



[RESEARCH](#)[RMLE ONLINE](#)[RESEARCH ARTICLES](#)[RESEARCH SUMMARIES](#)[RESEARCH ADVISORY BOARD](#)[RESEARCH BRIEFS](#)[back to Research](#)

NMSA Research Summary #6 Heterogeneous Grouping (1996)

Question: (A) What are the components of an effective heterogeneous grouping program? (B) How does heterogeneous grouping address the needs of special needs students? (C) How does heterogeneous grouping address the needs of gifted and talented students? (D) Is this different from inclusion programs?

Heterogeneous groupings refer to whole classes of students of varying intellectual ability or within classroom groupings where 2-5 students of varying abilities learn together. The grouping practice is associated with efforts to eliminate a "dumbed-down" curriculum and to allow all students the benefits of access to high-level instructional practices. Research points to positive effects on achievement, self-esteem, intergroup relations, and greater acceptance of mainstreamed students, (Slavin, 1991). The majority of the literature on heterogeneous grouping is not "middle level" specific but applies across grade levels.

(A) What are the components of an effective heterogeneous grouping program?

J. Belair, principal of East Lyme Middle School in Niantic, CT, where heterogeneous groupings have been instrumental in raising achievement scores, states, "The key is redesigning instruction, curriculum, and assessment. You need to put mixed ability groups together systematically to ensure true heterogeneous composition. Staff development is critical with training in open-ended projects, compacting curriculum, performance-based assessments, differentiated assignments and grading standards... While advising the use of strategies to address three areas: instruction, curriculum, and assessment, he provides the example of another necessary component, administrative support.

Instructional

- Incorporate Cooperative Learning Strategies (see Enclosure #1, Slavin, 1991).
- Design group work requiring the multiple-abilities of group members to solve, manage, and complete a complex task, that have the uncertainty of a challenge (Cohen, 1994) and necessitate the contributions of all group members (see Enclosure #2, Lotan, Swanson, & LeTendre, 1992).
- Delegate authority to students, allowing them to be responsible for their own and others' learning in cooperative groups.
- Teach new norms of classroom behavior, such as asking for and giving help, and new roles for group members such as being the reporter, facilitator, time keeper, resource person, and reporter (Lotan, et al., 1992).
- Handle status problems by publicly acknowledging the contributions of low-status students.
- Use peer teaching, cross-age tutoring, and cross-grade grouping, with alternative scheduling patterns.
- Provide individualization of instruction: When coupled with cooperative learning, individualized instruction meets a variety of needs within a heterogeneous class (Slavin, 1987).

- Use heterogeneous grouping when social interactions and diverse viewpoints contribute to the subject matter, such as in social science classes (Mac Iver & Epstein, 1993; Slavin, 1990);
- when entry skills are similar as in most electives and exploratories;
- when reading materials present information at various reading levels;
- when individualized learning resources are available; when curricular materials and trained staff provide support (Lotan, Swanson, & LeTendre, 1992).

Curriculum

- Design thematic, interdisciplinary units.
- Start with the state's framework of curriculum.
- Decide on the big questions and key ideas of the unit.
- Determine the themes with skill and content objectives.
- Organize the problem-solving tasks for group work, using a variety of multiple-abilities.
- Incorporate the school-wide Enrichment Model (see Enclosure #3, Renzulli, 1995), using an analysis of textbooks for content and the Total Talent Portfolios to compile a profile of a student's interests, abilities, and skills.

Assessment

- Provide explicit criteria.
- Measure both content (key ideas, integration with contemporary issues, and application in a quality product) and process, (integrating personal experience, a variety of perspectives, multi-ability skills, and inter- and intra-personal skills).
- Use individual and group assessment. Administrative Support
- Commit to providing time for teachers to learn and design new curriculum, have common planning time, and access to staff development and other resources.
- Train teachers in varied instructional practices to aid in developing a willingness to do groupwork.
- Create and sustain new roles for all school personnel (Villa & Thousand, 1992).

(B) How does heterogeneous grouping address the needs of special needs students?

Special needs students, as well as all students, need interactions with peers, challenging exposure to higher level thinking, recognition of contributions, and equal access to quality instruction. Heterogeneous groupings centered on complex tasks meet these needs through a variety of strategies (see part A). Research of the effects of heterogeneous grouping on low-achievers indicate positive effects on achievement, self-esteem, and intergroup relations (Slavin, 1990), indicating the addressing of emotional, interpersonal, and intellectual needs. Braddock (1990) advocates a flexible criteria to allow slower students with high commitment to decide to take more challenging classes and to set specific, accessible prerequisites that allow any student who meets these requirements to qualify for advanced classes.

(C) How does heterogeneous grouping address the needs of gifted and talented students?

Many educators advocate heterogeneous classes with special intellectually gifted classes. Oakes (1992) noted, "Many elementary and middle schools have taken the position that well-designed heterogeneous classes can meet the needs of most intellectually gifted students. But many schools also provide special activities for high achievers either within the regular classroom or after school. Most schools report success with this approach - but only after

considerable time and work with parents" (p. 451).

