

CREO

Project



Santa Cruz County
School Superintendent
Alfredo I. Velásquez

Career

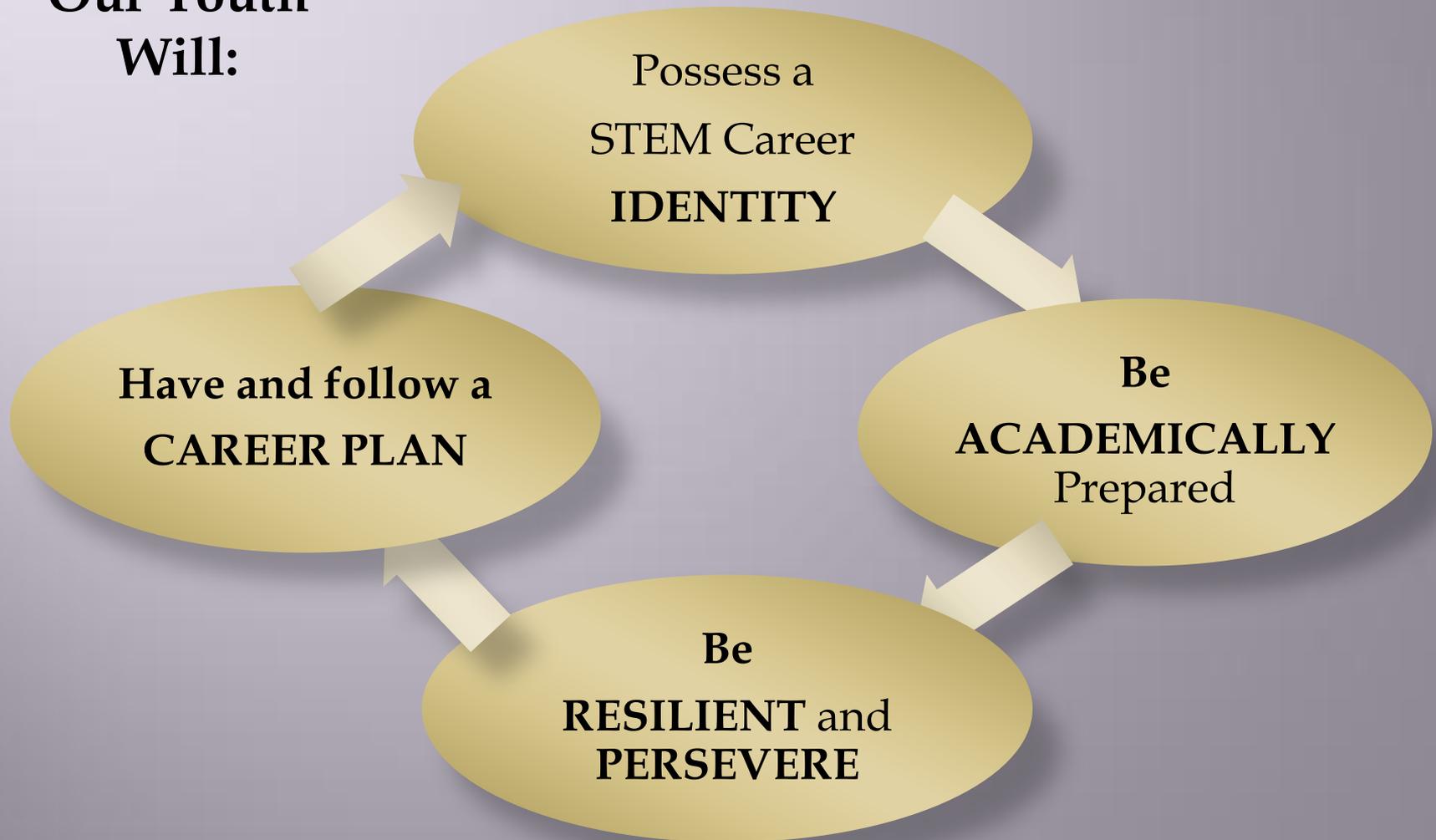
Readiness &

Educational

Opportunities

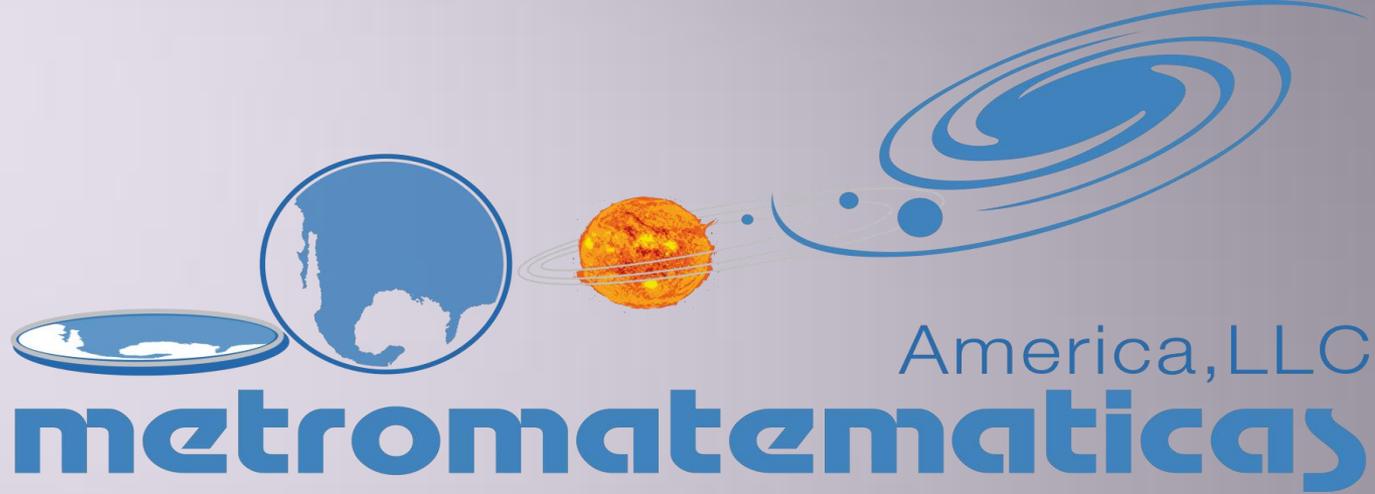
CREO Vision

**Our Youth
Will:**



Key Partners

- ⌘ **Santa Cruz County School Superintendent's Office:** Directs and responsible for Program in Santa Cruz County.
- ⌘ **Santa Cruz Valley Unified School District: RRHS:** Basic / Advanced Lab
- ⌘ **Nogales Unified School District: NHS:** Basic Lab (August 2016)
- ⌘ **Santa Cruz County Provisional Community College:** Basic Lab
- ⌘ **MetroMatemáticas:** Applied Math Curriculum and Teacher training
- ⌘ **Santa Cruz County One-Stop:** Employability skills training and internships (begin January 2017)
- ⌘ **Santa Cruz CREO Advisory Committee** composed of leaders for industry and the community



- Launched in 2009 by Ing. Nahum Correa
- Applied mathematics set in a STEM lab environment using precision measuring equipment
- Implemented in Emplame & Guaymas middle schools (Secundaria) in the state of Sonora in partnership with Offshore Group and Industrial Park industries.
- Remarkable increase in test scores.



MetroMatemáticas Works

Mexico National Math Test Results

