

**Proposal**  
**Second Annual**  
**Inspiring Young Minds under the Big Sky: A Technology and Science Camp**

Career Training Institute is submitting a proposal to the State Workforce Investment Board requesting funds to host a science camp for at-risk youth in June, 2011.

Inspiring Young Minds will achieve the following objectives:

1. Introduce low-income, at risk youth (including young women and minorities) to science, technology, engineering and math-related (STEM) career opportunities.
2. Increase awareness of academic preparation for STEM careers.
3. Provide hands-on, experiential learning in small groups that connect real life activities with STEM education.
4. Inspire curiosity and interest in science and math.

The US Department of Labor projects that 15 of the 20 fastest growing occupations required significant science or mathematics training to compete for a job. As jobs requiring a background in science, technology, engineering and math increase, more students are choosing not to major in those areas, and the participation of young women is declining at an even greater rate. According to one recent estimate, only five percent of the US workforce is employed in STEM fields, while the STEM workforce accounts for more than 50 percent of the nation's economic growth. (US Department of Labor, 2007)

Our intent is to introduce youth to STEM careers, thus broadening the possibilities of their career options. America must strengthen the skills of its workforce allowing our nation to be more competitive globally.

STEM careers are many and diverse. The National Science Foundation has identified about 150 different college STEM-related majors. If the US is to remain competitive in the global economy it is imperative that the number of students seeking STEM education dramatically increase.

The overall goal of the Science Camp is to introduce STEM through a series of fun, interactive, hands-on activities to at-risk and disadvantaged youth. These are youth who would not otherwise have an opportunity to participate in a venue like Exploration Works. This is a timely opportunity to reach out to youth as Montana and the nation's workforce needs change because of new and emerging careers in environmental restoration and reclamation, energy conservation, health sciences, information technology, engineering and alternative energy.

**Background:** Career Training Institute in collaboration with the Montana Department of Labor and Industry, Montana Student Assistance Foundation, Jobs for Montana's Graduates Foundation, Exploration Works Museum of Science and Culture, and Dennis and Phyllis Washington Foundation hosted a successful two-day science camp in June, 2010.

Sixty-two youth and ten chaperones participated. Campers experienced hands-on, interactive activities including robotics, critter and insect identification, solar technology, space exploration, rocket building, shark dissection, food chemistry, circuits and switches, river formation, information technology and hike up Mount Helena to discuss geologic formations.

Other activities during the science camp included a celebration banquet with a motivational speaker, Willie Rhines, Jr., "Coach R" from Harlem, Montana, and a resource fair during the second day that included exhibitors from the Montana Student Assistance Foundation, Montana Guaranteed Loan program, Montana Department of Labor and Industry Apprenticeship program, University of Helena College of Technology, Americorps and TRIO/Educational Opportunity Center.

Non-federal grant funding allowed CTI to purchase several door prizes that were randomly raffled during the two-day event. Several door prizes were donated as well. The grand prize was a mini-laptop that was raffled off during the celebration banquet.

Youth were housed at Carroll College and meals were provided by both Carroll College and local caterers.

**Year 2 Concept:** Host a two-day science camp in collaboration with project partners. The camp will provide exhibits, interactive workshops and experiential activities that facilitate learning and exploration of selected topics that inspire curiosity and interest in Science, Technology, Engineering and Math (STEM)-related education and careers. Based on camper feedback we will incorporate improvements to the schedule and workshop format. We also plan to host a celebration banquet with a program featuring a motivational speaker.

It's important to emphasize that activities will be used to link the importance of science and math to career opportunities in those fields. Camp activities will include topics such as green technology, energy, robotics, conservation, biology, space education or life sciences. Guest speakers relating their educational background and interests might include teachers, physicians, engineers, researchers or astronauts. Additional activities will include information on post-secondary or training opportunities for technology and science in Montana and the career opportunities available in Montana and the region.

**Target Audience:** At-risk youth, ages 14 to 24, enrolled in Workforce Investment Act Youth programs and Job Corps from throughout Montana, with a special emphasis on recruiting young women and minorities to attend the camp.

**Other Potential Partners:** Governor and First Lady Schweitzer's Math and Science Initiative, Office of Public Instruction, Commissioner of Higher Education, Student Assistance Foundation, Dennis and Phyllis Washington Foundation and other possible funders. If additional funding is secured, it will be used to augment camp activities and offset other costs outlined in the budget.

**SECOND ANNUAL  
INSPIRING YOUNG MINDS UNDER THE BIG SKY: A TECHNOLOGY AND SCIENCE CAMP FOR  
YOUTH**

**PROPOSED BUDGET**

<b>Item</b>	<b>Estimated Cost</b>	<b>Line Item Total</b>
<b>Housing at Carroll College</b> \$13.91 per person/night \$8 bedding per person 60 youth/2 nights \$2149 15 chaperones/2 nights \$537.30 15 youth/3 nights \$745.95 6 chaperones/3 nights \$298.38	Bedding 96 x \$8=\$768  Lodging = \$3730.83	\$4500
<b>Travel</b> for youth and chaperones based on .50 mileage reimbursement (400 mile avg roundtrip) and 2 cars per site x 9 sites.	\$3,600	\$3,600
<b>Meals</b> Day 1 (half day travel; half day camp) Day 2 (full day) Day 3 (half day travel; half day camp) Meals will include breakfast, am break, lunch, pm break and dinner *meals based on 110 students, chaperones, instructors, volunteers and other staff.	\$30 day x 3 days x 110 = \$9,900	\$9,900
<b>Exploration Works Tuition/Training Materials</b> \$100 per x 75 youth	\$7,500	\$7,500
<b>Camp Bags/TShirts/Name Tags/Lanyards</b>	\$25 per x 100	\$2,500
<b>Motivational Speaker for Banquet</b>		\$1,000
<b>Misc Equipment (rentals-tables, PA system, etc)</b>	\$500	\$500
<b>Conference Coordinator (JMGEF)</b> Registration, Food, Lodging, Logistics/Schedule		\$9,500
<b>CTI Staff</b> Counselors to assist with camp set up/tear down, assist instructors, direct campers, and run interference. Program manager will oversee subcontracts and ensure overall compliance of camp activities and expenditures as well as seek additional funding sources.  Fiscal staff: A/P, A/R, reporting, grant management	\$4,000         \$2,000	\$6,000
<b>Estimated Cost of Camp</b>		<b>\$45,000</b>

**Notes:** (1) Helena youth are included in housing but not travel costs. (2) Meals are based on 110 attendees to include all students, chaperones, instructors, volunteers and agency staff.