

Professors from TEAL Attend Inaugural White House Summit on Equity and Excellence in STEMM

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Drs. Tofel-Grehl and Suárez enjoy an official White House cupcake at the STEMM summit.

On May 1, 2024, the Biden-Harris Administration announced new multi-sector actions to eliminate systemic barriers in the science, technology, engineering, mathematics, and medicine (STEMM) ecosystem. This national introduction of a new set of cross-sector actions were announced by the White House Office of Science and Technology Policy (OSTP).

Drs. Colby Tofel-Grehl and Mario Suárez in the School of Teacher Education and Leadership (TEAL) in the Emma Eccles Jones College of Education and Human Services (CEHS) were honored to attend the inaugural White House Summit on Equity and Excellence in STEMM.

“Researchers, school leadership, teachers, after-school experts, and educators involved in STEM programs all came together for this event. Every attendee had something to do with reducing disparities for minoritized individuals in STEM. There were 200 to 300 people who came together to share ideas,” explained Suárez.

As part of the White House Summit on STEMM, the STEMM Opportunity Alliance (SOA), a trailblazing national initiative, was introduced to lead and coordinate cross-sector action to help achieve greater equity across STEMM fields. The initiative launched more than \$1 billion in work and investment opportunities in STEMM. OSTP’s strategic plan is to reduce disparities in STEMM participation by 2050.

Tofel-Grehl commented, “The STEMM White House Summit was an incredible opportunity to build national-level networks around diversifying opportunities and access across STEM for young people. We have already had colleagues from the meeting reach out to develop new partnerships in service to youth across Utah.”

Prior to their careers in higher education, Suárez and Tofel-Grohel both taught in the K-12 education system focusing on STEM programs. Suárez found one of the breakout sessions particularly relevant to his research. He commented, “One breakout session was focused on the teacher education aspect of this movement. How can educators improve the pathways for students in STEM? A group called Rosie the Riveters, which is focused on STEM programs for teen girls, helps students envision themselves in these types of groups. Colby and I were able to develop a network of connections for our research.”



Drs. Colby Tofel-Grehl and Mario Suárez, associate professors in TEAL

The two professors have been instrumental in developing a program called the CHAOS Learning Lab (Culture, History, and Art Originating in STEM) housed in CEHS. The program focuses on engaging teachers in integrating social studies, equity, and civics education within STEM while honoring a diversity of cultures and identities among teachers and students.

According to its mission statement, the CHAOS Learning Lab (CLL) operates on the belief that “culture and creativity are central to how individuals learn and that the best learning experiences often look like barely organized chaos. We focus on equity and how to have hard conversations with children to work toward a more inclusive and just world. Our work focuses primarily on K-12 teachers and students as we are especially interested in broadening participation in STEM through access and outreach at these early ages.”

The question now is how the experience at the White House Summit will translate into work being done in the CLL. Suárez says, “This experience will help with overall connections for the CHAOS Learning Lab. We met several program officers who will hopefully help Colby and me

meet other national program officers and get additional connections for our research.”

Suárez feels that the next steps to implement some of the initiatives from the OSTP are communicating research as social scientists to a broader spectrum of individuals, such as legislators and community members who can assist in disseminating research results in various ways.

“How do we get kids interested in STEM outside of the work that we generally do?” asks Suárez. “We are trained to do a study, write a journal article, and get it published, but it’s not accessible to the general public. Are there ways that we can reach out in another medium? What about a children’s book? A podcast? Another possible outreach that is something beyond just writing grants.”

Suárez concludes, “It was a very diverse group at the Summit. The event highlighted a Science Friday initiative, which invites a group of individuals who feature podcasts for elementary schools to share with other STEMM educators. It’s a pathway that brings together a K-12 pipeline with our same backgrounds. We can broaden the reach of expertise through collaboration and provide expanded programs through the CHAOS Learning Lab.”

For more information on the CHAOS Learning Lab, visit the lab's [website](#).