Public education is one of the vital American institutions that promote democracy and provide the means by which the American dream can be accomplished. Most children in the United States attend public schools. Public education is thus a very important function of the United States government. Much policy debate occurs over education, from the use and distribution of funds to the installation of various teaching methods and programs. Each American has a vested interest in determining which programs produce the best academic results and in obtaining efficiency economically. This study sought to determine what factors influence education. If one can identify the factors that have an influence on education, school systems can make necessary changes to improve academic performance.

Previous research as well as public opinion identified two main influential categories that determined or influenced academic success. The categories are comprised of controllable and uncontrollable factors. The distinction between the two was based on the ability of education policy to control or change each factor. Controllable factors generally involved funding and distribution, which can be controlled through property taxes, government aid, and distribution of those funds. The uncontrollable factors were socioeconomic in background, involving race, parental education, family income, and poverty levels. This study identified 7 independent variables measured at the state level, both controllable and uncontrollable. The data was collected from recent census studies and estimates. The controllable variables were as follows; per pupil spending in dollars, average teacher salary in dollars, and average property tax. The uncontrollable variables were percent white, median household income, percent of school age population at or below the poverty level, and percentage of population with a college degree. Academic success was measured using average state SAT scores. SAT scores were used because of the test’s widespread use across each state and because of their reliability. All
data was gathered from years 1998-2005 and each factor and SAT score average was found over this period and used. The data was all gathered at the state level for the purpose of determining which factors have measurable influence across the nation. The data was studied using regression analysis, to determine which factors were significant predictors of academic performance as measured by average SAT.

Much of the research and public opinion as a whole indicated that increased funding produces greater test results. The regression analysis, however, did not find funding to have as much impact as expected. Per pupil spending, one of the most commonly assumed factors that effects educational success was not significantly significant. In other words, spending more on average per pupil does not produce higher test results on the national level. Property tax, a main source of education funding was also found to be statistically insignificant. Only teacher salary was statistically significant, and it produced a negative correlation, meaning that higher pay was associated with lower test scores. This seemingly paradoxical result can easily be understood when one considers that struggling school districts often offer higher salaries as an incentive to attract teachers.

None of the socioeconomic factors were found to be statistically significant. Percentage white a measure of race and majority influence had no significant relationship with average SAT scores. Neither median household income nor percentage of school age population was statistically significant. Percentage of population with a college degree was also insignificant.

The results of this study are surprising. They not only defy commonly held beliefs, but also have widespread implications for policy. It seems that many factors often perceived as influential, are not statistically. An important point to remember is the influence that averages
have mathematically on statics. When conducting tests at such a large level using averages, it is imperative to recognize that averages tend to make muddy the accuracy of data. The study chose to use averages at the state level to determine factors with widespread influence and inadvertently produced questionable results. A more accurate study could be conducted using district level data from the entire nation, but this amount of information was impractical for this study. Overall, this study leads one to the conclusion that most of the academic success is dependent on the students themselves and their cultural and personal attitudes towards education.