



TOTAL INSTRUCTIONAL FOCUS: ENGAGED SCHOOL AND STEM COMMUNITY

An Engaged School and STEM community is a partnership of all school stakeholders including staff, students, parents and strategic alliances. Together, these partners embrace the school's STEM vision and share responsibility for the success of each student.

A Shared Vision

The STEM school engages the full community in developing its vision for STEM education. Education consultant Rick Dufour says in clarifying its purpose and vision, a school should bring together representatives of the faculty, business community, parents, students and the administrative team. He recommends the initial work of the assembled team include developing an understanding of the research on effective schools.

In addition, STEM school leadership should solicit input from strategic alliances so that the team gains an appreciation for the skills and knowledge students will need to contribute to their own and their community's economic productivity. In an Engaged School and STEM community, stakeholders embrace the vision that has been collaboratively developed and share responsibility for the success of each student.

Partnering for Student Success

STEM schools work in partnership with stakeholders to provide support and services to develop all students' capacity and confidence to meet the challenges of STEM. Intentional outreach must be extended to students who are underrepresented in STEM fields. An Engaged School and STEM community collaboratively develops a plan to engage students as active partners in their own success. This is accomplished through opportunities for students to set goals and receive support in implementing and monitoring progress. STEM challenge opportunities are available to nurture and further students' natural gifts, interests and abilities. In addition, early identification and intervention strategies ensure students receive scaffolded support such as mentoring, tutoring and counseling as needed for success.

Collaboration with Parents

Recognizing that parents are a student's first teachers, STEM schools actively reach out to parents to be partners in their children's education. The National PTA sets forth the standard in its *National Standards for Family School Partnerships Implementation Guide*: "Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class."

STEM schools employ multiple, ongoing and interactive modes of communication to keep parents informed of ways they can support their students' academic progress and encourage exploration, critical thinking and innovation. Opportunities for parental engagement include sharing specialized career expertise, helping facilitate a hands-on classroom exploration, chaperoning a field trip or tutoring a

small group of students. Since the majority of a student's time is spent outside of school, it is vital that parents share responsibility for high student performance.

Strategic Alliances

The STEM school works to build strategic alliances with business, community organizations and institutions of higher education to enhance the objectives of the school. Partnerships enable students to apply knowledge and skills to real-world settings through job shadowing, internships and service projects. Students benefit from onsite and virtual career talks and site visits. These alliances provide personnel resources for activities such as mentoring, tutoring, counseling and co-teaching, as well as financial support to fund scholarships, resource acquisition, grants and incentives for teacher and student innovations.

The Engaged School and STEM community makes available STEM learning opportunities that give learners insight into the nature, challenges and excitement of STEM career choices. These opportunities prepare students for success in studies at institutions of higher education, and place students in roles they will assume as productive 21st century citizens.

Bibliography

Dufour, Rick. "Developing a Shared Vision. ASCD Express.2007. Accessed at <http://www.ascd.org/ascd-express/vol5/510-video.aspx>

National Standards for Family School Partnerships: An Implementation Guide. PTA.org. Accessed at <http://www.pta.org/2757.asp>



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Guiding Questions

Use the reflection questions below to guide discussions. We recommend documenting evidence to support each question. Doing so will assist you in setting action plans, goals, and progress monitoring.

A Shared Vision

- In what ways does your school engage the faculty, business community, parents, students and the administrative team in developing the school's vision for STEM education at your site?
- What are some ways you have solicited input from your strategic alliances to gain a better knowledge and appreciation of the practices students will need to join the workforce?

Partnering for Student Success

- In what ways does your school work in partnership with stakeholders to provide support and services so that all students, including those underrepresented in STEM fields, meet the challenges of STEM?
- Describe your plan to engage students as active partners in their own success.
- Describe the STEM challenge opportunities available to nurture and further students' natural gifts, interests, and abilities.
- What intervention strategies are in place to support students?

Collaboration with Parents

- What are some ways you reach out to parents to be partners in their children's education and share responsibility for high student performance?

Strategic Alliance

- Describe your efforts to build strategic alliances with business, community organizations, and institutions of higher education?
- What are some of your STEM learning opportunities available to students that give them insights into the nature, challenges, and excitement of STEM career choices and prepare them for the world of work?