

# Beyond No Child Left Behind: Value-Added Assessment of Student Progress

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*The federal No Child Left Behind Act (NCLB) requires each state to evaluate every public school annually, and to make “adequate yearly progress” toward helping all students meet or exceed state standards in reading and math by 2014. However, each state defines its progress and creates its own tests. Most states measure academic achievement based on pass-fail tests that require students to attain a minimum score.*



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Unfortunately, pass-fail test scores do not tell administrators which teachers are most effective or how much students have improved. Value-Added Assessment (VAA) is an alternative methodology that evaluates educational progress based on the *growth* of each student’s knowledge base, rather than the attainment of particular test scores.

VAA was first implemented in Tennessee public schools in 1992. The value-added measure for each student is the improvement (or decline) in his or her test scores over the course of a year. Each student’s past test scores are analyzed to predict the student’s performance over the upcoming year. These predictions are then compared to the student’s actual scores at the end of each school year. Only those students who meet or exceed their predicted scores are considered to have made adequate progress. Teachers are deemed exceptional if their students surpass predictions, effective if students meet them, and ineffective if students fall below them.

**VAA in the States.** Due to NCLB, in recent years many states have developed much of the basic infrastructure researchers say is required to implement VAA. This includes standardized, annual tests, collecting students’ tests scores and

socioeconomic characteristics, and systems able to link each student to individual teachers.

According to a 2007 study by Florida State University, schools in 15 states are using forms of VAA. But only four states have officially mandated its use. Of those, only Tennessee (for 16 years) and Ohio (since 2007) use VAA as one of several factors in annual report cards that rank schools by academic achievement. However, the U.S. Department of Education is encouraging all states to develop VAA to replace simple pass-fail test scores in measuring “adequate yearly progress.” Since 2005, the department has given 11 states approval to substitute VAA for minimum test scores.

## **Implementing VAA Successfully.**

Although more states are collecting the statistics necessary for VAA, so far there is little evidence its use has improved academic achievement. Theodore Hershberg of the University of Pennsylvania believes that VAA requires complementary policies to improve academic achievement: accountability, training teachers to use VAA and merit pay. Evidence from other researchers supports the conclusion that VAA can be effective if implemented in conjunction with other policies.

*Better accountability.* Like other states, Florida gives schools a grade based on test performance and dropout rates. In a December 2007 National Bureau of Economic Research study, Cecilia E. Rouse and colleagues found that low-performing schools in Florida raised student test scores after the state threatened to reduce local school funding and to give parents a choice

