

# What is brain based learning education essay



**ASSIGN  
BUSTER**

Does brain based learning really help improve test scores? Why is there so much emphasis on testing in schools across America? The cause of both of these questions lies in the No Child Left Behind Act. This particular piece of legislation has become more controversial as time goes by, for many reasons. The original intent of this law was to create benchmarks for school administrators across the country to gauge the effectiveness of their staff. It attempted to measure student achievement, how much students are learning, and if the teachers are really doing their job. While it all sounds very good on paper, the reality of this act is that it has become one of the biggest educational nightmares of the decade.

First, much more media attention has been paid to testing, in particular to the No Child Left Behind (NCLB) Act and its required Adequate Yearly Progress (AYP) on state tests. These are the two most important benchmarks that were instituted by the NCLB Act. These two benchmarks are coming up repeatedly in discussions between educators and politicians, because it is a result of these benchmarks that is failing or passing schools. However, the only way to measure these benchmarks is via standardized testing, a practice that even test makers warn is not completely accurate and may not serve the students as needed. A year's or a semester's education is just too complex to reduce to a single test, and one test can't tell us much about a student. In fact, most national testing companies do not recommend their tests be the sole gauge for high-stakes decisions. In New York City, for example, where a single test will determine which students stay in third grade, even test-makers Harcourt Assessment, Inc., and CTB McGraw-Hill warned not to make test scores the only factor in such decisions. (Goldberg,

2005) Second, objections to various aspects of testing have increased dramatically, questioning everything from the tests themselves to lack of funding for federal mandates. This stems from the end results of using a standardized test to measure students that come from a variety of ethnic, socio-economic, and cultural backgrounds, all of which has a significant impact in how they perform on standardized tests.

Third, many cities and states, even parents in some cases, have found interesting, creative ways to circumvent the tests or their results. In Florida, there are several standardized tests that are being used as benchmarks - the FCAT and HSCT - to name two. If a student doesn't pass the FCAT, that particular student can be retained up to 2 years in that grade in order to 'prove' that they have learned the material and deserve to be promoted to the following grade, regardless of their test scores. The first immediate drawback to this standard is that testing begins at the 3rd grade level. If a child is held back in 3rd grade twice, by the time they are in middle school, assuming they passed the FCAT in 5th grade on their first try, they are generally almost 14 entering middle school, which is normally the age at which one is leaving middle school to enter high school. This does several things for the student: first it depresses them, second it embarrasses them, and in many cases, it opens the door to dropping out in the 9th or 10th grade because they are already so much older than their peers they can make that decision on their own, no parental consent required, and they have no incentive to get their high school diploma. If that is not enough, the HSCT is a required high school exit exam, which prevents many seniors from graduating. So assuming that the student made it to their senior year, if they

have a bad test with the HSCT, they still cannot receive their diploma, even if they have straight A's. This has caused many parents to get creative assisting their senior in actually graduating. Florida parents have learned they can send their children's transcripts to the North Atlantic Regional Schools, in Lewiston, Maine, and receive a legal diploma sufficient to have their children admitted to many colleges in spite of a failing high school exit exam, which is the HSCT mentioned above. This focused parents nationwide, especially ones with children in special education, looking to circumvent state exit exams which they see as unfairly denying their children high-school diplomas. (Goldberg, 2005)

Finally, the U. S. Department of Education (USDOE) compromised on some NCLB requirements and is pressured to back down even more. From Arizona to Michigan to Alaska and from Kentucky to Maryland to California, the federal government is getting complaints about the unfairness of NCLB, ranging from interference with states' rights to inadequate funding, too many subgroup requirements, inappropriate and unwarranted rigidity over requirements, and overreliance on a small set of standardized tests. Largely because of extensive media coverage, Americans are learning that, quite often, objections to testing come down to ideology, not empirical differences. Giving students multiple tests instead of one per subject, reducing the number of subgroups or increasing their minimum size, making assessment formulas clearer and fairer, taking into increasing account teacher evaluation and various kinds of performance, reducing the number of students retained, and limiting retention to once in a student's K-12 career will all become more

common in the future. Narrow ideology must yield to rigorous but attainable standards, multiple forms of assessment, and best practices.

