What Educators Need to Know About Curriculum Compacting

Del Siegle - Editor

When once the child has learned that four and two are six, a thousand repetitions will give him no new information, and it is a waste of time to keep him employed in that manner.
– J. M. Greenwood
Principles of Education Practically Applied, 1888

Practitioners' Guide - A9302

Implications for the Classroom

Our brightest youngsters are frequently asked to participate in practice exercises or instruction of skills or content they have previously mastered. As classroom teachers, we want to provide curriculum that is adapted to the learning needs, rates, and interests of our above average ability students, but we often do not have the needed planning time or guidelines. Curriculum compacting is a process to "streamline" the grade level curriculum by eliminating material our students have previously learned. In doing so, we challenge our above average ability learners by providing them with time for enrichment or acceleration activities.

Sometimes less is more, particularly with curriculum compacting. Less repetition of previously mastered material can result in more learning for our students. Modifying curriculum is not a new concept. Many educators have been effectively practicing it for years.

Research shows that bright students know a lot more than we anticipate and studies also indicate that teachers can determine instructional objectives and assess whether students have mastered them. When starting a new unit, you can provide students an opportunity to share what they already know. This can be accomplished through an informal discussion or through a written assessment. Most textbook publishers include pretests with their curriculum material. Once you have identified objectives, appropriate assessment techniques can be found or developed.

After the assessment, a list of students who have demonstrated mastery of the objectives can be compiled. A simple grid with the student names down one side and the objectives listed across the top works well. Place an X on the grid under the objectives each student has mastered. By glancing at the grid, you can tell which students know the material you are covering. Start small. Select one unit, in a subject

area with which you are comfortable, and begin with two or three students. Basic skills subjects like mathematics and language arts work well. As you become more familiar with the process, you can include more students and expand to other subject areas.

Since the students have demonstrated prior mastery through your assessment, they can then work on more challenging material that interests them. Initially, most teachers find the development of replacement activities the most difficult part of the compacting process. Computer programs, learning centers, and independent study projects work well. Don't be afraid to ask for help. Other teachers have resources you can use. Parents and community members can serve as mentors when students pursue specialized topics.

Once students understand the concept of compacting, they will begin taking ownership of their learning. Compacting is a mutually beneficial process. Your students are not repeating material they have already learned and are able to work on more challenging material in their interest areas. You are able to devote instructional time to students who need assistance. Everyone benefits.

Research Facts

- The difficulty level of textbooks has been steadily declining. On the whole, newer copyright dated texts have been **"dumbed down"** with lower readability levels, less difficult questions, and less extensive illustrations.
  Farr, R., & Tulley, M. (1985). Do adoption committees perpetuate mediocre textbooks? *Phi Delta Kappan, 66*(7), 467-472.

- Seventy-eight to 88% of fifth and sixth grade average readers can pass pretests on basal comprehension skills **before** they are covered in the basal reader.
  Taylor, B. M., & Frye, B. J. (1988). Pretesting: Minimize time spent on skill work for intermediate readers. *The Reading Teacher, 42*(2), 100-103.
- Students in grades 2-5 encounter approximately 40-65% new content in their math textbooks. Over the course of the school year this equates to new materials only **two or three days** a week.
  Flanders, J. R. (1987). How much of the content in mathematics textbooks is new? *Arithmetic Teacher, 35*, 18-23.
- When teachers eliminate as much as 50% of the grade level curriculum for gifted students, there is **no difference** in achievement test results.
- With **minimal training** teachers can effectively identify and eliminate material already mastered by students.
  Reis, S. M., Westberg, K. L., Kulikowich, J., Caillard, F., Hébert, T., Plucker, J., Purcell, J., Rogers, J., & Smist, J. (1992). *Why not let high ability students start school in January? The curriculum compacting study* (Research Monograph 93106). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.

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