Why GAO Did This Study

The federal government has invested billions of dollars to improve student academic performance, and many schools, teachers, and researchers are trying to determine the most effective instructional practices with which to accomplish this. The Conference Report for the Consolidated Appropriations Act for Fiscal Year 2008 directed GAO to study strategies used to prepare students to meet state academic achievement standards. To do this, GAO answered: (1) What types of instructional practices are schools and teachers most frequently using to help students achieve state academic standards, and do those instructional practices differ by school characteristics? (2) What is known about how standards-based accountability systems have affected instructional practices? (3) What is known about instructional practices that are effective in improving student achievement? GAO analyzed data from a 2006-2007 national survey of principals and 2005-2006 survey of teachers in three states, conducted a literature review of the impact of standards-based accountability systems on instructional practices and of practices that are effective in improving student achievement, and interviewed experts.

What GAO Found

Nationwide, most principals focused on multiple strategies to help students meet academic standards, such as using student data to inform instruction and increasing professional development for teachers, according to our analysis of data from a U.S. Department of Education survey. Many of these strategies were used more often at high-poverty schools—those where 75 percent or more of the students were eligible for the free and reduced-price lunch program—and high-minority schools—those where 75 percent or more of students were identified as part of a minority population, than at lower poverty and minority schools. Likewise, math teachers in California, Georgia, and Pennsylvania increased their use of certain instructional practices in response to their state tests, such as focusing more on topics emphasized on assessments and searching for more effective teaching methods, and teachers at high-poverty and high-minority schools were more likely than teachers at lower-poverty schools and lower-minority schools to have made these changes, according to GAO’s analysis of survey data collected by the RAND Corporation. Some researchers suggested that differences exist in the use of these practices because schools with lower poverty or lower minority student populations might generally be meeting accountability requirements and therefore would need to try these strategies less frequently.

Research shows that standards-based accountability systems can influence instructional practices in both positive and negative ways. For example, some research notes that using a standards-based curriculum that is aligned with corresponding instructional guidelines can facilitate the development of higher order thinking skills in students. But, in some cases, teacher practices did not always reflect the principles of standards-based instruction, and the difficulties in aligning practice with standards were attributed, in part, to current accountability requirements. Other research noted that assessments can be powerful tools for improving the learning process and evaluating student achievement, but assessments can also have some unintended negative consequences on instruction, including narrowing the curriculum to only material that is tested.

Many experts stated that methodological issues constrain knowing more definitively the specific instructional practices that improve student learning and achievement. Nevertheless, some studies and experts pointed to instructional practices that are considered to be effective in raising student achievement, such as differentiated instruction. Professional development for teachers was also highlighted as important for giving teachers the skills and knowledge necessary to implement effective teaching practices.