Proposal: S.T.E.M. PROS In-House Field Trip

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Program Overview:
S.T.E.M. PROS is thrilled to offer an exclusive, interactive, and educational **In-House Field Trip**. Our mission is to bring the wonders of science, technology, engineering, and mathematics directly to your school, providing a unique learning experience that aligns with your state science standards. With over 8 years of experience working with 140+ schools, we've perfected a format that's educational, fun, and stress-free for schools to host.

Key Benefits:

- **Expertly Designed Presentations:** All activities are created by expert K-12 STEM educators and are aligned with state standards.
- **No Hassle for Schools:** We take care of setup, teardown, and all logistics — no need for buses, transportation, or extra planning.
- **Custom Tailored:** Each station is tailored to reinforce your school's curriculum, ensuring students gain valuable experiences that enhance classroom learning.

Logistical Requirements:
To ensure a successful and interactive experience, we require:

- 1-hour setup and 1-hour teardown
- Spacious area with approximately 4 tables (e.g., school stage, cleared classroom)
- Adequate room for students to engage in hands-on activities
- Maximum of 5, 1-hour sessions with 10 minutes between sessions to reset (K-3 classes will be 30 minutes)
- Maximum of 30 students per session to ensure adequate participation

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Cost & Value:

- K-3rd Grade: $10 per student
- 4th-12th Grade: $15 per student
- Minimum of $750

Our program not only engages students but also supports teachers by reinforcing classroom content, offering practical applications of key concepts, and sparking curiosity that can drive deeper learning and discussion in the classroom.

Audience:

Each presentation is tailored to a specific grade level, following a school-provided schedule to ensure an engaging, age-appropriate experience for all students. Grade levels are separated, with presentations scheduled throughout the day (e.g., Kindergarten 8:30-9:00, 1st grade 9:10-9:40, etc.), allowing multiple classes to benefit from demonstrations and activities customized to their learning needs.

Stations & Activities:

S.T.E.M. PROS will set up a series of up to **5 engaging 1-hour presentations**, each featuring interactive, hands-on STEM activities.

Here's a selection of our most popular presentations:

1. **Forces & Motion: "The Spin Zone"**
   Dive into the dynamic world of forces and motion! Students become scientists as they unravel the mysteries of gyroscopes and bicycles. Ever wondered how figure skaters twirl so rapidly? We'll uncover the secrets together in a whirlwind of fun and learning! *Balanced*, *unbalanced*, *mass*, *weight*, *momentum*, *inertia*

2. **Static Electricity: "The Electric Touch"**
   Experience the shock of excitement with our Van de Graaff generator! This electrifying station offers students a hands-on encounter with static electricity. Watch hair stand on end and feel the tingle of electrical energy coursing through the air - it's a truly electrifying experience!
   Electric fields, *attraction*, *repulsion*, *conductors*, *insulators*, *open and closed circuits*

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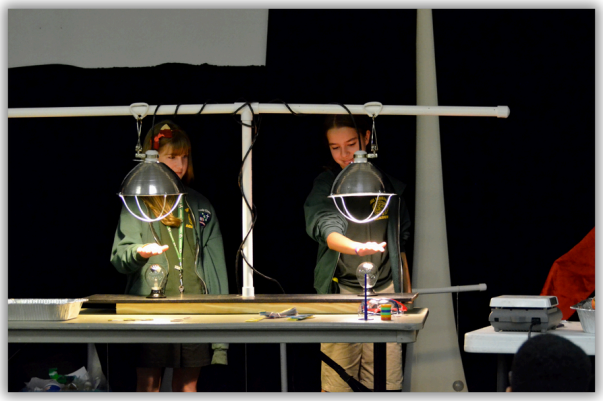
3. **Light, Lasers, & Lenses: "Let There Be Light"**
Embark on a luminous journey through the world of light. From the magic of lasers and lenses to the wonders of the electromagnetic spectrum, students will see the universe in a new light. Discover how astronomers decode the secrets of the stars, turning light into a cosmic detective tool! *Reflection, refraction, absorption, color, electromagnetic spectrum, waves, lenses, spectroscopy, empirical evidence-experimentation vs observation*

4. **Size of the Solar System: "Cosmic Scale"**
Journey across a miniature universe with our scale model of the solar system, featuring a colossal 7.5-foot diameter Sun! This awe-inspiring presentation expands minds, showcasing the vastness of space and giving students a tangible sense of the enormity of our cosmic neighborhood. *Scale of the solar system, mass, weight, gravity, distances, basic planetary characteristics*

5. **Sound: "Vibrations & Visuals"**
Enter the realm of sound where waves become a spectacular show! Students will not only hear but see and feel the vibrations of sound. Get ready for a unique laser light show, "Seeing Sound," where music and light dance together in a symphony for the senses! *Frequency, energy, pitch, vibrational energy, energy transfer, energy transformation, waves*

6. **Radiometer Race: Light vs. Heat**
In this exciting station, students will explore the hidden differences between two seemingly identical lamps—one with an incandescent bulb and the other with an LED. By placing a radiometer, a device invented by Sir William Crookes in 1873 to measure light radiation, under each lamp, they'll discover how the heat from the incandescent bulb makes the radiometer spin much faster than the cooler LED, revealing the science behind energy efficiency and the power of light! *Heat, temperature, brightness, LED (Light Emitting Diode), radiation, energy, heat transfer, electromagnetic spectrum, absorption, reflection*



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7. **Gravity: "The Gravity Playground"**
   Tackle the timeless puzzle - do heavier objects fall faster? Experiment and explore in our gravity playground. Students will be fascinated by the gravity well demonstration, visualizing the orbits of planets and unraveling the gravitational forces that keep our universe in motion. *Mass, distance, air resistance, control, variable, replication, experimentation, observation, forces, orbit/revolution, rotation, nature of science, scientific model*

8. **The Power of Air Pressure**
   Experience the force of air pressure by inflating a giant balloon, testing suction cups, using air pressure to knock over a stack of cups, and exploring a vacuum jar. Students will see Newton's laws in action and learn how atmospheric pressure works. *Newton's laws, mass, weight, forces*

Next Steps:
We are passionate about enhancing STEM education and creating unforgettable learning experiences for students. We look forward to partnering with you to cultivate a vibrant and engaging STEM learning environment at your school.

For more information or to schedule an In-House Field Trip, please feel free to reach out to me directly:

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