Learning requires time, quality

By Carla Thomas McClure

As schools try to improve student achievement in core subjects, teachers may be tempted to cram more content into less time. But this approach can be counterproductive, according to the American Educational Research Association (AERA, 2007). What's needed, according to the association's review of the research, is better use of existing time and appropriate use of extended time for learning.

Why do researchers distinguish between allocated time and academic learning time?

Researchers use the term allocated time to describe the total amount of time dedicated to a particular content area within a school day or year. Academic learning time is the amount of time students spend working on appropriately rigorous tasks. Numerous studies have shown that students who spend more time engaged in such tasks have higher achievement than students who spend less time, if the assigned tasks are central to the curriculum.

Can increasing allocated time improve student learning?

Increasing the amount of time available for learning through after-school programs can be especially helpful for low-performing students — but only if the program includes specific activities focused on academic content. Researchers at the Collaborative for Academic, Social, and Emotional Learning conducted a meta-analysis of research on 73 after-school programs and concluded that "interventions that recognize the interdependence between youths' personal and social development and their academic development can be very effective" (Durlak & Weissberg, 2007). Studies in California show that extended time for learning is also crucial for English language learners, many of whom must learn academic English and course content at the same time (e.g., Gandara, Maxwell-Jolley, & Rumberger, 2006). AERA cautions, however, that adding more time without paying attention to how the time is used is unlikely to yield positive results.

How can time be used more effectively in the classroom?

AERA recommends that schools seek to increase academic learning time by focusing on key curriculum concepts and increasing the rate of academic engagement among students. Increasing the rate of engagement requires that teaching be well-structured and adjusted to suit the learning needs of individual students. A U.S. Department of Education practice guide (Pashler et al., 2007) on organizing instruction to improve learning presented strong evidence for two practices:

- Allowing time for students to answer deep-level questions and explain their answers; and
- Giving short-answer and fill-in-the blank quizzes at regular intervals to re-expose students to key content.

Allowing sufficient time for students to master skills and concepts is especially important in subjects such as math and science, which require deep conceptual learning. A 2003 study cited by AERA illustrates this point. In the study, 3,000

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8th-grade science students, all taught by the same teacher, received different versions of a single curriculum. Each covered the same content within a different time frame (three, six, and 12 weeks). Seventy percent of the students who received 12 weeks of instruction did well on multiple-choice tests and written essays. For the three- and six-week versions, student performance remained about the same on the multiple choice tests, but performance decreased dramatically on the essay test. The researchers concluded that for many students, "packing the curriculum results in superficial understanding" (Clark & Linn, 2003).

What other guidance does AERA offer?

AERA issued four policy recommendations:

1. Schedule more instructional time for the core academic subjects;
2. Extend the school day and calendar as necessary to meet these needs and still maintain time for non-core subjects, such as gym, art, or library;
3. Make sure that extended allocations of time for core curriculum are used for high-demand academic learning adapted to individual students' needs; and
4. Focus additional funds on the students who need it most.

RESOURCES ON TIME AND LEARNING

THE NATIONAL CENTER ON TIME AND LEARNING, established in 2007, provides information on increasing academic and enrichment opportunities for students. Its web site includes a blog (Time Matters) and column, Ask a Principal.
www.timeandlearning.org

MASSACHUSETTS 20/20, established in 2000, has helped launch several initiatives to expand the school day or provide after-school services in Massachusetts. See its web site for research summaries and best practice reports
www.mass2020.org/

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