

**ZMATH 2011d.00238**

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**Gifted students and advanced mathematics.**

Mont. Math. Enthus. 8, No. 1-2, 319-328 (2011).

Summary: The extension to a wide population of secondary education in many countries seems to have led to a weakening of the mathematics curriculum. In response, many students have been classified as “gifted” so that they can access a stronger program. Apart from the difficulties that might arise in actually determining which students are gifted (is it always clear what the term means?), there are dangers inherent in programs that might be devised even for those that are truly talented. Sometimes students are moved ahead to more advanced mathematics. Elementary students might be taught algebra or even subjects like trigonometry and vectors and secondary students taught calculus, differential equations and linear algebra. It is my experience over thirty-five years of contact with bright students that acceleration to higher level mathematics is often not a good idea. In this paper, I will articulate some of the factors that have led me to this opinion and suggest alternatives. At the same time, one needs to deal with truly exceptional students in an appropriate way.

*Classification:* C40 D30

*Keywords:* talented students; enrichment; acceleration programs; curriculum