



FOR YOUTH DEVELOPMENT®
FOR HEALTHY LIVING
FOR SOCIAL RESPONSIBILITY

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) New Ideas



A Creative Endeavor

When did the collective idea of science, technology, engineering, and math (STEM) lose its association with resourcefulness, vision, and inspiration, which have always been the foundation of how the greatest discoveries in the field have occurred? It turns out, we don't need to add the "A"—visual, music and other arts—to STEM. Instead, we just need to ground how we engage youth in STEM activities to ensure relevancy and a connection to youth's real-world experiences.

We don't have to look too far to see the creativity inherent in STEM—a visit to an Apple store, a TED talk viewing, or a conversation with a friend about the newest trend is all it takes. STEM is everywhere. It is a part of everything we do every day. STEM is an opportunity to pursue "jobs that don't yet exist...[that] will require workers to use technologies that have not yet been invented to

solve problems that we don't even know are problems," according to Richard Riley, former Secretary of Education under President Bill Clinton. Separating STEM from other content areas, such as arts and humanities, and presenting it as something that lacks creativity and innovation does a disservice to the kids we work with and the future we hope to create.

We can engage youth today in the fascinating world of STEM. We can begin by encouraging them to combine knowledge and skills with the creativity that leads to innovative ideas—the ideas that gave us the Apple iPad, new and ever-evolving sound systems, and machines that help people with disabilities. Youth who are encouraged to be inventive now will someday be the ones creating new products to address needs we can't even imagine.

"Imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world, and all there ever will be to know and understand."

—Albert Einstein