Subject Acceleration Case Study: Mathematics

Submitted by: Mother of an Accelerated Student

The student in this case study is my son "George", who was radically accelerated in math beginning in first grade. This story is an example of both success and also disappointment.

First, the success. In first grade George's teacher noticed that he was profoundly ahead of his peers in his math understanding. She gave him an end-of-the-year third grade test and George performed in the above 85% range. George was also a strong reader who was reading at the 4th grade level. The first grade arranged for the 4th grade teacher to welcome George into her class for math every day at 1:00, at which time his first grade class would have their math lesson. At the end of the year the 4th grade teacher recommended that George accelerate another year in math, based on his performance in her classroom. So, in second grade George was placed in a 6th grade math class, still in his elementary school building. The following year, instead of going to the middle school for math as a third grader, George met daily with one of the sixth grade teachers and covered the material in the honors level seventh grade math text. In fourth grade he was bused to the middle school for honors eighth grade math, and was bused to the high school for math in fifth and sixth grades. Each year his classroom teachers were willing to work their math schedules around George's schedule. George was always one of the top students in his Honors and AP math classes. Because he was with the same students each year, he developed a friendly relationship with them and teachers said that his participation in class was appropriate and they often forgot he was four years younger.

The disappointment came when George entered high school and there were no more math classes he could take. He had completed AP calculus (earning a "5" on the AP test) in 8th grade and the only options for him were distance learning or PSEO. Since he could not drive and both my husband and I worked, PSEO was not a good plan, so George and two high school students who had also completed AP calculus, worked together that year on a calculus class through distance learning. The high school math department did not have anyone who could help them and the high school did not have a gifted intervention person who could help either, so the kids were on their own. George took a second year of distance learning his sophomore year, but the lack of human interaction made it difficult for him to enjoy the experience. By his junior year he was filling his schedule with other classes.

George graduated last June at the top of his class and with perfect SAT scores. He is now at Harvard, where he placed into the highest levels of math classes, but says it is unlikely that he will take any more math classes and is instead thinking of a major in psychobiology.

What is the lesson to be learned from this story?

Acceleration in a subject area can be a very positive thing. It really kept George excited about math and growing in that subject area for many years. But without a plan that goes from K-12, acceleration can also be a negative thing. George was probably not going to be a mathematician, but his disconnection with math after the eighth grade pushed him out of certain future fields of study, such as engineering.

In my current job as an elementary school gifted and talented specialist, I am eager to place children appropriately, but I also caution parents and teachers to look not just at what works for the moment, but for what the long range plan will be. I wonder if George wouldn't have been better off with a less radical grade skip since that would have put him into PSEO at a time when he could have driven himself to classes and kept him involved in math.

One final note, the lack of math classes in high school got George to take an interest in writing for the school newspaper and being involved in school leadership, which were not entirely bad consequences!