

**The New Approach to Self-Achievement (N.A.S.A.) Project 2004**

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The New Approach to Self-Achievement Program is designed to target rising seventh, eighth, and ninth grade students who require assistance in refining their mathematical skills, science awareness and knowledge, and test taking strategies. During the six week duration of the program, students are challenged in these areas through the application of robotic and aeronautic projects which encourage the students to practically apply their mathematical and science awareness accordingly.

The first three weeks of my tenure were designated to assisting Mrs. Tammy Allen in the preparation of the 2004 NASA Project. As her assistant, I was held accountable for organizing, filing, preparing, analyzing, and completing the applications for the NASA Project. Additionally, I constructed the apposite databases which contained imperative information which aided in the selection of our participants. During the latter portion of those three weeks, Mrs. Allen, various staff members, and I, interviewed the numerous first-time applicants of the NASA Project. Furthermore, I was assigned to contact the accepted applicants of the program and provide all necessary information for the initiation of the child into the NASA Project.

During the six week duration of the program, I will be working as a Project Leader at the Lorain Middle School site located in Lorain, Oh, with Mr. Fondriest

Fountain. Mr. Fountain and I will work with the eighth and ninth grade students in constructing robots, in which the students are told are made for NASA research which is being conducted on the surface of planet Mars. The robots, which are built from LEGOS and programmed through RoboLab computer software, are prepared to complete assigned Missions such as running obstacle courses; plowing and retrieving LEGOS; and scanning surfaces for intense regions of light.

As a Project Leader, I am responsible for assisting Mr. Fountain in the classroom; preparing lessons and developing curriculum conducive to the students' comprehension level; taking attendance; providing support during field trips; and maintaining an orderly and positive learning atmosphere for the students. I also assist in preparing weekly Missions in the form of a packet, which are assembled by the Project Leaders from the Cleveland and Lorain sites, that containing age and grade level appropriate information on mathematics, science, logic, NASA and NASA Glenn Research Center facts, and test taking strategies and techniques.

Throughout the week I am responsible for introducing and tutoring this information to the students. Every Thursday, the students are tested on their retention of this information by competing in a Scholastic Challenge in the form of Jeopardy PowerPoint Presentation. Upon completion of this competition, although every student is rewarded in some way, the winning team is rewarded with NASA prizes and paraphernalia.

Mr. Fountain, the Lorain, staff and myself have worked together diligently in preparing exercises; class work; and games that will strengthen the scholastic the bases of these students. The students have been rigorously been working on fractions, decimals,

geometry, multiplication, and division during these first two weeks of the program. Fortunately, there have been numerous signs of an improvement in the students' confidence and ability to execute mathematical problems that once intimidated them. Their psychological improvements, can be partial contributed to the Saturday sessions in which the student's parent's must attend, with IMHOTEP, a contracting company that focuses on reducing test anxiety and the psychological progression of students and parents in the areas of mathematics, science and test taking skills.

The NASA Project is a new and innovative way to ensure that no is left behind within the school system. Too often, many students are overlooked and not given the proper vessels and guidance to excel and compete with students who are doing well in the same course. This program is a pledge to provide every student with an equal chance to become the astronauts, engineers, technology programmer, and mathematicians of NASA near future.