and trainings:

National Differentiated Instruction Conference
July 20-23, 2003, Cleveland, OH:
<http://differentiatedinstruction.com/>

ASCD Professional Development Online:
specific courses to address differentiated instruction and understanding by design:

<http://www.ascd.org/trainingopportunities/pdonline.html>

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