## Dos and Don'ts of High School Education

## Prof. Venkata Rao Mulpuri

High school education plays an important role in shaping the future career paths of many students. Proper planning is necessary to achieve academic goals and make the high school experience memorable for the rest of one's life.

Freshman year plays a pivotal role in student success, and it is the foundation of a strong high school career. Students who dig a deep hole during freshman year due to improper planning and limited understanding of the issues suffer during the rest of their high school years playing a catch-up game. It is best not to be overly ambitious during freshman year. Never take Advanced Placement (AP) courses in freshman year. Some school districts allow students to take math and science courses over the summer months that precede freshman year. The summer session is typically 4–6 weeks long. It is difficult to assimilate the course content in such a short time, especially in courses like geometry and chemistry, which require a full academic year of study if students are to grasp the material thoroughly. After completing a math course such as Geometry or Algebra-II over the summer, students are then compelled to take the higher-level course during freshman year. This doesn't suit the maturity level of many students and often results in problems. The best courses to take in summer are history, economics, etc.

Moreover, in the recent years peer pressure has created a trend in which students take a greater number of AP courses than they can handle during their sophomore and junior years. Many students think that they can impress college admissions committees by taking more AP courses. They do not realize that their performance in AP courses impresses the committee more than the mere quantity of AP courses taken. Earning poor scores in the 2–3 range on the AP exam or electing to skip the AP exam will prove detrimental to students' chances of getting into a good college even if their grades in school for the AP courses are good. Again, due to peer pressure some students skip the regular physics or chemistry courses and go directly for AP Physics and AP Chemistry courses. This creates excessive mental pressure, and it detrimental for students retaining the information they are supposed to acquire during high school. This energy would be better spent getting involved in two or three school clubs where students can assume leadership positions than if it were spent struggling with an undue course load.

Summer internships are another ambitious goal set forth during high school, yet it is more often the parents who would like to see their children involved in summer projects than the students themselves. I have seen parents pressure their family friends to provide a summer internship for their child. It is important to keep in mind that in many places the minimum age for a summer internship is 16, and employers often prefer rising seniors to rising juniors or sophomores. Simply put, seniors are more mature, knowledgeable, and better able to handle an internship—they may make some contributions to the organization. Employers offer their valuable time to train the student and expect to receive something back on their investment, so many companies are reluctant to take rising sophomores or juniors as interns. Securing a good internship as a rising senior is good enough to

impress the college admissions committee. It is a good idea to dedicate earlier summers to volunteer work or retail business work that will improve interpersonal skills. Working with others is a very important skill, and high school is the best time to acquire it. Furthermore, time in these early summers can be spent attending summer academies that will prepare students for the tough courses in the coming academic year. Students should use this valuable time off to improve their writing skills and prepare for the SAT or ACT. If they already have career goals and know which colleges they want to attend, they should look for the admission criteria set forth by those colleges so that they can plan their academic and nonacademic activities around those criteria. They can also use some of the weeks in early high school summers to visit grand-parents and other relatives in India. Finally, families shouldn't forget to visit colleges during the summer. This strengthens the student's academic resolve, family bond and builds emotional maturity.

Proper planning makes the 4 years of high school more enjoyable and transforms it into a greater learning experience. Each of us only gets one chance to have this experience, and making the best out of it is the smart thing to do.

About the author: The author is a professor of Electrical and Computer Engineering at the George Mason University, Fairfax, Virginia. He has authored or co-authored 4 book chapters and more than 130 technical research articles on various topics in several international journals. So far he has supervised 16 completed Ph.D. theses. He is passionate about early elementary school, elementary school and secondary school education. He has written books for kindergarten children and is the founder of: Madame Curie School of Science and Technology, an early elementary education school in South Riding, VA; and also Curie Learning LLC, which specializes in enrichment educational programs in the Washington, DC area for elementary-, middle-, and high-school children.