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#### MARSHALL SPACE FLIGHT CENTER THE UNIVERSITY OF ALABAMA

## "THE INTERPRETATION AND EFFECTIVE IMPLEMENTATION OF THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1996"

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| Prepared By:    | Pamala D. Heard           |
|-----------------|---------------------------|
| Academic Rank:  | Assistant Professor       |
| Institution:    | Langston University       |
| Department:     | Department of Mathematics |
| NASA/MSFC:      |                           |
| Office:         | Education Program Office  |
| MSFC Colleague: | Mr. Jim Pruitt            |

#### INTRODUCTION

The purpose of this research is to develop a plan that gives schools the opportunity to acquire knowledge of the Stevenson-Wydler Technology Innovation Act. The law suggests that federal agencies give surplus equipment to educational entities. It would then become the school's choice to take advantage of the opportunity. The purpose of this proposal is to develop an ongoing partnership with schools around the United States. Its attempt is to inform schools about the law and organize a plan that will allow schools to take advantage of this opportunity. It would inform teachers about available resources and expose their students to educational opportunities.

#### RESEARCH APPROACH

The initial approach to this research was to interpret Executive Order 12999, Stevenson-Wydler Technology Innovation Act. The law had to be examined carefully in order to dissect it components. The law is designed to transfer excess and surplus equipment to our nation's classrooms, and encourage federal employees to volunteer their time, to assist teachers and connect classrooms. Additional components to this law were the Omnibus Reconciliation Act of 1993, Public Law 103-66. This law refers to the Empowerment Zones and Enterprise Communities that are designed to afford communities real opportunities for growth and revitalization. The framework of the program consists of four key points -- economic opportunity, sustainable community development, community-based partnerships and strategic vision for change. In the executive order the Empowerment Zones and Enterprise Communities topped the priority list to receive surplus equipment. The priority list formed with Empowerment Zones and Enterprise Communities, Public and Private Elementary Schools, Public and Private Secondary Schools, Colleges and Universities and nonprofit organizations. The law was structured to help ease red tape for schools that need surplus equipment.

Marshall Space Flight Center currently has a pilot plan in place to address the previous act. The center recently distributed equipment to the Tri-State Education Initiative and to the State of Alabama. My research required an expansion on the site's approach for the six states the flight center services. The six states include: Alabama, Arkansas, Iowa, Louisiana, Missouri and Tennessee. The plan currently in effect would give notice to schools. The schools would then complete the necessary paperwork and return it to the Education Office. After completion of the paperwork the office would schedule a briefing for the school. Schools would be invited for the briefing and given an opportunity to view the equipment. Once school representatives select equipment for their schools' systems it would then be tagged. They would return to their schools and wait for notice to pick-up their equipment. If more than one tag was on the equipment, the education office would decide what school would get the equipment by priority list, elementary, secondary, colleges and universities. Once the schools are notified, then the schools would have fourteen days to pick-up the equipment.

An examination of the current setup indicates that change needs to be made that would better accommodate participating states. The new executive order states that newspapers, community announcements, and the Internet can be used for promotion of the act's purpose. It is my belief that NASA should use its established resources to distribute the information to each school, starting with three points of contact in each state. It should include: State Department of Education for public schools, State Department of Education for private schools and the Commission of Higher Education. I firmly believe that additional information needs to be distributed on a wider scale. I would suggest contact be made with at least two newspapers and education associations in each state. I further suggest that NASA continue to use the resources already established. These include: Teacher Resource Center Network, NASA TV, NASA Spacelink, Pamphlets, Professional Conferences, Flyers, Mobile Teacher Resource Center and Teacher Enrichment Programs.

I surveyed three hundred and sixty-two teachers, administrators around the United States. The levels included K-12, teachers and administers-local and state levels, Colleges and University faculty member and some University administrators. The surveys consist of ten questions that was asked of the pool in effort to acquire knowledge about this law. One question was, have you heard about the Stevenson-Wydler Technology Innovation Act? Their response indicated that ninety-seven percent of them had not and three percent had. Ninety-nine percent of the people surveyed said they did not know if their organization had taken advantage of this opportunity. One hundred percent of the people did not know how long this law had been in effect. Another question asked, was what is the most effective way for an educator to gather information that will benefit his/her institution. Forty-one percent said the Internet, eighteen percent said using a mailing list, seventeen percent said newspaper, fifteen percent said journal and nine percent said using other methods. They were also asked to list three ways educational systems nationwide can effectively receive information? The top three answers were Internet thirty-four percent, direct mail twenty-two percent and Journals and Organizations twenty percent. The surveyors were asked if they knew what an Empowerment Zone and/or Enterprise Community is? Eighty-seven percent of the surveyors did not know. Ninety-five of them did not know if they lived in one of these areas. It was also asked what would be the most feasible way your institution to view excess government research equipment. Forty-seven percent said the Internet, twenty-six percent said catalog or mailouts, fifteen percent said video tapes, nine percent said site visits and three percent said other ways. The final question is what method of delivery would be most feasible for your institution to receive surplus equipment and fifty-one percent said by UPS, thirty-four percent said by freight, ten percent said mail and five percent said personal pick-up.