Coleman et al. (1993) in their report of five schools which had successfully blended gifted education programs into middle schools identified factors critical to program effectiveness:

- administrators who demonstrated a clear commitment to the middle school philosophy and provided a challenging environment for all students,
- autonomy of principals and teachers,
- availability of expertise and human resources,
- enthusiasm of students and teachers,
- a sense of commitment to the school,
- curriculum differentiation which used some form of instructional (ability/performance) grouping and enrichment,
- students were grouped by ability and/or performance for language arts and mathematics instruction" (Executive Summary of the Middle School Site Visit Report).

(D) Is this different from inclusion programs?

In some cases, it is different. Heterogeneous groupings may or may not have inclusion provisions, meaning the groups of students may include students with special needs. In some cases, inclusion also refers to ethnic diversity. The strategies remain the same with or without inclusion, being effective for all students by increasing equity of access and by developing higher order thinking, while promoting social interactions and recognition of contributions (Renzulli, 1994; Cohen, 1994).

Related Articles

1. Synthesis of research on cooperative learning, by R. E. Slavin (1991), *Educational Leadership*, 48 (5), 71-77.
2. Strategies for detracked middle schools: Curricular materials, instructional strategies, and access to learning, by Lotan, R. A., Swanson, P. E., & LeTendre, G. K. (1992). *Middle School Journal*, 24(1), 4-14.
3. Teachers as talent scouts, by J. S. Renzulli (1995). *Educational Leadership*, 52(4), 75-81.
4. How one district integrated special and general education, by R. A. Villa and J. S. Thousand (October, 1992).
5. Enabling the learning disabled, by S. Smith. *Instructor*, July/August, 1993, 88-91.

References

- Braddock, J. H. (1990). Tracking the middle grades: National patterns of grouping for instruction. *Phi Delta Kappan*, 72, 445-449.
- Cohen, E.G. (1994). *Designing groupwork: Strategies for the Heterogeneous classroom* (2nd ed.). New York: Teachers College Press.
- Coleman, M. R., et al. (1993). *Middle School Site Visit Report: Five Schools in Profile. Report: Gifted Education Policy Studies Program*. Chapel Hill: North Carolina University.
- Erb, T. O. (1992). Encouraging Gifted Performance in Middle Schools, *Midpoints*, 3(1). Columbus, OH: National Middle School Association.
- Johnson, D. W., & Johnson, R. T. (1987). *Learning Together and Alone* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Kulik, J. (1993). *An analysis of the research on ability grouping*. Storrs, CT: National Research Center on the Gifted and Talented. (ERIC Document Reproduction Service No.

ED 367-095)

- Lotan, R. A., Swanson, P P., & LeTendre, G. K. (1992). Strategies for detracked middle schools: Curricular materials, instructional strategies, and access to learning. *Middle School Journal*, 24(1), 4-14.
- Mac Iver, D. J., & Epstein, J. L. (1993). Middle grades research: Not yet mature, but no longer a child. *The Elementary School Journal*, 93(5), 521-533.
- Oakes, J. (1992). Detracking schools: Early lessons from the field. *Phi Delta Kappan*, 73 (6), 448-454.
- Oakes, J. (1985). *Keeping Track: How Schools Structure Inequality*. New Haven, CT: Yale University Press.
- Robinson, A. (1990). Cooperation or exploitation? *Journal for the Education of the Gifted*, 14(1), 31-36.
- Renzulli, J. S. (1994-1995). Teachers as talent scouts. *Educational Leadership*, 52(4), 75-81. Sharan, S., & Sharan, Y (1979). *Small group teaching*. Englewood Cliffs, NJ: Educational Technology Publications.
- Slavin, R. E. (1987). Combining cooperative learning and individualized instruction. *Arithmetic Teacher*, 35, 14-16.
- Slavin, R. E. (1990). *Cooperative Learning: Theory, Research, and Practice*. Englewood Cliffs, NJ: Prentice-Hall.
- Slavin, R. E. (1990). Cooperative learning and the gifted: Who benefits? *Journal for the Education of the Gifted*, 14, 28-30.
- Slavin, R. E. (1991). Synthesis of research on cooperative learning. *Educational Leadership*, 48(5), 71-77.
- Slavin, R. E., Leavey, M. B., & Madden, N. A. (1986). *Team accelerated instruction-mathematics*. Watertown, MA: Charlesbridge.
- Smith, S. (July/August, 1993). Enabling the learning disabled. *Instructor*, 88-91.
- Stevens, R. J., Madden, M. A., Slavin, R. E., & Farnish, A. M. (1987). Cooperative integrated reading and composition: Two field experiments. *Reading Research Quarterly*, 22, 433-454.
- Villa, R. A., & Thousand, J. S (1992). How one district integrated special and general education. *Educational Leadership*, 50(2), 39-41.
- Webb, N. (1985). Student interaction and learning in small groups: A research summary. In R. Slavin, S. Sharan, S. Kagan, R. Hertz-Lazarowitz, C. Webb, and R. Schmuck (Eds.) *Learning to Cooperate; Cooperating to Learn* (147-172). New York: Plenum.
- Wheelock, A. (1992). *Crossing the tracks*. New York: The New Press.

NATIONAL MIDDLE SCHOOL ASSOCIATION

4151 Executive Parkway, Suite 300
Westerville, OH 43081

1-800-528-NMSA (6672)
Email: info@NMSA.org

© COPYRIGHT 2005 by NATIONAL MIDDLE SCHOOL ASSOCIATION. ALL RIGHTS RESERVED.