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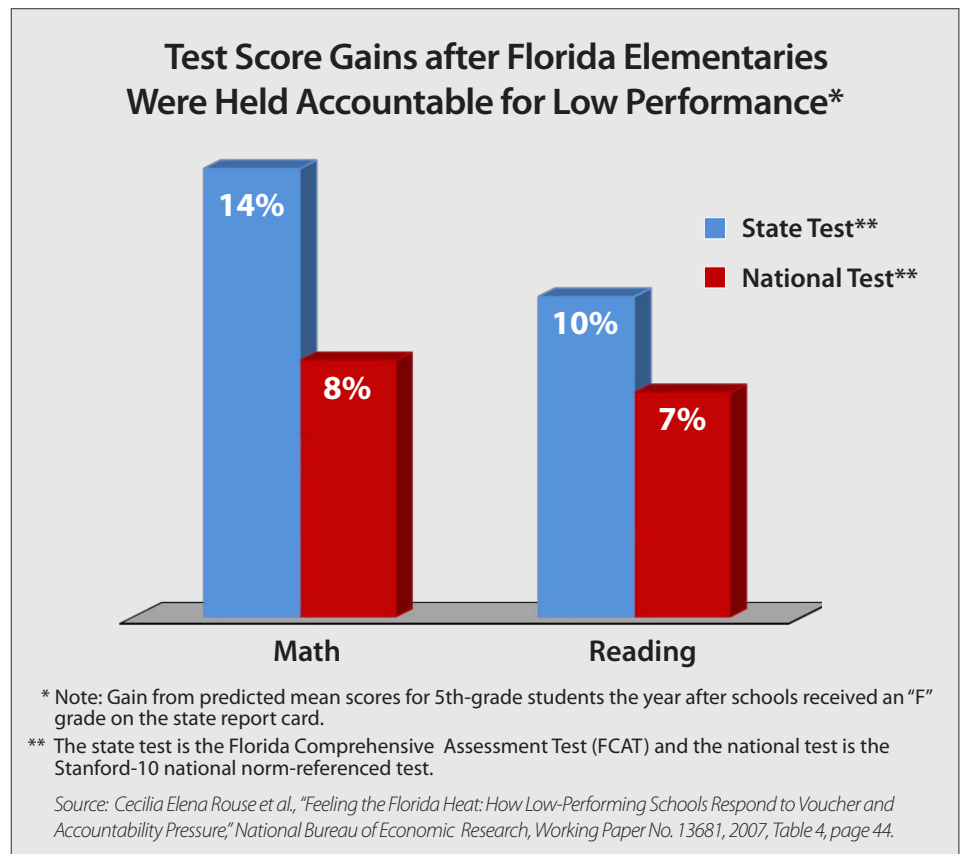
of other schools. [See the figure.] This shows that holding schools accountable for performance can yield positive results. Nationally, NCLB has attempted to increase accountability by monitoring pass-fail test scores by school and socioeconomic group. But these scores don't evaluate specific students or teachers. States can improve accountability by using VAA to assess the *progress* of individual students, teachers and schools.

**Program Training.** Second, states must train teachers and administrators on how to use VAA. A 2007 Rand Corporation study observed that Pennsylvania's VAA pilot program did not increase achievement at pilot schools compared to nonpilot schools; but this effect was due more to the pilot schools' failure to use VAA statistics effectively than any inherent flaw in VAA itself.

**Paying for Results.** Third, teacher compensation must be tied to performance or merit. A 2004 study of a four-year pilot program in Denver, Colo., by the Community Training and Assistance Center, found that students' test scores increased when teachers met two or more district-approved teaching objectives and were compensated for those achievements.

However, Hershberg notes that in order to institute merit pay, states must collect data about performance at the classroom level (preferably through VAA) and use it to evaluate individual teachers. Right now, only Tennessee and North Carolina collect VAA data this specific, and only Tennessee allows it to count on teachers' evaluations, though for no more than 8 percent of the overall evaluation.

**Using VAA for School Report Cards.** VAA could identify underperforming schools, so parents could exercise school choice by moving their children to better performing public schools, charter



schools or, with the help of a government voucher, private schools. Unless underachieving schools face the prospect of losing students to more successful schools, they will not make the changes necessary to reverse academic decline.

VAA can also identify academic achievement for subsets of students at the school level, without focusing on specific students and teachers. For example, in 2003 the National Center for Policy Analysis used VAA to generate report cards for all the schools in Texas. Analyzing students by ethnicity, they found that many schools were better at teaching one ethnic group, say blacks or Hispanics, than another group, and few were successful at teaching all groups. Even if states don't use VAA for merit pay, they could use it to publicly identify low-performing schools and give parents the choice to move their kids to schools that excel at teaching students with similar characteristics.

**Conclusion.** VAA bases expectations for a student on that individual student's previous achievement and growth patterns. The analyses provide a more objective standard for evaluating teachers and their teaching methods. Further, it gives parents a way to determine if a school serves their children's educational needs. It allows parents with the option of school choice to see how well a school caters to the needs of students with similar characteristics to their own child or children, so they can make a better-informed decision. This is important because not every school serves every student equally well; while a school may be "exemplary" by conventional standards, it may be markedly lacking in how well it serves certain groups of students.

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