

STUDENT WORK SECTION

R. Howard – Section Editor
The University of Tulsa, Tulsa, OK, 74104-3189

The paper in this section describes work undertaken by a student at the Academy for the Advancement of Science and Technology, Bergen County Academies, Hackensack, New Jersey. This work was presented in the poster session of the 2004 Annual Meeting of the National Council of Teachers of Mathematics held in Philadelphia, Pennsylvania.

ANALYSIS OF SOCIO-ECONOMIC FACTORS IN CORRELATION TO STANDARDIZED EDUCATIONAL TEST SCORES

M.F. CONNOLLY
*Academy for the Advancement of Science and Technology
Bergen County Academies, Hackensack, New Jersey 07601*

Abstract

This paper describes the analysis of socio-economic factors in correlation to standardized educational test scores. The scores used were from the Elementary School Proficiency Assessment exam distributed to fourth graders in New Jersey during the years 1999, 2001- 2003 [1-4]. The socio-economic factors are from the 2000 United States Census [5]. Simple regression and other statistical equations were used to compare the data from both sources with *Microsoft Excel* as a programming tool to perform the analysis.

Introduction

The Greek philosopher Pythagoras believed that numbers were the basis for understanding our existence, or certain aspects of our existence. He suggested that mathematics told the story of life and that through comprehension of their connection, we could better understand ourselves and our lifestyles. Aristotle frequently wrote about the Pythagoreans. In his *Metaphysics*, he wrote, "...the Pythagoreans, who were the first to take up mathematics, not only advanced this study, but also having been brought up in it they thought its principles were the principles of all things." [6]