Ingenuity in Arithmetic

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In a highly competitive global marketplace, creativity is one of the most invaluable tools for an individual or group to have at their disposal. Countries invest millions into research on education with the ultimate goal of nurturing creative traits in younger generations. The goal of the study was to determine a correlation between creativity and mathematical proficiency in high school students. Participants were asked to take a twenty question, multiple choice test, and a figural Torrance Test of Creative Thinking(TTCT). The TTCT was graded on a scale of 20, with 10 points given for originality, 5 for flexibility, and 5 for elaboration. The study found no statistically significant correlation between mathematical ability and creativity. The correlation coefficient between creative and mathematical ability was .2, suggesting a slight positive tilt with little to no correlation. At the same time, math and creativity scores both trended upward with age. Importantly, according to the t-test, the trends displayed by age were not significant. This means that the study found the null hypothesis correct, and that creativity is not affected by mathematical ability in high school students.

Awards Won:

Drexel University: Full tuition scholarship $194,000