

R4 CREATING'S STEM PIPELINE



At R4Creating, we have developed a STEM pipeline process that guides students through four levels of development, resulting in academic, personal and career success. The process allows students to progress independently through a series of tested programs that create a competitive advantage. At each step in the process we offer resources to support schools and STEM coaches in an effort to help them guide students through the pipeline. Ultimately, entire communities will be impacted as students leave the pipeline with valuable experience and clear career direction. The levels include the following:

Level 1. Introduction and Exploration: Workshops and outreach events that give students access and introduce them personally to the fun aspects of STEAM learning. These opportunities engage their creative problem solving skills and their ability to explore innovative ideas through inquiry-based learning activities.

Level 2. Experiences and Learning: Opportunities for students to get their hands on and learn about STEAM, often delivered through camps and workshops. This level introduces STEAM opportunities to students and allows them to explore multiple disciplines and career possibilities, introducing them to important career decision-making skills.

Level 3. Application and Practice: Programs designed to allow students the opportunity to apply their education and learn from both success and failure in real life scenarios. Examples include internships and participation in STEAM competitions, both of which are valuable tools in narrowing student interests and making tangible career and education plans. In addition, leadership skills and other vital workplace skills are learned through these practice opportunities.

Level 4. Launch: Support for students, and often their families, as they transition from Levels 2 and 3 into Level 4 where their objective is application and career readiness. This Level is marked by a critical time of confidence building, values exploration, resume writing, scholarship and job applications and interviews. Students receive much needed support to successfully launch using workshops, online support, and career/life coaching.

Science, Technology, Engineering and Math (STEM)

STEM WORKFORCE DEVELOPMENT PIPELINE

R4CREATING STEM SUPPORT ORGANIZATION



1. INTRODUCTION & EXPLORATION

Students are introduced to STEM through fun. Community fairs, workshops and events where they interact and engage, creatively solving problems using innovation.



2. EXPERIENCES AND LEARNING

Opportunities for students to get their hands on and learn about STEM, often delivered through camps and workshops with opportunities to discover multiple disciplines and opportunity for career exploration.

STEM COACHES AND PROFESSIONALS ARE CRITICAL TO EFFECTIVE PROGRAMS

Ensuring that steps between each stage, along with a complete life launch plan, is critical for each student moving through the STEM pipeline. Effective development leads directly to impact on the workforce pipeline and leads to positive life and economic impact.

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3. APPLICATION AND PRACTICE

Powerful project based learning experiences designed to challenge students to solve real world problems by application of what they have learned. Examples include internships and STEM competitions.



4. LAUNCH!

This stage is marked by increased career decision making and is a critical time of confidence building and values exploration leading to pursuit of trade, career or further education to support career decisions.