

ECUSA President, Dr. Ana Muñoz, Spotlighted in PNAS Article Advocating Multilingual STEM Education

Dr. Ana Muñoz, a distinguished scientist and teacher with a Ph.D. in Microbiology and postdoctoral work at the USDA and at the University of Minnesota, and the newly appointed President of ECUSA (Españoles Científicos en USA), has been prominently featured in an article published in the prestigious journal Proceedings of the National Academy of Sciences (PNAS). Authored by Science Writer Amy McDermott, the article delves into the challenges faced by nonnative English speakers in the realm of STEM education.

Dr. Ana Muñoz's invaluable contributions to the field of education and outreach are exemplified by her role in the bilingual immersion program at Wakefield High School in Arlington, VA. There, she teaches biology and chemistry entirely in Spanish, making science more accessible to students whose first language is Spanish. Many of these students come from immigrant families, where English proficiency may be limited. Dr. Muñoz has not only broken-down linguistic barriers but also dismantle misconceptions surrounding science, dispelling myths propagated by misinformation.

In a recent initiative, Dr. Muñoz orchestrated an enlightened field trip to the AstraZeneca complex in Gaithersburg, MD. The visit provided a rare opportunity for forty-five high school girls, most of whom are from Spanish-speaking households, to engage with researchers, many of whom share their cultural background. The event was organized in collaboration with STEM for HER, a Falls Church, VA-based non-profit committed to encouraging women and girls to pursue careers in science. The experience was transformative, as the girls interacted with scientists who shared their stories, described their research, and even allowed the students to engage with lab equipment.

Dr. Muñoz is deeply invested in the mission of promoting inclusive STEM education, not only through her work in the classroom but also in her capacity as the President of ECUSA. Her dedication to fostering a more diverse and representative scientific community is underscored by her efforts to inspire young women to envision themselves as scientists, breaking free from conventional stereotypes.

In recognition of her outstanding contributions to education, Dr. Muñoz was awarded the National Secondary Teacher of the Year in 2021 by the Association of Two-Way and Dual Language Education.

The PNAS article highlights a global movement toward teaching science in multiple languages, advocating for an inclusive approach to STEM education. Dr. Muñoz's pioneering work in this field has garnered recognition for its potential to revolutionize how science is taught and learned. By championing multilingual education, Dr. Muñoz is contributing to a more equitable and accessible scientific landscape, ensuring that language is not a barrier to knowledge.

For more information about ECUSA and Dr. Ana Muñoz, visit www.ecusa.es

About ECUSA

ECUSA is a non-profit organization for science and technology professionals that have a relationship with Spain. With a cross-disciplinary approach, it was conceived by volunteers in 2014 with the goal of promote and spread the roles of science, technology and the people involved.

ECUSA also aims to educate, inspire, and train new scientists' generations and researchers and also create network to promote their career opportunities, to help with relocation and integration in the local communities.

Our mission and values include to promote and disseminate the role of science, technology and its professionals in the USA; to contribute to the knowledge of science by means of scientific and technological outreach actives; and to help Spanish scientists in their personal and professional development in the USA.

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