

93% of studies on student testing, including the use of large-scale and high-stakes standardized tests, found a "positive effect" on student achievement, according to a peer-reviewed, 100-year analysis of testing research completed in 2011 by testing scholar Richard P. Phelps. [138]

Standardized tests are reliable and objective measures of student achievement. Without them, policy makers would have to rely on tests scored by individual schools and teachers who have a vested interest in producing favorable results. Multiple-choice tests, in particular, are graded by machine and therefore are not subject to human subjectivity or bias. [55]

20 school systems that "have achieved significant, sustained, and widespread gains" on national and international assessments used "proficiency targets for each school" and "frequent, standardized testing to monitor system progress," according to a Nov. 2010 report by McKinsey & Company, a global management consulting firm. [146]

Standardized tests are inclusive and non-discriminatory because they ensure content is equivalent for all students. Former Washington, DC, schools chancellor Michelle Rhee argues that using alternate tests for minorities or exempting children with disabilities would be unfair to those students: "You can't separate them, and to try to do so creates two, unequal systems, one with accountability and one without it. This is a civil rights issue." [103]

China has a long tradition of standardized testing and leads the world in educational achievement. China displaced Finland as number one in reading, math, and science when Shanghai debuted on the Programme for International Student Assessment (PISA) rankings in 2009. [150] Despite calls for a reduction in standardized testing, China's testing regimen remains firmly in place. [139] Chester E. Finn, Jr., Chairman of the Hoover Institution's Koret Task Force on K-12 Education, predicts that Chinese cities will top the PISA charts for the next several decades. [150]

"Teaching to the test" can be a good thing because it focuses on essential content and skills, eliminates time-wasting activities that don't produce learning gains, and motivates students to excel. [18] The US Department of Education stated in Nov. 2004 that "if teachers cover subject matter required by the standards and teach it well, then students will master the material on which they will be tested--and probably much more." [19]

Standardized testing has not improved student achievement. After No Child Left Behind (NCLB) passed in 2002, the US slipped from 18th in the world in math on the Programme for International Student Assessment (PISA) to 31st place in 2009, with a similar drop in science and no change in reading. [95] [145] [144] A May 26, 2011, National Research Council report found no evidence test-based incentive programs are working: "Despite using them for several decades, policymakers and educators do not yet know how to use test-based incentives to consistently generate positive effects on achievement and to improve education." [154]

Standardized tests are an unreliable measure of student performance. A 2001 study published by the Brookings Institution found that 50-80% of year-over-year test score improvements were temporary and "caused by fluctuations that had nothing to do with long-term changes in learning..." [107]

Standardized tests are unfair and discriminatory against non English speakers and students with special needs. [106] English language learners take tests in English before they have mastered the language. [101] Special education students take the same tests as other children, receiving few of the accommodations usually provided to them as part of their Individualized Education Plans (IEP). [102]

Standardized tests measure only a small portion of what makes education meaningful. According to late education researcher Gerald W. Bracey, PhD, qualities that standardized tests cannot measure include "creativity, critical thinking, resilience, motivation, persistence, curiosity, endurance, reliability, enthusiasm, empathy, self-awareness, self-discipline, leadership, civic-mindedness, courage, compassion, resourcefulness, sense of beauty, sense of wonder, honesty, integrity." [147]

"Teaching to the test" is replacing good teaching practices with "drill n' kill" rote learning. A five-year University of Maryland study completed in 2007 found "the pressure teachers were feeling to 'teach to the test'" since NCLB was leading to "declines in teaching higher-order thinking, in the amount of time spent on complex assignments, and in the actual amount of high cognitive content in the curriculum." [11] [12]

NCLB tests are drastically narrowing the curriculum. A national 2007 study by the Center on Education Policy reported that since 2001, 44% of school districts had reduced the time spent on science, social studies and the arts by an average of 145 minutes per week in order to focus on reading and math. [1] A 2007 survey of 1,250 civics, government, and social studies teachers showed that 75% of those teaching current events less often cited standardized tests as the reason. [16]

