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May 15, 2017

Michael McConnell
Principal
Innovation Academy
701 W Wetmore
Tucson, AZ 85705-1547

Dear Mr. McConnell:

On behalf of the Freeport-McMoRan Foundation, I am pleased to enclose a check in the amount of \$4,780.00 payable to Innovation Academy to support the Innovation through Coding project.

The funds should be used to complete the project as described in the application. Please notify us at your earliest convenience should the project scope change from the original application. Please note, materials purchased from the funds are the property of the school and not the applicant.

This grant is made by the Freeport-McMoRan Foundation on behalf of the company and its operations. Any acknowledgment of our support should be attributed to the Freeport-McMoRan Foundation.

As a recipient of this award, you will be **required to submit a final report that summarizes the project progress and impact.** You will receive an email next April describing the reporting process.

Please be sure to deposit your check within 90 days of date of issue. After 90 days, the check will automatically be cancelled within our system or be considered void by local banking institutions. If for any reason you are not able to deposit the check within the 90-day period, please contact us and we will address the issue.

Please accept our best wishes for a very successful project and thank you for providing enhanced opportunities for students in our communities to excel in learning, particularly around STEM disciplines.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tracy L. Bame'.

Tracy L. Bame
President, Freeport-McMoRan Foundation

Enclosures

cc: Cherie Rankin, Community Development and Social Responsibility, Freeport-McMoRan


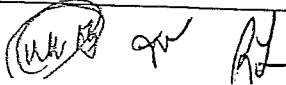
OKAY

PROJECT COORDINATION

PROJECT PROFILE



Forms should be submitted to Mike Bejarano, School Operations

Working title:	Innovation through Coding
Target population: <i>(Which schools, grades, staff, etc. are impacted?)</i>	K-5
General problem addressed by the project:	We need developmentally appropriate resources to teach coding in grades K-5.
Project Synopsis: <i>(Please also attach the proposal abstract or any additional clarifying information needed.)</i>	Students in grades K-5 will develop coding and problem solving skills through the use of a variety of manipulatives. K-Code and Go Robot Mouse 1 st Dot and Dash w/ I-pads 2 nd -5 th Makey-Makey Kits with HP 11E Laptops
Source and amount of funding requested:	Freeport McMoRan STEM Innovation Grant \$4,785.00 COST REIMBURSEMENT GRANT? <input type="checkbox"/> YES x <input checked="" type="checkbox"/> NO
Funding will pay for: <i>(People, equipment, materials, training, services, supplies, etc.)</i>	The funding will cover the total cost of the manipulatives and technology.
District contribution(s):	none
Potential partners & their contributions:	UA College of Education GSEIT Lennar Homes
Sustainability plan: <i>(Explain how the project will be sustained without committing district funds)</i>	None. This is non-consumable.
Municipal/Department:	 Innovation Academy 

* Project Budget Upload Innovation through Coding Grant Budget.xlsx (8.53 K), uploaded by Michael McConnell on 12/15/2016

* Project Community Tucson, Arizona

* Freeport-McMoRan Relationship None

* Project Summary Innovation Academy is K-5 STEM School opening in August 10, 2017.
<http://www.amphl.com/Domain/3425> Innovation Academy is an Amphitheater Public School. Innovation Academy will serve 500 students from throughout Tucson. Innovation Academy is a 100% Open Enrollment School. All students are welcome, there is not an entrance exam. Enrollment was, is and will be accepted on a first-come first-served basis. Unlike most Open Enrollment situations, transportation will be provided from each of our elementary schools. The Engineering Design Process and the Scientific Inquiry Method will be embedded throughout the school day. Our teachers will plan using the 5E concept. All lessons will be designed for students to Engage, Explore, Explain, Elaborate, and Evaluate. The Mission of Innovation Academy states: The children of Innovation Academy are critical and creative problem solvers who are empowered to be innovative leaders of tomorrow.

* Projected Project Start Date 08/10/2017

* Projected Project End Date 05/21/2020

* Educational Need STEM Education allows students to make real word connections and see how their learning fits into the world in which they live. Students will be engaged in hands-on minds-on learning. Coding allows students to invent, innovate and problem solve. The problems that students are solving are problems that are meaningful to them.

Coding drives innovation. From self-driving cars to robot-assisted surgery to social media, computer science is revolutionizing every aspect of our lives. Coding is a fundamental skill that children need to learn so they can lead this movement.

Coding allows kids to be creative. They can create projects that do really amazing things.

Coding builds confidence. It is incredibly empowering for children to be able to create projects and show them off to family and friends.

Coding is best learned early. Learning to code is similar to learning a second language. The earlier that children are exposed to fundamental topics like sequencing, loops, and conditionals, the more deeply they absorb these concepts.

Coding translates to success in other areas. Learning to program supports learning in other areas, like math, reading, and science.

At Innovation Academy we will provide a well-rounded education that has a STEM focus.

