

**There Is No Such Thing
As Too Many Scientists...
Or Is There?**

Justin Chacko
East Meadow High School

“There Is No Such Thing As Too Many Scientists... Or Is There?”

Many people argue that the United States can never have too many scientists. After all, two heads are better than one. Others oppose this and claim that the money involved in funding so many scientists is wasted money. These people feel that the money spent is not worth it, but that progress is a function of time, not the number of scientists. However, in reality, it is clear that there is a genuine need for more scientists and engineers in the United States workforce.

Over the years, there has been a general decrease in the number of U.S. scientists and engineers. This general shift may be a direct result of the increasing loss of interest in science and math. It seems rather counterintuitive, considering that in the United States, the average intelligence has been rising rather steadily. Using IQ tests to gauge the level of American citizens' intelligence, scientists have noted that the average IQ rises about three points per decade. However, it has been suggested that the level of competition within the occupational field and its intrinsic difficulty have repelled many prospective scientists and engineers (Greve, 2006).

This competition within the field seems also rather unjustified. Careers seem to be limited, yet there is a clear need for scientists, especially now in light of the various natural calamities like Hurricane Katrina. Scientists could have helped detect, prevent, or take actions to counter such natural disasters. If at all it could not have been avoided, then they can help deal with the catastrophe's aftermath. Furthermore, at this time, the United States is involved in a number of wars, including the war on terror. Disease can be used as a fear-inflicting tactic by terrorists. Thus, it is necessary for there to be an ample amount of scientists in

order to attack the issue and discover either preventive measures or counter-acting cures. If there are not enough scientists, the United States will be vulnerable to many plagues, whether natural or artificial.

Scientists and engineers can help solve various problems that afflict our lives, as well as create innovative devices that can improve our quality of life. For example, with the aftermath of Hurricane Katrina, engineers are needed to help reconstruct a stronger city that can withstand the furious power of nature. Also, dealing with terrorist threats, such as anthrax, scientists are necessary to develop countermeasures to protect the lives of American citizens. The Constitution declares that the purpose of the government is to promote the general welfare of its inhabitants. Thus, it becomes obvious that it is the role of the government to take action to guide talented people into the science and math occupational fields in order to improve the quality of American life.

However, the government is for the people, by the people, and of the people. Thus, it can only be as strong as the collected strength of the people it governs. There is then a public responsibility to encourage students to pursue further education in fields of science and math. Promoting such skills in early education would help build the foundation for students to later pursue a career relating to their extensive scientific and mathematical knowledge. By giving students a head start, the subjects would become more familiar, thus decreasing people's hesitancy in devoting their lives to science or math. However, mere education might not provide the sufficient motivation for students to decide this course of action for their lives. Thus, it is necessary for the government to provide

appealing salaries and dignity for both scientists and engineers. (Is There A Shortage of Scientists and Engineers?, 2003)

Personally, the one aspect I love most about science is the inherent hands-on experience involved. Instead of merely reading about experiments, I can see, hear, taste, and feel science in action right in front of me. This interaction brings me one step closer to what I am studying. I feel a stronger connection with the material I am learning. Researching is also appealing because of the originality of its nature. The feeling of discovering something new or thinking something that no one has ever pondered before is an incredible feeling. I feel the more hands-on experience I have, the more motivated I am to pay attention and truly comprehend the subject matter. I believe that most other students feel likewise, so it would be in the schools' best interest to promote higher levels of experimentation in science courses.

Despite such apparent evidence, some people may still resist actions that promote students to pursue science and math. However, this necessity cannot be disputed, considering that it was significant enough to be an important issue in modern politics. President George Bush stated the need for an educational initiative in his *State of the Union 2006 Address*. Such a course of action would truly be beneficial, not only for America, but for the world (Bush, 2006).

Work Cited

- Bush, G. (2006). The state of the union address by the president. Retrieved Feb. 20, 2006, from The White House Web site: <http://www.whitehouse.gov/stateoftheunion/2006/>.
- Greve, F. (2006). Rise in average IQ scores makes kids today exceptional by earlier standards. Retrieved Feb. 20, 2006, from Washington Bureau Web site: http://www.realcities.com/mld/krwashington/news/special_packages/good_news/13777124.htm.
- Is there a shortage of scientists and engineers?. (2003). Retrieved Feb. 19, 2006, from RAND Web site: www.rand.org/pubs/issue_papers/IP241/IP241.pdf.
- Teitelbaum, M. S. (2002). The U.S. science and engineering workforce: an unconventional portrait. Retrieved Feb. 20, 2006, from PHDS Web site: <http://www.phds.org/reading/guirr2002/teitelbaum.html>.