1035-G1-651 **David E Boliver*** (dboliver2@cox.net), 1121 NW 185th St., Edmond, OK. *Cryptology as Outreach to Prospective College Students in a Summer Enrichment Program.*

During the last decade, the presenter has been privileged to run 8 years of summer academies serving students aged 13 to 15 and focused on elementary cryptology as a hook for involving them in preparation for a future college career in the STEM disciplines. Students have been highly enthusiastic about this program and it has often had over 100 applicants for 60 spaces. These students learn the meaning of number congruences and how to solve them algebraically. They use this knowledge to encrypt and decrypt messages using both the Euler Phi-function and the Chinese Remainder Theorem. They also prepare extensive reviews of possible collegiate futures for themselves, including both academic and financial planning for those futures. We will show how other campuses can implement similar programs to engender an increased supply of majors who are appreciative users of mathematics and how employing undergraduate mathematics teaching majors as staff can contribute to their teaching careers. (Received September 13, 2007)