Helios Education Foundation

Engaging minds. Enriching lives.

Glossary of Terms
STEM Education Teacher Professional Development
Request for Proposal

Adult Learning Principles: Instruction will include autonomy and self-directed opportunities; will build upon life experiences and knowledge; establish clear goals; make the learning relevant and useful; and show respect to the learner.

Balanced Budget: A budget for which expenditures are equal to income.

Benchmark: A standard by which something can be measured or judged.

Competencies: Measurable skills and/or abilities that correlate to a specific subject content area within STEM education.

Curriculum: Materials used to supplement the teachers, mentors, and/or coaches in their teaching methodology of a specific learning program. The curriculum collectively describes the teaching, learning, and assessment materials available for a given course of study.

Developmentally Appropriate: Teaching strategies and learning environments that reflect research, theories and practices about how students grow, develop and learn.

Direct Beneficiary: 5th to 10th grade teachers who will benefit from the program or projectõs proposed offerings.

STEM Education: Helios Education Foundation defines STEM education as an interdisciplinary approach to learning which removes the traditional barriers separating the four disciplines of science, technology, engineering and mathematics, and integrates them into real world, rigorous and relevant learning experiences for students.

Impact: For the purpose of the Foundationõs RFP, impact is the effect or consequence the stated project will have on the target audience.

Indicators: A number or ratio related to a specific goal, derived from a series of observed facts. Indicators can show relative changes due to the described program or project.

Indirect Beneficiary: The students who are taught by the STEM teachers.

Integrated Curriculum: Content and activities are presented in an interdisciplinary approach connecting STEM subjects together for the benefit of modeling for the teachers how STEM teaching and learning is different from the traditional areas of science, technology engineering and mathematics. Furthermore the activities will be models of those which can be transferred into the classroom and are grade appropriate for the target audience.

Mentoring: The transmission of knowledge in a subject area by a more experienced person to an individual who has less experience, through the enabling of a more comprehensive understanding of the subject content, and by providing guidance and support.

Measurement: Criteria of assessment and/or evaluation. A way to describe the extent of the effect a project has or has not had on the target audience; assessment of capacity.

Open-Ended Questions: Questions that must be answered with more than the response ñyes, or noò, or with just one word answers.

Outcome: An end result or consequence.

Peer: Person of the same age.

Process-Oriented Experiences: Activities in which students participate that require thinking, communicating, organizing, interacting, making decision and solving problems, individually and in groups.

Professional Development: Broader than the term 'trainingô, it includes helping teachers not only learn new skills but also develop new insights into their teaching methodology and their own practice; to explore new or advanced understandings of content and resources.

Professional Learning Communities (PLC): For the purpose of this RFP, PLC describes a collegial group of educators who are united in their commitment to student learning. They share a vision, work and learn collaboratively and visit and review other classrooms.

Quality: For the purpose of the Foundationôs RFP, the term quality is focused on the teacher. A óqualityôprogram or project focused on teacher professional development related to STEM will include improving teaching methodology; interactions with students; allow for self-reflection of teaching style and practices; facilitate peer-to-peer interaction; present an interdisciplinary approach that goes beyond the basics of math and science; provide for professional learning communities; and embed professional development in the classroom for real world application and reflection.