Now, the differences stem from something as simple as racial background, as seen by the following study. At the nation's highest-ranked colleges and universities, admissions officers generally are seeking students who turn in very high scores on their SAT II tests. Nationwide, only 228 blacks scored 700 or above on any of the SAT II tests. In contrast, there were 12, 295 white students who scored 700 or above. Nationwide, blacks made up 4. 5 percent of all SAT II test takers but only 1. 0 percent of all students scoring 700 or above. If we drop the scoring threshold to those who scored 650 or above, the situation does not improve a great deal. Nationwide, 788 African Americans scored 650 or above on any of the SAT II tests. But more than 55, 000 nonblack students scored 650 or above. African Americans make up only 1. 4 percent of the students who score at or above the 650 scoring level. Some 7. 6 percent of all black students who took SAT II tests scored 650 or above compared to 25. 8 percent of all white students who took the SAT II tests. (Anonymous, 1999) This study is showing how the blacks that were traditionally underperforming on these tests have begun reaching higher achievement levels. However, it also shows that the test itself, due to its standardization, can't be used as a sole measure of achievement, simply because it doesn't even account for racial bias that affects scoring in the ways recorded above.

While testing is often the only method that can measure a student's performance in order to recommend or place them for post-secondary learning, most colleges do understand that there is more to admissions than <https://assignbuster.com/what-is-brain-based-learning-education-essay/>

just SAT and SATII test scores. This is why on a college application now a personal essay is usually standard, along with a secondary essay on the students' choice of several topics provided. There is also increasing scrutiny of the student's time outside of the classroom, service activities or extra-curricular activities, clubs, and hobbies that they may have been involved in as well. The reason for all this is because it serves to show an admissions representative a sample of the depth of the education and learning that the student has achieved over a 12 year period. While not necessarily touting the merits of college application processes, the fact that institutions of higher education recognize that testing alone doesn't truly measure a student should provide a clue to the government about the big failure in the benchmarks set by the NCLB Act.

When students follow brain-based learning techniques, education takes on a whole new panorama, regardless of the standardized testing. In Key Largo, FL, there is a school that has used brain-based learning to innovate new programs that are truly inspiring students to learn as a whole person.

Technology, whether it is a computer, video or telecommunications equipment, or a global-positioning-system (GPS) device, is embraced at Key Largo, a preK-8 school of 1, 200 students where all classrooms are wired and where the student-to-networked-computer ratio is 3 to 1. Based on brain research, technology provides opportunities to use such important science of learning principles as pre-existing knowledge, active learning, mental models, transfer, and learning for understanding. Part of the standard practices for teachers at Key Largo, is to check for a range of student dispositions before creating individual learning plans. Does the student work

better in groups, or alone? Does she remember more if the information is told to her, if she sees it in writing, or if she is given a project and allowed to discern the knowledge through hands-on work? Is he easily distracted, or do noise and activity propel him to work harder? As a result of those answers, harsh fluorescent lighting has been replaced with the soft glow of 60-watt bulbs in real table lamps. CD sounds of a rushing stream serve as background music. Eating (healthy) food in class is encouraged." Part of the brain research tells us that children have different learning styles, and that if we want them to do the very best they can in life — in school — then we as educators need to tend to what their learning styles are," says St. James, the school principal. (Curtis, 2005) As unique as the approach has been, it has been working. This particular school has students that are consistently passing all of the FCAT benchmarks, while relieving the educators from teaching to that particular test.

Another unique approach used by Key Largo was the Brain Gym, which are basically mental exercises that one does throughout the day to stimulate the brain and change the constant repetition of material or vary the sensory input, which also assists students in absorbing and retaining the day's information. In other places, a school district in Pennsylvania did a study with yoga as a brain-based learning stimulation to see the long-term effects. The observational studies include an increase in the concentration of the students and a noticeable improvement in behaviors. The students were less likely to react and completed complex tasks without frustration. Many of the students participating in the study excelled in areas outside of their classroom, winning many awards and being noted as outstanding

contributors to their school. Faces that used to be taut with anxiety and fear from school projects are now smiling and have an observable glow. These exercises create a positive connection, between learning, taking risks and connecting with others. The student response has been very strong. Many students ask for the Superbrain Yoga as they move ahead in their grades and find that not every classroom is doing the yoga. One student focused the commencement speech of the graduating class, on the changes the students experienced within a classroom of this setting. It has been 3 years since the original study and the students to this day continue to connect these exercises with the academic and behavioral shifts within themselves. (Siar, 2005) This is a prime example of brain-based learning empowering students to achieve, regardless of test scores and standardized testing.

