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JOHN MUIR CHARTER SCHOOLS AND RANCHO CIELO YOUTHBUILD STUDENTS WIN THE ORANGE COUNTY SUSTAINABILITY DECATHLON

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ABSTRACT

n October 2023, John Muir Charter Schools and Rancho Cielo YouthBuild students participated in the The Orange County Sustainability Decathlon Challenge, a contest to design and build a model solar-powered home that addresses climate change and California's housing needs, showcases innovation and ensures the home is market-ready and can educate the community about the challenges climate change poses.

Success in the face of adversity is nothing new to Ranch Cielo and John Muir Charter School students; many thought the school wouldn't work when the idea was presented over 20 years ago. Starting with only 20 participants in 2003, Rancho Cielo YouthBuild has flourished and currently has approximately 200 students enrolled. Similar doubt was cast when Rancho Cielo YouthBuild decided to participate in the Orange County Sustainability Decathlon, competing against renowned institutions like Cal Poly Pomona, UC Santa Cruz UC Irvine, Cal State Long Beach, and Virginia Tech.



Thirty-eight students from John Muir Charter Schools and Rancho Cielo YouthBuild's Construction and Sustainable Design Academy worked for over a year to design, build, transport, assemble, and present a solar powered and environmentally sound small home. In October 2023, 12 Rancho Cielo YouthBuild and John Muir Charter Schools students traveled to the Orange County Fairgrounds to assemble, display, and present the home. Students stayed in Orange County for the month of October, and for many, it was the first time they had left their hometown or stayed in a hotel. Students attended academic classes onsite at the fairgrounds for 4 hours each day and worked an additional 4 hours each day on the home. Students exceeded expectations, racking up five 1st place awards (Energy Efficiency, Sustainability & Resilience, Lighting & Appliances, Health & Comfort and Innovation) and three 2nd place awards (Architecture & Interior Design, Engineering & Construction and Communications & Marketing) across ten total categories, making it the overall winner of the inaugural competition.

The project was supported by a grant from the City of Salinas through the Salinas City Safety Division and the California Violence Intervention and Prevention Grant Program, Cal VIP. From there, Rancho Cielo Construction and Sustainable Design Academy founder, Judge John Phillips, has been involved every step of the way as part of the OCSD Advisory Committee. In addition, partnerships with Hayward Lumber, Scudder Roofing/Solar and EcoLogic Architects led to the designing and building a next-gen healthy modular home prototype named Nexus_01 to emphasize the project's collaborative nature.



Rancho Cielo donors and board members Bill Hayward and Pete Scudder led the project, and the design process was led by Architect Thomas Rettenwender, Project Manager Laura Cowan Higuchi and several industry leaders, including Don Chapin, Mark Laliberte, Larry Weingarten, along with Rancho Cielo staff, including CEO Chris Devers, Construction Teacher Ed Bennett, CTE Director Joe DeRuosi, and John Muir Charter Schools CEO R.J. Guess. Along with competition judges, over 10,000 people toured Nexus 01 while it was displayed in Orange County. The 847-square-foot home is is designed with healthy living at its center. Every detail of the home was meticulously crafted, from its spacious porch to the innovative interior layout with adaptable, convertible spaces to create a harmonious living experience.

Founded in 2000, Rancho Cielo and John Muir Charter Schools provide CTE training in Culinarily arts, construction, auto/diesel mechanics, classic car restoration, welding, and agricultural mechanics/mechatronics, and a full and accredited high school diploma education. Participants age 16-24 complete vocational training with industry professionals; receive free mental health counseling; probation case management and support; job readiness; life skills; physical activity; enrichment activities; and connections to health, social and family services. As the high school education partner to Rancho Cielo, John Muir Charter Schools employs 15 full time staff at Rancho Cielo and contributes approximately \$2,000,000 a year in services and to Rancho Cielo and John Muir Charter Schools students.

JOHN MUIR CHARTER SCHOOLS

- www.johnmuircs.com
- https://youtu.be/vq_xozG5nGc?si=M5IzkqQPhWE5Thk0

RANCHO CIELO YOUTHBUILD/YOUTH CAMPUS

- https://www.ranchocieloyc.org/
- https://www.youtube.com/watch?v=DqT8-0 r5Vk

ABOUT



R.J. Guess has diligently served in the education realm for 25+ years. As an educational leader he has a passion and dedication to maintain the integrity of a classroom and to provide strong instructional leadership. Guesses philosophy centers around creating various options for students to explore learning, including but not limited to, online learning, homeschooling, project-based environments, vocational training centers and college prep academies.