Progress of Treatment Group (Students who participated in Metromatemáticas Learning Program) as Compared to State and National Results.

Period	School Year	Grade	Percentage of Students Scoring in the Following Classifications											
			Insufficient			Elementary			Well			Excellent		
			School	State	National	School	State	National	School	State	National	School	State	National
Pre-Test: Prior to Metromatemáticas	2011	7	67.3%	50.0%	59.3%	22.9%	31.7%	29.4%	9.2%	14.0%	9.3%	0.7%	4.4%	2.1%
Year One Results	2012	8	45.7%	45.5%	52.9%	30.7%	33.5%	32.4%	19.7%	14.0%	11.0%	3.9%	7.0%	3.8%
Year Two Results	2013	9	25.2%	36.0%	50.3%	22.8%	30.6%	22.0%	22.0%	18.2%	12.8%	30.1%	15.3%	6.8%

MetroMatematicas



Transforms the classroom

- ⌘ MetroMatematicas represents an innovative model of teaching mathematics.
- ⌘ Designed to facilitate the development of technology, scientific instrumentation, critical thinking, problem solving, and reasoning skills for students.
- ⌘ Utilizes an applied practice curriculum that employs current technology used in the STEM fields
- ⌘ Includes up to 120 hours of teacher training for the Basic and Advanced Labs.

Metromatemáticas – Basic Lab

- Lab type environment.
- Use precision measuring equipment.
- Geometry, trigonometry, algebra, statistics and probability.
- Work and present as a team.
- Relate learning math with real-world settings.



