



2024 National Award Winners

CAP's K-6th grade [Aerospace Connections in Education \(ACE\) program](#) began in 2007 as the Jr Cadet program. In 2008, the program name was changed to ACE and the sixth grade curriculum began being used in grades 6-8. Since the program's inception, over 638,000 students have been impacted. During the 2023-2024 AY alone, over 101K students were involved! Each year, those who are nominated for their stellar ACE work are considered for awards. Awards are included for the [ACE Plus Adopt program](#) as a component of the ACE program which connects CAP squadron as mentors for grades 5-8. The names found below are the award winners for 2024. Each award recipient will receive an award plaque and a grant award courtesy of the [Air & Space Forces Association Education Council](#).

Click on each blue award, below, for each winner's story!

[National ACE School of the Year: Grayhawk Elementary School](#)
[National ACE Coordinator of the Year: Grayhawk's Michelle Lindstrom](#)

~ Principal, Eli Hubbell, Scottsdale, AZ

Site of the 2024-2025 National ACE Liftoff Event on Oct 15, 2024!

[National ACE Teacher of the Year: Thomas Ellis, 5-8th Grade Science Teacher](#)
Palm Beach Day Academy, Palm Beach, FL

[National ACE Collaborative Teacher of the Year: Caitlin Hayes, STEM Teacher](#)
St. John the Apostle Catholic School, Virginia Beach, VA

[National ACE Resource Teacher of the Year: Kayla Kill](#)
LeMay Elementary School, Bellevue, NE

[TWO National ACE Students of the Year:](#)

[Mason Grinder, 6th Grade](#)

Macon County R-IV School, New Cambria, MO ~ Dawn Johnson, Teacher

[Kyle Adams, 6th Grade](#)

Palm Beach Day Academy, Palm Beach, FL ~ Thomas Ellis, Teacher

[National ACE Plus Adopt Collaborative Squadron and School Teams of the Year:](#)
[GLR-MI-059 Adrian Composite Squadron & Prairie Elementary School and](#)
[SER-FL-049 Ormond Beach Composite Squadron & Ormond Beach Middle School](#)
Adrian, Michigan, and Ormond Beach, Florida

How are ACE awards determined?

Nominations are accepted for the major ACE awards of National Teacher, School, and Student of the Year for the Aerospace Connections in Education (ACE) program.

For other ACE awards selected, to include the collaborative ACE Plus team award, the CAP National HQ ACE team in Montgomery, AL, identifies schools, teachers, and/or squadrons having gone above and beyond; uniquely standing out via their photos sent to the HQ team and their social media posts which tagged @CAPaerospace.

For all ACE participants for the upcoming 2024-2025 Academic Year, keep the ACE team informed of all being done with ACE students and remember to tag @CAPaerospace on any social media posts about your CAP work so that YOUR work will be noticed!

Points of Pride for 2023-2024

Exceeding the goal of 100,000 “faces of ACE” across the nation was the highest achievement of the year. Reaching 101, 384 students with 658 teachers from 548 schools in 48 states + Europe (DoD) was a significant milestone. (See ACE list by state [HERE.](#))

In addition to a variety of school types, there were Boys and Girls Clubs, Scout groups, Women in Aviation International (WAI) groups, after-school programs, museums, libraries, and summer camps all using the ACE program. Proudly, CAP had a large group of ACE Plus teams this year, as well.

- 98% educators view ACE as fitting well with standards; supporting STEM education; a valuable use of time; and a positive influence on behavior and learning.
- 78% of ACE schools are Title 1 Schools, therefore allowing CAP to reach a broad range of ethnicities and socio-economic demographics.

The new [ACE Plus: Squadron-Classroom Adopt program](#) expanded in its fourth year to have CAP squadrons connect with teachers to help teach the ACE lessons, share information about the CAP cadet program, coordinate field trips, and teach about a variety of STEM careers. Included in this year’s ACE Plus Adopt program was 8 Regions, 24 wings, 30 squadrons, 38 teachers, and 2,786 students. (See the outstanding ACE Plus award winners above.)

Through the Years

Since 2007 inception: over 638,000 ACE students in 50 states + DC & PR + Europe (DoD)

- ***The [Air & Space Forces Association](#) has been a steadfast partner, providing shirts and award grants. CAP appreciates their continued support.***
- To get a perspective of the overall ACE program and history, see the 16-year milestone and 2024 ACE awards story in CAP.NEWS, [HERE.](#) (July 2024)



2024 National ACE Teacher of the Year:
Thomas Ellis, 5th-8th Grade Science/Aerospace Teacher
Palm Beach Day Academy, Palm Beach, FL

Thomas Ellis was nominated by Wendy Bieneman, Assistant Head of Upper School at Palm Beach Day Academy, with an impressive narrative of his aviation work which included CAP's ACE program. Thomas has worked with the ACE program for two years; this year with him teaching 15 fifth-grade ACE lessons to his students and his students making an impressive pre/post test percentage increase of 32.81%. Ellis integrated the CAP ACE program within his aerospace curriculum, and worked with his students to build and fly the RC airplane CAP STEM Kit, working with the FAA and the local RC club to do so. His work to inspire his students toward an interest in aerospace-related STEM subjects and potential careers is important and impressive. Ellis commented on the program, "The ACE curriculum helped to inspire and foster a sense of curiosity in aerospace among my students. We have students who are attending aerospace summer camps because of what they learned in our class."

