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Philip B Yasskin* (yasskin@math.tamu.edu), Department of Mathematics, Texas A&M University, 3368 TAMU, College Station, TX 77843-3368. *Texas A&M Summer Educational Enrichment (SEE-Math) for Middle School Students: Organization and Technology.*

For the last nine year, the Texas A&M Math Dept has conducted a Summer Educational Enrichment Program (SEE-Math) for gifted middle school students entering the 6th, 7th or 8th grade. Last year, the instruction was provided by 16 faculty with the help of 8 undergrad students, and 7 high school students. From 81 applicants, we accepted 44 students based on their ability and interest in math and science as reported by their teachers.

The curriculum consists of a collection of activities which do not appear in the usual grade school curriculum. Many of the activities are organized so that the students recognize patterns, make conjectures and either prove or disprove them. These include Platonic solids, Euler numbers, toothpick puzzles, Pythagorean theorem, map coloring, logic puzzles, Mobius strips and graph theory. Other activities teach applicable computation, such as computer animations, geometric constructions, pigeon hole principle, Venn diagrams, cryptography, probability, and search ranking algorithms.

More information is available at <http://www.math.tamu.edu/outreach/SEE-Math/>

The focus of this talk will be on the organization of the program and the activities which make use of computer technology: computer animations, cryptography and search ranking algorithms. (Received September 22, 2010)