

Why Not Let High Ability Students Start School in January? The Curriculum Compacting Study

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During the 1990-1991 academic year, The University of Connecticut site of The National Research Center on the Gifted and Talented conducted a study to examine the effects of a curriculum modification technique entitled curriculum compacting. This technique is designed to modify the regular curriculum to meet the needs of gifted and talented students in the regular classroom. The study was designed to investigate the types and amount of curriculum content that could be eliminated for high ability students by teachers who received various levels of staff development. It also examined what would happen to students' achievement, content area preferences, and attitudes toward learning if curriculum compacting was implemented. To participate in this study, districts had to meet and accept the following criteria: (1) no previous training in curriculum compacting, and (2) random assignment to treatment groups. Efforts were made to recruit districts throughout the country with elementary student populations that included economically disadvantaged and limited English proficient students. Teachers in 27 school districts were randomly assigned by district to four groups, three treatment groups that received increasing levels of staff development or a control group. After receiving staff development services, teachers in each of the treatment groups implemented curriculum compacting for one or two high ability students in their classrooms. The control group teachers identified one or two high ability students and continued normal teaching practices without implementing curriculum compacting. A battery of pre and post achievement tests (out-of-level *Iowa Tests of Basic Skills*), *Content Area Preference Scales*, and a questionnaire regarding attitude toward learning were administered to identified students in the fall and at the completion of the school year. The results of this study indicate that the compacting process can be implemented in a wide variety of settings with positive effects for both students and teachers. In addition, the results expand previous knowledge about effective and efficient methods for training teachers to make appropriate and challenging curricular modifications for gifted and talented students in regular classrooms.

Citation:

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Conclusions

1. Ninety-five percent of the teachers were able to identify high ability students in their classes and document students' strengths.
2. Eighty percent of the teachers were able to document the curriculum that high ability students had yet to master, list appropriate instructional strategies for students to demonstrate mastery, and document an appropriate mastery standard.
3. Approximately 40-50% of traditional classroom material could be eliminated for targeted students in one or more of the following content areas: mathematics, language arts, science, and social studies.
4. The most frequently compacted subject was mathematics, followed by language arts. Science and social studies were compacted when students demonstrated very high ability in those areas.
5. Replacement strategies did not often reflect the types of advanced content that would be appropriate for high ability students, indicating that additional staff development, as well as help from a specialist in the district, would be beneficial.
6. When teachers eliminated as much as 50% of the regular curriculum for gifted students, no differences in the out-of-level post achievement test results between treatment and control groups were found in reading, math computation, social studies, and spelling.