While there will always be an intense debate on how to use more authentic ways to measure and assess student learning and performance, testing is still the unfortunate reality in our school system, and as an educator one should be preparing the students to improve their test scores. Study skills and memory retention techniques should be taught, along with various testing approaches such as quick-scanning techniques, time limits, and prioritizing. Teachers should also prepare students to manage and understand themselves so they can practice relaxation, positive reinforcement and rest prior to test-taking. Teachers can also go the extra mile to make students aware of what to expect during the test taking.

(Jensen, 2008) All of these steps can help minimize the impact of the test on the student, which helps improve their performance and would hopefully



create test results that are a better gauge of the benchmarks the administration and the state are trying to implement.

Brain based learning has proved effective even in very low income communities, where students have reaped the benefits and been more successful than in past years. Again, Florida is the prime example, because of the standardization of the testing for all the schools in the state. The objective of this project is to create a brain-based learning environment to teach reading successfully to primary learners at Bowling Green Elementary. Bowling Green is a highly transient rural community with a low socio-economic status which is reflected in the migrant population of the community. The demographics are composed of 82% Hispanic, 5.5% African-American, 10% Caucasian and 2% Other Cultures. There are 120 current LEP students and 125 ESE students in this K-5 elementary. This Title One district received a C rating from the state of Florida last year after having missed 17 days in August because of three hurricanes passing through the county. BGE had the lowest scores in reading among the four elementary schools in Hardee County. Hardee is the only school district in Florida to be granted an alternative FTE count from the state of Florida. The reason for this is that the high migrant population of the county fluctuates according to the growing seasons of local crops. Students do not all begin school in August because they enroll in later months with the picking seasons such as October and January. Basically, what it means is that it cannot be counted on the pass/fail system because the students are performing so far below level in comparison to all other elementary schools statewide. All students come from diverse backgrounds and family

situations. Students can be monolingual with Spanish as their first language, bilingual in Spanish and English, or diverse in their cultural background.

Bowling Green is a rural town and the majority of the parents work picking fruit or vegetables in local fields or orange groves. The purpose of a brain-research environment for learning rather than a traditional experience is to encounter the challenges of diversity among the children and improve learning according to separate abilities and needs of the students.

Differentiation is a new practice in the current curricula yet can solve many individual reading problems in a first grade classroom. All educators should be encouraged to try and facilitate brain research in the classroom for improved reading and learning for optimum achievement among students.

(Opalek, 2006) Since the inception of the study, the scores for this particular elementary school have slowly been improving, even among standardized test results, which serve as a direct proof of the value of brain-based learning on improving test results for students from all backgrounds and socio-economic statuses.

There are other studies nationwide that also show the effect of brain-based learning strategies on children who traditionally struggle in school. In this particular study, 35 families with students who were underachieving were tested before using the strategies and after. Thirty-five parents strongly agreed that their child learns best when concepts are presented in different ways. Less than 10 do not view their child as having a hard time controlling their own behavior in class. About 30 parents feel somewhat included in their child sharing learning experiences with them. Twenty-nine parents felt their children were motivated to learn in school. After the study was completed,

pre- and post-surveys of parents indicated parental perception of student motivation had changed slightly in the positive direction at the end of the study. Students had improved marginally over a short period of time, with greater improvement directly related to a longer duration of the study period. Parental perception of students' learning styles stayed the same; most indicated that their children learned best when material was presented in a variety of ways. None of the parents strongly disagreed with anything except their perception of how their children behaved in class. (Posciask & Settles, 2007) Basically, the brain-based learning techniques helped the students retain, and even improved classroom behavior somewhat in the regular school setting.

In conclusion, brain-based learning strategies are an excellent way to improve students' overall performance, retention, and test-taking abilities. As more and more educators and schools take the risks and move to a more all-inclusive and creative classroom environment, standardized testing will lose importance and serve as a minor benchmark of achievement, as opposed to its current status as the be all, end all of an educator's yearly performance review. The American educational system truly owes it to itself and all the educators and students to really analyze the downfalls of standardized testing as benchmarks for achievement, and begin to rewrite the NCLB Act to where education does what it's meant to do; which is to teach, expand minds, and open new worlds to old and young alike.