#### **RESULTS**

Research, interviews, and site visits contributed heavily to my results. After analyzing the information and the procedures of the pilot plan, I researched and interviewed people from Marshall Space Flight Center and prospective customers. Many customers I spoke with did not know where to obtain information related to the Stevenson-Wydler Technology Innovation Act. Considering my research, NASA must distribute the information to their customers in a more

feasible manner. The biggest "hurdle" is NASA's inability to use the power of advertisement. The center should use its current resources to promote the programs that are available to the education community.

My proposal is to distribute information to our educational customers via newspapers, educational associations and NASA programs already established. After the distribution of information to prospective customers and areas, contact should be made on a state-by-state basis. This should be done across the entire spectrum of education, from top to bottom. An example would be the State Board of Education for public and private schools, and Commission of Higher Education. Once the information is distributed the opportunity will then rest on the individual school systems.

Another option for equal distribution is to let the school's view and tag surplus equipment on the Internet. If NASA would start-up a database with the schools that are participating, then they would have a file of schools who have not taken advantage of this opportunity and contact those schools directly. This related information would strengthen the lines of communication and make future contact even much easier.

Customers should also be briefed about the procedures and requirement for the program. This should be done using video tape so the customers would know what they need and what to expect when they surf the net and/or travel to the center, to tag equipment. A system should definitely be devised that would allow the customer to pickup equipment and/or have it shipped on the day it is tagged. This would be much more feasible and economical for the customers.

My personal opinion is that implementation of the Stevenson-Wydler Technology Innovation Act should begin soon. Phase I, should begin August 1, 1996, Distribute information to Newspapers, Education Associations, NASA TV, Internet, Pamphlets, Teacher Enrichment Programs and National Space Grant College and Fellowship Program State Consortium Offices should be contacted and information distributed related to the contact person and general information about the law.

Phase II, September 1, 1996, contact all school districts in the Empowerment Zones and Enterprise Communities. School representatives will complete necessary paperwork and return it to NASA's Education Office. Once the information is received the Education Program Office will mail a video tape for the district to view. After the tape is viewed it will be returned to the Education Office. The districts will later receive a letter informing the school of scheduled dates and times for the purpose of viewing and tagging equipment. The deadline for the paperwork should be returned around October 10, 1996. If the school chooses to tag equipment it should be available for delivery and/or pick-up the same day.

Phase III will begin October 1996, contact State Department of Education for public and private schools. Their deadlines for response will be November 10, 1996. Phase III will follow the same steps as Phase II. After the information is received school representatives will be given an opportunity to view the equipment.

Phase IV will begin November 1, 1996. The Commissioner of Higher Education in each state will be contacted. Phase IV will follow the same procedures as Phase II and III. Once the paperwork is received they will be able to view and tag equipment. The deadline for the paperwork will be December 10, 1996.

Phase V, the final stage of the implementation plan will allow all schools and nonprofit organizations to visit and view equipment. Once the information is stored on a database, the Education Office will have knowledge of the schools' districts that did not participate and do a follow-up. With the usage of the database other educational opportunities for the schools will be easily relayed, having direct contact in each district. After completion of all phases the school will take advantage of the information, tag and visit as often as necessary. One must also remember the second part of the law-federal employers volunteering their time to help connect our schools to technology and equipment. Since Marshall has a volunteer program already in place, Project Laser, then this could be used as an integral part of the law that is already functional. Marshal Space Flight Center must institute tagging over the Internet, the pick-up on the same day as the site visit, and allow more days to view and tag equipment on site. Besides the laws, emphasis must be placed on school districts in all six states. This implementation program should include all schools.

#### **CONCLUSION**

Information that is proclaimed by law to help the needs of schools and school systems needs to find it way into these systems. With federal agencies having this information it must be distributed so all schools can take advantage of the opportunity. If we want our children to be prepared for the 21st century then all avenues must be open. These advances cannot be open for the few and privileged, but for all. If we only help the few and privileged, these United States will not be a functional, from a progressive standpoint, in the future. We have to distribute this information to everyone and let them make the decision about whether or not to take advantage. Some of this information will helps schools that have no funds to obtain some of the technology available. It's in our hands how will we use it. Will we help only a few or will we help the masses. When we look at the opportunities of the Internet and the database the possibilities to open "doors" for the future seem endless.

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