

David Tyrel “Ty” White
2023 2nd Place National AFA/Rolls-Royce Aerospace/STEM Teacher of the Year

11th-12th grade chemistry & science teacher

[Wilcox High School](#)

Tammy Hall, Principal

[Wilcox Unified School District](#)

Kevin Davis, Superintendent

Nominated by AFA’s AZ Cochise Chapter 107

107 President & VP/AE: George Castle

AZ President: Wally Saeger

AZ VP/AE: Eric Jameson



David Tyrel “Ty” White is a dedicated high school teacher at Wilcox High School in Wilcox, AZ, who, after working during college as a para-professional in both traditional and charter schools, decided to become a high school Chemistry teacher. He loves guiding his students as they drive their own authentic STEM experiences. He is a proud rural teacher who believes there are opportunities for students to be engaged in STEM-learning and STEM-doing wherever students are located. Due to his extraordinary work, he was named the 2023 National Rural Teacher of the Year and the 2023 AZ State Teacher of the Year.

He is always seeking to learn and grow, and to find more opportunities for his students to have new and exciting experiences, both within his chemistry area and expanding outward in unique and interesting ways, especially with his Biosphere experience provided to students and teachers alike. After participating and winning in the International Space Settlement Design competition (ISSDC) he became the Southwestern SSDC regional coordinator and continues running the qualifying program years later. Additionally, he co-founded a non-profit, Industry Simulation Education (InSimEd), to bring aerospace engineers to work directly with students at the event.

Ty is proud of the many initiatives he has sponsored at his school which has helped create avenues for students to find different ways they can participate in STEM. He has sponsored students performing authentic research, the space settlement design challenge, the Racing the Sun Solar Go-Kart challenge, the Rocketry camp, the Biosphere experience, and other initiatives above and beyond his chemistry classroom. Significantly is the creation of the InSimEd program to supplement all of his programs.



See video of Ty’s Biosphere 2 program’s collaboration and overall student impact [HERE](#).

Peer Teacher Supporter and Advocate

Aside from being an advocate to create more STEM access opportunities for students, Ty has had several opportunities to support fellow teachers. In 2021, he was selected as a Noyce Borderlands Master Teacher Fellow. The goal of the initiative is to develop content and training to support and grow young teachers while creating a stronger support network and resources across the southeastern Arizona region. Outside of this, he has worked with Kal Mannis from the Arizona Science Center, Anna Pawlow from the Society for Science, and Eric Proctor from the Arizona Game and Fish to raise awareness of local resources and develop PD for isolated rural and small school teachers. Ty has also spent this past year co-hosting a podcast with Dr. Melissa Sadorf from the Arizona Rural Schools Association, highlighting some of the amazing things rural teachers do to help their schools flourish.

A Significantly Consequential Teacher

AFA Cochise Chapter 103 President, George Castle:

“Ty White is one of the most consequential teachers I have ever met with his current activities in the Cochise County STEM ecosystem being quite noteworthy. He teaches primarily chemistry, but can motivate students of all ages to enjoy and learn any area of science. No matter in what circumstances he finds himself and his students, he has the ability and attitude to turn all situations into successes, most especially by collaborating with other teachers at his school as well as local businesses and industry leaders to ensure all students have the opportunities to succeed and be prepared to join the future workforce.

“Ty also has the ability to identify with and understand the students’ different abilities, likes, and dreams. He helps them understand concepts in science and how they relate to the students’ everyday life by being involved in and consistently improving many of the extracurricular science activities for the students. The students are very motivated to do well and continue their studies due to Mr. White’s ability to instill a love of learning science.”

Expertise and Passion

AZ AFA President, Wally Saeger:

“Ty White manifests all the qualities of a national STEM teacher: excellence in the classroom, recognition by his peers, and demonstrated impact at the local, state, and national levels in the challenging world of STEM education. His expertise and passion as a STEM teacher is demonstrated each day, but an example of this is when he was invited to bring students from Arizona to Kennedy Space Center to compete in the international Space Settlement Design Competition, he selected the students, raised the funds for travel, and came home with an international winning team! He has continued this same dedication and involvement in this program – even to the point of co-founding another organization to help supplement the authentic experience for the students.

“I cannot think of a more fitting individual to represent AFA in the world of STEM education and to advance the goal of promoting STEM throughout the nation at all K-12 levels. We need him to follow in the footsteps of those who have gone before him and expand this influence even wider. “

A Rural Educator with a Vision for All Students

Willcox Unified School District Superintendent and Business Manager, Kevin Davis:

“Several years ago, when I started working at Willcox Unified School District, Ty and I discussed making Willcox ‘the spot’ for science in our county and our state. Since that time, Ty has worked diligently to make that happen, despite not receiving much compensation for his efforts. Through these efforts he has given students opportunities to help them achieve their dreams. These range in scope from local competitions, such as our area's YES Fair, to international events, such as the International Space Settlement Design Competitions held at NASA's Kennedy Space Center, at which his students have won multiple times.

“Of significance, he has been instrumental in starting a chief science officer program here in Willcox, further promoting opportunities for his students and our teachers.

“Another major accomplishment that Ty has been instrumental in maintaining and growing is the Southwest Space Settlement Design Competition. This event was held in Willcox under Ty's direction for a few years prior to the pandemic. Ty kept it going remotely during this time and is currently holding the event at the Biosphere in Tucson. This event brings students and professionals from Boeing, NASA, and other industry leaders together to work on real-life space design challenges. This and the many other activities Ty is involved with are just the tip of the iceberg on the body of work he has created to help his students not only learn, but be exposed to the world beyond our small town and realize the great things they can accomplish.

“Two years ago Ty was recognized as the Arizona Rural Schools Association's Teacher of the Year. I was never prouder of one my team members. Last year, Ty was awarded the 2023 National Rural Teacher of the Year award and spoke at their annual conference. ([See article HERE.](#)) He was also recognized as the 2023 Arizona Teacher of the Year. Now, as an AFA STEM ambassador, Ty is in a unique position to represent the teaching profession in both urban and rural schools in America. Ty can help bring the issues confronting rural schools to the forefront of the educational discussion across our nation to help bring equality to all students.”





Parting Accolade as Posted 1 August 2023 on the Wilcox High School Facebook Page:

Ty White, WHS's very own Chemistry teacher, championed 10 students by taking them to the finals of the International Space Settlement Competition for the 6th year in a row. 10 students, split into two teams, competed with students from all over the world at Kennedy Space Center in Florida. One team of five was part of the winning company! Congratulations Willcox Students!

