

Problems Addressed:

- Many studies have shown that hands-on experiences are the best tools for teaching science and technology. Teachers, however, especially in the North Alabama area, have very little access to materials and equipment required by hands-on approaches.
- Teachers are often overwhelmed by technology programs, projects, or expectations imposed on them.
- Effective teaching of technology requires supportive internal and external communities. These are often lacking in most schools.
- The community outside the teaching establishment is, for the most part, quite uninformed and uninvolved in K-12 science and technology education.

The HATS STEDTRAIN Seed Grant Program:

In the first months of every year the STEDTRAIN Committee issues a Call for Proposals to K-12 schools in north Alabama for innovative projects that will "seed" students enthusiasm for science and technology. The grant application is a simple three-page form. Grant amounts requested can range from \$200 to \$1000. Funding is supplied by HATS and donations.

Proposals are evaluated and rated by Committee volunteers according to strict criteria. STEDTRAIN volunteers conduct follow-up visits to assigned grantee teachers. Grantees report on their projects by means of mid-term reports and poster displays and brief overviews of their projects at the annual STEDTRAIN Conference. The conference is often held in conjunction with TEAMS Week.. TEAMS Week is a week of multiple technical conferences and a common exhibition hall. TEAMS Week attracts approximately 6,000 technical professionals and business people. The projects therefore receive wide publicity and exposure.

The program presently is focused on the four north Alabama counties of Madison, Marshall, Morgan, and Limestone and has been in existence since 1988.

HATS-STEDTRAIN Grants to K-12 Schools

A program that is producing results!



Since 1988 HATS has raised and administered funds totaling \$176,178 for the STEDTRAIN Seed Grants Program and for other worthy K-12 programs in the north Alabama area. A total of 130 teachers have received STEDTRAIN grants during this period.

What teachers say about the program*

"K-12 teachers have almost no funds for hands-on science projects and hands-on has been shown to provide the best kinds of educational experiences. The HATS STEDTRAIN Seed Grants make possible what otherwise could not be."

Jane Caudle, Discovery Middle School, Madison City Schools.

"This equipment has already been used to teach abstract concepts such as boiling point reduction, the acceleration due to gravity, hydraulics, and pneumatics to over 400 students at the school. The equipment has been effectively used to make the abstract concrete. Students have expressed a new excitement toward these topics."

Matt Dean, Buckhorn High, Madison County School

"Usually the children get very restless in the last couple of months of a semester. The children during the course of our Seed Grant, however, were totally focused and went directly to work when they entered the classroom. There were no discipline problems."

Dottie Main, Academy of Academics & Arts, Huntsville City Schools.

"The best part of the Seed Grant was the extensive parental and community involvement. It is bringing the community together."

Sara Lowman, Westminster Christian Academy

"We like the simple, straightforward format for submitting a proposal. It does not cut unnecessarily into a teacher's time." *Jane Jones, Williams Middle School and Cecilia Nichols, Challenger Elementary School, Huntsville City Schools*

"I have provided my colleagues with demonstrations and training using the purchased equipment. Together we have developed units of study and have integrated the use of the technology across the curriculum. For example, we have planned to use the exercise heart rate monitor during the service learning project, Jump Rope for Heart." *Robert Mills, Academy for Academics and Arts, Huntsville City School*

"The children worked together as teams, each child contributing and each child learning from the others." *Numerous schools, including Athens Elementary, Johnson High, Bob Jones High*

* Paraphrased

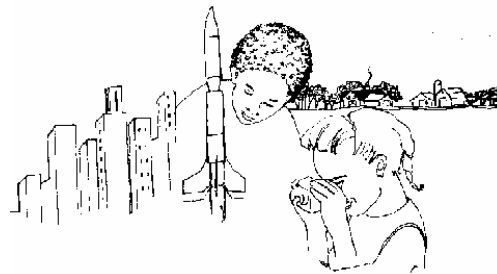
Its amazing what teachers can do when given a chance!

A teacher in an "on alert" elementary school used materials purchased with grant funds for math instruction. Youngsters from her class won a national math competition.

An "Amusement Park Physics" grant inspired a middle school math class to win a State mathematics competition.

High school youngsters became so proficient in performing DNA analyses (equipment purchased with grant funds) they amazed professionals.

Teachers who have received grant awards have inspired fellow teachers to apply for their own grants.



Hands On Science - Join with us to make it happen!

HATS

Huntsville Association of Technical Societies
HATS is a 501(c)(3) non-profit organization

STEDTRAIN

Science and Technology Education and Training,
- a HATS committee

STEDTRAIN Mini Conference

with poster displays of Seed Grant projects
Is often held in conjunction with TEAMS conferences.
Public encouraged to attend. No admission charge.

TEAMS Week

Technological Excellence in Aviation, Missiles and Space

E²T Conference

Education, Employment and Technology for TEAMS
Sponsored by HATS

Often held in conjunction with TEAMS conferences.
Watch for announcements for specific dates and times.
No admission charges.

For more information or to arrange a public presentation on the program

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Please send donations (tax-deductible) to:

HATS-STEDTRAIN Fund
P.O. Box 1964
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STEDTRAIN and HATS Web Pages:
<http://www.hats.org/STEDTRAIN/stedtr.shtml>
<http://www.hats.org>