- Three labs – Rio Rico and Nogales High Schools and the local college (SCCPCC)
- Summer programs held in July.
- SY 2016: After school programs

Advanced Lab

Students will engage in more sophisticated study that emphasizes the scientific approach.



Students will expand and apply Basic Lab skills in an industrial environment.

Metromatemáticas

Reengineers the classroom environment & curriculum

AND

Prepares teachers in a different pedagogy of teaching Math



Nagesh Kumar
Rio Rico HS



Jose Lopez-Garcia
SCC Provisional
Community College



Jigar Mehta
Nogales HS



Matt Anderson
Rio Rico HS

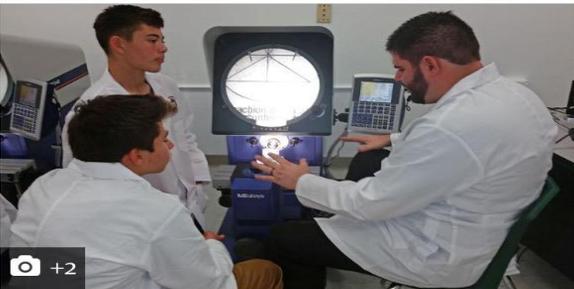
Accomplishments and the Future



A accomplishment Unveiling of the Lab

- November 4th at Rio Rico High School
- Over 100 attendees including:
 - Members of the Education Community
 - Community Leaders

Nogales  International



MetroMatematicas program aims to create innovators, thinkers

By Manuel C. Coppola
Nogales International Nov 9, 2015

More than 100 people attended the unveiling of a program at Rio Rico High School that aims to disrupt current 16th Century math-learning techn...



- Local & Statewide Officials
- International dignitaries
- Members of the Private Sector from related fields
- Representatives from Local and Regional Media

Accomplishment Recruitment and Community Outreach

- Presentations at Future Freshmen activities and programs
- Presentations to incoming Freshmen Orientation Sessions
- Middle School and 8th Grade Presentations
- Local College and Career Expos
- Presentations to local community groups

Accomplishments Summer and After School Programs



Accomplishments

College and Career Awareness

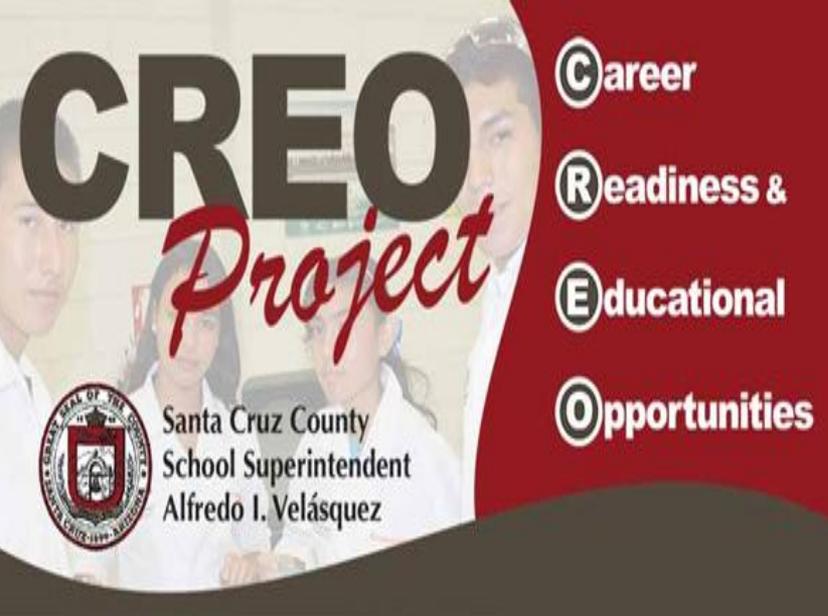
Field trips to companies
and colleges



The Future

SY 2016-2017 and beyond:

- ▣ MetroMatematicas will be an elective class.
- ▣ Nogales HS will enroll 20 students in an elective Honors class
- ▣ Students will be enrolled in 5 classes at RRHS.
- ▣ Continue the program at the Community College.
- ▣ Begin middle school student CREO programs.
- ▣ Establish Santa Cruz County teacher training program.
Expand the MetroMathematics teacher cadre.
- ▣ Establish Advanced Lab.
 - Beta Test Advanced lab
 - Train teachers in Advanced Lab curriculum
- ▣ Expand commitment of Business and Industry.
- ▣ Evaluate, validate, and refine CREO.
- ▣ Expand CREO beyond Santa Cruz County.



For Further information about CREO
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