Standardized tests are not narrowing the curriculum, rather they are focusing it on important basic skills all students need to master. According to a study in the Oct. 28, 2005, issue of the peer-reviewed *Education Policy Analysis Archives*, teachers in four Minnesota school districts said standardized testing had a positive impact, improving the quality of the curriculum while raising student achievement. [116]

Increased testing does not force teachers to encourage "drill n' kill" rote learning. According to a study in the Oct. 28, 2005, issue of the peer-reviewed *Education Policy Analysis Archives*, good teachers understand that "isolated drills on the types of items expected on the test" are unacceptable, and principals interviewed said "they would sanction any teacher caught teaching to the test." [116] In any case, research has shown that drilling students does not produce test score gains: "teaching a curriculum aligned to state standards and using test data as feedback produces higher test scores than an instructional emphasis on memorization and test-taking skills." [18]

Most parents approve of standardized tests. A June-July 2013 Associated Press-NORC Center for Public Affairs Research poll found that 75% of parents say standardized tests "are a solid measure of their children's abilities" and 69% say the tests "are a good measure of the schools' quality." 93% of parents say standardized tests "should be used to identify areas where students need extra help" and 61% say their children "take an appropriate number of standardized tests." [2]

Testing is not too stressful for students. The US Department of Education stated: "Although testing may be stressful for some students, testing is a normal and expected way of assessing what students have learned." [19] A Nov. 2001 University of Arkansas study found that "the vast majority of students do not exhibit stress and have positive attitudes towards standardized testing programs." [5] Young students vomit at their desks for a variety of reasons, but only in rare cases is this the result of testing anxiety. [6]

The multiple-choice format used on standardized tests produces accurate information necessary to assess and improve American schools. According to the Center for Teaching Excellence at the University of Illinois at Urbana-Champaign, multiple-choice questions can provide "highly reliable test scores" and an "objective measurement of student achievement." [131] Today's multiple-choice tests are more sophisticated than their predecessors. The Center for Public Education, a national public school advocacy group, says many "multiple-choice tests now require considerable thought, even notes and calculations, before choosing a bubble." [39]

Standardized tests are not objective. A paper published in the Fall 2002 edition of the peer-reviewed *Journal of Human Resources* stated that scores vary due to subjective decisions made during test design and administration: "Simply changing the relative weight of algebra and geometry in NAEP (the National Assessment of Educational Progress) altered the gap between black and white students." [130]

Standardized testing causes severe stress in younger students. According to education researcher Gregory J. Cizek, anecdotes abound "illustrating how testing... produces gripping anxiety in even the brightest students, and makes young children vomit or cry, or both." [7] On Mar. 14, 2002, the Sacramento Bee reported that "test-related jitters, especially among young students, are so common that the Stanford-9 exam comes with instructions on what to do with a test booklet in case a student vomits on it." [8]

Older students do not take NCLB-mandated standardized tests seriously because they do not affect their grades. An English teacher at New Mexico's Valley High School said in Aug. 2004 that many juniors just "had fun" with the tests, making patterns when filling in the answer bubbles: "Christmas tree designs were popular. So were battleships and hearts." [132]

The multiple-choice format used on standardized tests is an inadequate assessment tool. It encourages a simplistic way of thinking in which there are only right and wrong answers, which doesn't apply in real-world situations. The format is also biased toward male students, who studies have shown adapt more easily to the game-like point scoring of multiple-choice questions. [77]

Finland topped the international education (PISA) rankings from 2001-2008, yet has "no external standardized tests used to rank students or schools," according to Stanford University researchers Linda Darling-Hammond and Laura McCloskey. [148] Success has been achieved using "assessments that encourage students to be active learners who can find, analyze, and use information to solve problems in novel situations."

Excessive testing may teach children to be good at taking tests, but does not prepare them for productive adult lives. [140] China displaced Finland at the top of the 2009 PISA rankings because, as explained by Jiang Xueqin, Deputy Principal of Peking University High School, "Chinese schools are very good at preparing their students for standardized tests. For that reason, they fail to prepare them for higher education and the knowledge economy." [139] China is trying to depart from the "drill and kill" test prep that Chinese educators admit has produced only "competent mediocrity." [112] [113] [1]