* Target Population Innovation Academy will be capped at 500 students, approximately 83 in each grade K-5. Innovation Academy is a school without boundaries. Any student can apply for open enrollment and students are accepted on a first-come, first-served basis. We currently have students enrolled from all 13 Amphitheater Elementary Schools as well as from over 15 schools in Tucson. We are truly a school without boundaries, physically and metaphorically.

* STEM Project Activities In Kindergarten students are going to learn to develop and write a code for another student to follow to help our Robot Mouse find a piece of cheese. Students will learn to code by using the Code and Go Robot Mouse Activity Set.

In first grade students will use I-pads to develop code which will help Dot and Dash accomplish a variety of tasks. The tasks that Dot and Dash can accomplish are only limited to the students' imagination.

In second, third, fourth and fifth grade students will learn to code, create and problem solve using Makey-Makey kits in conjunction with HP 11e laptops.

In all grades students will work collaboratively and creatively to solve the problems of the world.

Teachers will use these resources in a project based learning environment where all content areas are integrated into the daily learning.

* STEM Project Goals Goal-To provide opportunities for students to learn to code, create and problem solve. Goal-For students to see how their skills can be applied to the real world.

Goal-For students to communicate and share their learning as well as their creations.

Goal-For parents to be engaged in their child's learning as well as the school community.

Objective-To increase students' participation in coding activities, competitions, and events as measured by the number of participants.

Objective-To have 100% of the 4th grade students score in the Exceeds range on the Arizona Instrument to Measure Standards Science examination.

Objective-To increase the overall passing rate on AZMERIT in English Language Arts and Math each year.

* STEMWorks No

- * **Goal & Objective #1** Goal-To provide opportunities for students to learn to code, create and problem solve.
Objective-Teachers will plan daily hands-on learning activities for students.

Objective-Students will have the opportunity to learn and develop their coding skills weekly.

- Goal & Objective #2** Goal-Students will see how the skills they are learning can be applied to the real world.
Objective-Community partners will visit Innovation Academy at a minimum monthly (frequency of guests will increase based on student need).

- Goal & Objective #3** Goal-Students will communicate and share their learning as well as their creations.
Objective-Innovation will hold monthly family nights where students can communicate their learning in a variety of ways.

- * **Achievement** Student academic achievement will increase when they have the opportunity to learn content at a deeper level. Students at Innovation Academy will not just learn the how, they will also learn the why. When students have the ability to use the skills that they learn their understanding increases immensely. Quoting Benjamin Franklin, "Tell me and I forget, teach me and I may remember, involve me and I learn."

- * **Project Partners** The University of Arizona College of Education will be partnering with our teachers as we develop our maker labs.
Great Scott Technology IT will provide 20 I-pads. GSEIT will maintain, insure, upgrade and replace the I-pads every 2 years. GSEIT will also support our teachers by providing professional development opportunities as well as access to professional working in the technology field.

- * **Assessment** Innovation through Coding will be assessed based on the students ability to code, solve problems and compete in a variety of competitions; Code-a-thon, Lego Robotics, USA Computing Olympiad, Day of Code, Odyssey of the Mind and Project Paradigm.
Student academic achievement will also be used to assess the effectiveness of Innovation through Coding. Each year it is expected that all students will show no less than one year of academic growth as measured by DIBELS, DRA, MAP, AzMERIT and classroom assessments.

Assessment Tools

- * **Sustainability** Innovation through Coding will be sustainable in that community partners have agreed to support the program through financial, physical and personnel resources. This grant will provide the backbone to the program. Over time as students determine the direction they want to go based on their interests or the problem they are trying to solve our community partners including our PTO will provide the necessary resources to continue, expand and go forward.

Volunteer Need Volunteers are always needed however at this time we believe that we have enough volunteers to meet our current needs. That being said, volunteers are always appreciated and will never be turned away.

Statement of Understanding

- * **Statement of Understanding** Yes
- * **Applicant Electronic Signature** Michael P. McConnell
- * **Applicant Signature Date** 12/15/2016
- * **Principal's Email Address** mmcconne@amphl.com
- * **Principal Electronic Signature** Michael P. McConnell
- * **Principal Signature Date** 12/15/2016

Need Support?

Grade	Item	Quantity	Cost	Item	Quantity	Cost	Total
Kinder	Code and Go Robot Mouse	6	\$60.00				
	1 Dot and Dash			I-pads	3	\$315.00	\$360.00
	2 Makey Makey Classic	3	\$200.00				
	3 Makey Makey Classic	3	\$100.00	HP 11e Laptop	1	\$420.00	\$1,545.00
	4 Makey Makey Classic	3	\$100.00	HP 11e Laptop	1	\$420.00	\$720.00
	5 Makey Makey Classic	3	\$100.00	HP 11e Laptop	1	\$420.00	\$720.00
				HP 11e Laptop	1	\$420.00	\$720.00
Total:							\$4,785.00