

Interview with Cindy Hasselbring, K-12 Education Advisor for Next Gen STEM in NASA's Office of STEM Engagement (OSTEM).



Cindy Hasselbring serves as a K-12 Education Advisor for Next Gen STEM in NASA's Office of STEM Engagement (OSTEM). In this role, she led the development of NASA's first online community of practice for educators, CONNECTS, and oversees its implementation. Previously, she served as the Senior Policy Advisor and Assistant Director for STEM Education at the White House Office of Science and Technology Policy, where she led the implementation efforts of the Federal STEM Education

Strategic Plan. She served as subject matter expert on STEM education for the President's Council of Advisors of Science and Technology, co-chaired five interagency subcommittees and working groups, and provided multiple reports on STEM education to Congress on behalf of the White House.

Previously, she was the Senior Director for AOPA's High School Aviation Initiative and led efforts to build a four-year aviation STEM curriculum to inspire more students to enter careers in aviation and aerospace. She led STEM initiatives as Special Assistant to the State Superintendent at the Maryland State Department of Education (MSDE). Prior to working at MSDE, Cindy completed two years as an Albert Einstein Distinguished Educator Fellow at the National Science Foundation in Arlington, Virginia.

She was a 16-year veteran mathematics teacher at Milan High School in Michigan and was awarded the Presidential Award for Excellence in Mathematics and Science Teaching and earned National Board

Certification during her teaching tenure. She enjoys spending time with family and flying as a private pilot in her free time.

What is your job title and what does it entail?

K-12 Education Advisor, Next Gen STEM, Office of STEM Engagement (OSTEM), NASA Headquarters

I serve as the product owner for NASA's newest STEM resource for educators, CONNECTS. CONNECTS stands for "Connecting Our NASA Network of Educators for Collaborating Together in STEM". This online community of practice platform enables educators to access NASA content and provides a forum for collaboration across the NASA OSTEM enterprise. Additionally, I provide expertise about formal K-12 STEM education, share current challenges states are facing in education, and think through how NASA can play a role in supporting them.

What/who inspired you to do this job?

I visited Kennedy Space Center when I was about five years old and have been fascinated by space exploration my entire life, aspiring to be an astronaut. In 2002, while at a NASA Educational Workshop at Goddard Space Flight Center, I learned that NASA was again accepting astronaut candidate applications from teachers, so I applied. I did not make the astronaut cut but became part of a teacher cohort named the Network of Educator Astronaut Teachers (NEAT). Through this group, I had access to some of my career's most meaningful professional learning – including NASA events, NASA content and the other NEAT teachers. I am forever grateful for the inspiration and experiences NASA has given me and I am thrilled to be able to help other teachers now through CONNECTS and give back to the STEM education community.

What qualifications/ job training did you complete?

I earned my undergraduate degree in Mathematics at Cedarville University (Ohio) with an emphasis in Secondary Education. I earned my Master's degree in Secondary School Teaching at Eastern Michigan

University. I taught high school mathematics for 16 years at Milan High School (Michigan) and have since become more involved in STEM education policy both at the federal and state levels, including serving as Assistant Director and Senior Policy Advisor for STEM Education at the White House Office of Science and Technology Policy. Additionally, while working at the National Science Foundation, I completed a project investigating current priorities and needs in STEM education in all 50 states. This awareness has helped me better understand what educators need in their current environments and determine what STEM resources NASA has that can help address these needs. As Senior Director, I also led the High School Aviation Initiative at the Aircraft Owners and Pilots Association, the world's largest community of pilots. Through this initiative, our team built a high school aviation STEM curriculum that now serves over 10,000 students in 44 states. This Initiative also holds an annual high school aviation symposium and awards flight training scholarships to teachers and high school students.

What advice would you give to students about STEM?

The opportunities in STEM careers are endless and not all require four-year degrees. Take advantage of opportunities to gain work-based learning experiences, including NASA's Internship Program by checking out <https://intern.nasa.gov/> as well as other federal work-based learning programs, <https://www.nitrd.gov/stem4all/>.

What do you think is the most important aspect of integrated STEM?

It is important for STEM to be rooted in authentic, meaningful problems with real-world scenarios. This is more motivating and interesting for students and provides for more rigorous STEM learning. Students need more opportunities to apply their learning from across disciplines, develop their communication and soft skills, and use creativity to solve problems.