

STEMing

the TEACHER SHORTAGE TIDE

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EXECUTIVE SUMMARY

“STEMing the Teacher Shortage Tide” addresses our nation’s need to redress the critical shortage of **Science, Technology, Engineering and Math (STEM)** candidates to pursue careers in these fields as well as candidates with STEM backgrounds to teach in our nation’s P-12 schools. Without a qualified pool of STEM teachers who have degrees in these fields, we continue the cycle of unprepared math and science students taught by underprepared teachers. STEM teachers whose background or preparation is weak simply do not promote passion and commitment in students to pursue STEM careers or to become STEM teachers. The premise of this document is to focus on these concerns by uniting business and education as partners. This partnership represents an innovative and mutually beneficial solution to meet the needs of business and the needs of education. The result of this union empowers our country so we can retain our role as a world economic and political leader.

Partnerships between corporations (which employ STEM professionals), university and other teacher preparation providers, and school districts are a viable means by which we can redress the educational and economic situation. These are explored through the three key components that are necessary to consider in solving this current dilemma as well as anticipating future needs.

- First, recognize that we must provide qualified STEM teachers to promote enthusiasm toward STEM careers:
 - Open a dialogue with potential partners about this issue. Be very clear about the probable ramifications of doing nothing.
 - Gather and widely distribute statistics and research findings to demonstrate the seriousness of the problem.

- Second, identify partners who are ready to think on a different plain and are willing to work with traditional and non-traditional partners to solve a critical challenge:
 - Enlist the help of national organizations, which have already recognized the problem and can reach out to potential partnerships.
 - Identify successful partnerships which already exist and their stories, “warts” and all.
 - Enlist the key stakeholders in existing successful partnerships to mentor those ready to form new partnerships.

- Third, create the formulae for initiating, building, and sustaining effective partnerships.
 - Gather from existing partnerships the key components they considered in forming their partnerships; such as:
 - a) initiating partner
 - b) target population
 - c) support systems offered
 - d) preparation program offered, and
 - e) timelines.
 - Work with interested partners to create new models if existing ones do not meet their needs.
 - Be ready to share successes and failures with all stakeholders.
 - Ensure plans are in place to evaluate models, to revise plans as necessary, and to sustain those who are moving STEM professionals into the classroom and who are exciting P-12 students about STEM careers.

The need for quality STEM teachers to prepare our nation's youth for success in our changing society is clear. Our plan to unite business, education providers, and school districts has the potential to meet the challenges we collectively face as our economic, social, and political beliefs have been tested during recent times.

For additional information or for an opportunity to discuss how your corporation can be part of the solution to STEM This Teacher Shortage Tide, contact:

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