From Wendy Bieneman:

"In only his third year as a teacher, Thomas Ellis has developed an Aerospace Education program that inspires, encourages, and motivates students to both learn and dream as they look to the skies and beyond. Students begin the subject area getting to know aviation pioneers such as Otto Lilienthal, Amelia Earhart, the Wright Brothers, and Chuck Yeager. After students have been introduced to the pioneers of flight, they transition to principles of flight and lessons based on the four forces of flight. In their fourth week, they assemble balsa wood planes, take them outside as test pilots as they fly and measure the distance of each flight.

"Using resources and curriculum from Civil Air Patrol and others, Thomas has crafted a classroom experience with his students that has them learning both inside the classroom and experiencing the joys of flight outside of it, as well. Working together as a team, students in his nine-week courses begin a major project, halfway into the term, building upon the academic lessons as they learn principles of aeronautical engineering and design. This year, the projects his students have designed include the following:

- Building a functional wind tunnel, using the same principles the Wright Brothers used.
- Designing and building a working hot air balloon from nothing more than tissue paper, glue sticks and 6 feet of duct tape.
- Building Level 5 models of the Space Shuttle Endeavour and the SR-71 Blackbird as they learned about the atmosphere and flight dynamics of operating above 50,000' MSL
- Inspiring a Build-Off Competition between two groups of students as they build two working models of the Spirit of St. Louis while learning about Charles Lindbergh.
- Assembling a Carbon Cub RC airplane while learning about the new FAA regulations for operating RC and drone aircraft. Through their research, Thomas and his students were able to find protected airspace in our county called, FRIA, that allows them to fly the RC plane and experience the joy of flight.

“Thomas' classes have inspired students to go beyond the subject matter he's taught in class. In the words of one parent, ‘In Aerospace class this year, my child has been so inspired, and we love that he has found these interests about which he is so passionate. He is so eager to learn more and is taking every opportunity to take (aerospace) classes this summer.’ Another parent has said, ‘My child doesn't like to come home and talk about what he learned in school, but he loves to share what he learned in Aerospace Science.’

“Thomas' commitment to his craft is year ‘round as he took classes over the summer to become a better teacher, learning of various projects he can do with students of 5th - 8th grades, and how to best present challenging subject matter to students in each age group. He attends Saturday STEM sessions with his students, organized by Sci Tech Institute, a STEM organization from AZ. The STEM sessions focus on real-world problems, such as providing emergency care to people in rural areas, water shortages, and transportation challenges. Using principles of engineering, students develop and present solutions to those problems. The student group that Thomas mentored came up with a solution using coming of age air taxis to provide emergency medical care to citizens in rural areas. The group understood the importance of what is known in the medical field as "the golden hour" and in a rural area providing lifesaving care in those first 60 minutes is best accomplished using an EMT and an air ambulance (air taxi).

“To bring the realism of flight to his students, and the lessons that come with it, Thomas used his personal time to seek out and meet with subject matter experts in the field of flight simulation. Working with them, he crafted a proposal to our school to purchase a flight simulator that will bring realism and additional authenticity to his aerospace curriculum. I'm excited when I think of how many students will go on to pursue pilot certificates and serve our country through STEM fields in aerospace through their connections in his classes. During Black History Month, as his students researched STEM heroes, and narrated their essays for the entire school at a special assembly, Thomas worked with his students to integrate aerospace heroes into the heroes they researched. Heroes like Bessie Coleman, General Daniel ‘Chappie’ James, and C. Alfred ‘Chief’ Anderson introduced themselves to our students through the voices of our 5th graders. The special assembly reinforced the value of diversity among our school community, and provided our African-American students additional mentors and heroes from a time before ours.

“Our leadership team, along with parents and students alike, look forward to seeing what Thomas plans over the summer for his students next year. Knowing him, he'll not only tweak, refine, and perfect, but he'll also come up with completely new topics and projects to engage the hearts and minds of our students.”

From Thomas Ellis:

“We are all thrilled beyond words at the significance of this award for our school, our community, and the work we've done. It's been a team effort all year.”

Ellis and his students working with the 5th grade ACE propeller balsa glider flights and calculations, with the wind tunnel used for further aviation experimentation, and building and flying tissue paper hot air balloons.



**CONGRATULATIONS,
THOMAS ELLIS,
NATIONAL ACE
TEACHER OF THE YEAR!**