Executive Summary Prepared for Board of Trustees Meeting (July 29, 2008)

STEM Principles Discussion

Executive Summary

Prepared for Board of Trustees July 29, 1008

Discussion of DISD STEM (Science, Technology, Engineering, Math) Principles

Purpose of Report

To further discuss solutions for the purpose of increasing rigor and relevance to our current science and math programs.

Objectives

- Identify research-based professional learning opportunities for our teachers
- Increase content knowledge for teachers that hold a Generalist certificate
- Determine best practice for integrating math, science, engineering and technology

Operational Impact

The use of Title IIb funds shall be the primary source for professional learning costs. Consultant fees with North Texas STEM plus the costs of substitutes for a minimum of 20 teachers for 6-8 days is approximately \$36,000. Other professional learning would be in addition to these costs. The Title II funds are not currently accessible and may require supplemental funding.

Results

The intended result is to increase the rigor of student learning in the mathematics and science courses that we currently offer. Additionally, our desire is to increase student enrollment in our higher level courses by using methods that recruit underrepresented populations. Moreover, our aim is to increase the number of students that graduate with the intention of pursuing college degrees in science, mathematics, engineering, and technology fields.

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Other Options

Other options to consider are to increase the professional learning community among our teachers within each content area to better network successful practices. Within these PLCs we desire to access local scientists and local university personnel to become members to increase our knowledge of the scientific community and 21st century careers for our students. Other professional learning opportunities include Dr. Bob Robertson's "Stop Faking It", the Dana Center's TEXTEAMS, and using Laying the Foundation, a private foundation that would assist with our Pre-AP and AP courses.