



Astronaut Terry Verts, former commander of the International Space Station, told AMOS he was "captured for life" with a love of science.

"Astronomy and space photography and going into space is something that I love, and I can really credit that to my time going to science museums as a kid."



December 2020

Dear Friends,

This year, as many as 800 children and science explorers were Wowed! by AMOS educational programs. Imagine how many more children in our community could be inspired to study science, explore the universe, and reach for the stars? With your help, we can double that number.

**In 2020, AMOS provided quality STEM education to more than 255,000 people.**

The museum saw more people than ever during the first part of the year before moving to virtual STEM education programs, serving more than [240,000 online visitors](#) through science programs such as our online field trips and STEM activities. AMOS is a non-profit cultural institution and relies on donations and grants to serve our mission. We cannot do it without you!

### Are you the missing element?

This year has challenged each of us individually and as a nation on so many levels. We thank you for your investment and belief in continuing our mission during such unprecedented times. Now, more than ever, we need your support. **Here are three important reasons for supporting AMOS:**

**Science Literacy:** Science literacy is critical in preparing young people for good careers<sup>1</sup> and *essential* to cultivating young people's curiosity. Science and technology help humans understand critical issues so they can make informed decisions.

### By 2030, 80% of all jobs will require STEM skills.

**Educational Support:** North Carolina ranks as one of the lowest in science and math proficiency. AMOS provides expertise in STEM education upon which schools across Western North Carolina rely. Expert STEM education, science tool kits, in-person and virtual field trips, and professional development are ways in which AMOS supports area educators.

**Racial Equality:** Breaking down the barriers of opportunity requires equal access to quality STEM education. Improving STEM education for the entire community helps close the opportunity gap for minority children. **Reducing racial inequality and systemic racism begins with providing equal opportunity for quality education to all children.** AMOS brings educational programs to minorities and low-income communities through our partners like Avery Learning Center, area YMCAs, county libraries, and school districts across WNC. **With your help, we can continue to break down barriers and expand our reach.**

**Support AMOS with your financial gift now, and your donation will be matched dollar for dollar.**

### Yes, to Science!

I understand the critical need for STEM education. I want to support AMOS and know that museums are fundamental to a healthy community. I want to ignite interest in the sciences and support scientific literacy.

Please accept my Elemental gift of:

\_\_\_ Annual Fund Contribution:     \$25    \$50    \$100    \$250    \$500    \$\_\_\_\_\_

\_\_\_ Monthly Pledge:                     \$20    \$30    \$40    \$50    \$100    \$\_\_\_\_\_

Three ways to give:

- (1) Enclose a check
- (2) Use your credit card online at [www.AshevilleScience.org](http://www.AshevilleScience.org), or
- (3) Call us at (828) 254-7162.

«Name»  
«Address»  
«City», «State» «Zip»

## Matching Funds for Your Donation

To sustain AMOS and bridge the opportunity gap for underserved communities, AMOS has received support from generous donors like yourself to match your contributions. Every dollar you pledge by the end of 2020 will be matched dollar for dollar; can you make or increase your pledge today?

### *How is an investment in AMOS an investment in our present and future?*

- Museums are educational hubs and economic engines. We are moving beyond the traditional role of repositories and engaging visitors in critical thinking skills to tackle our current and future challenges.
- Science, technology, engineering, and mathematics (STEM) are critically important to our well-being, the nation's economic growth, and the environment. AMOS encourages creativity, innovation, collaboration, and critical thinking in students.
- AMOS provides unique educational programs that excite, energize, and enrich our understanding of science and its many applications.
- AMOS's programs are designed to meet local educational needs and fill gaps in our local educational systems. A significant factor in student achievement in **science** is the quality of science education provided in school.

By working together, we ignite curiosity and a lifelong love of learning in the sciences, and we create opportunities for a brighter future for us all.

**Thank you for your financial gift. We are in this together.**

Sincerely yours,



Amanda Bryant  
Executive Director  
Asheville Museum of Science

*The Asheville Museum of Science (AMOS) is Western North Carolina's home for experiential science learning, discovery, and exploration. AMOS strives to spark the imagination and foster lifelong curiosity.*

#### **3 WAYS TO GIVE**

1. **Online at**  
[www.ashevillescience.org](http://www.ashevillescience.org)
2. **Call us at (828) 254-7162.**
3. **Enclose a check.**

P.S. You can make your donation online at [www.AshevilleScience.org/support-us](http://www.AshevilleScience.org/support-us). Please make your donation or pledge before the end of 2020 so that we can double your gift.

1 According to multiple studies (Rodriguez, Roberto, Supporting our Youngest Innovators: STEM Starts Early. *Department of Education*. March 2016; Clements, Douglas. Math, Science, and Technology in the Early Grades. *The Future of Children*. Vol. 26, No. 2, Fall 2016; and *National Research Council*, 2012), early exposure to STEM education helps students with a lifetime of academic achievement, confidence to take on more challenging STEM education in secondary and college careers, and an ability to identify oneself in a STEM-related career as an adult.

2 According to the Bureau of Labor and Statistics, 60 percent of jobs require STEM skills. 79% of the fastest-growing jobs require advanced STEM skills, but only 24% of college graduates major in STEM fields.

***AMOS is a 501(c)(3) non-profit organization, and donations are tax-deductible***

Asheville Museum of Science | 43 Patton Avenue, Asheville, NC 28801 | (828) 254-7162 | [www.ashevillescience.org](http://www.ashevillescience.org)

### **Examples of your Support at Work**

- \$20 sponsors a child's visit to the museum or access to a science kit sent to their home.
- \$25 sponsors a virtual field trip to the museum and a hands-on activity kit for one child.
- \$60 sponsors a scholarship for a child for one day for summer camp or winter camp.
- \$250 sponsors a virtual classroom field trip to the museum, STEM lab, and hands-on learning.
- \$300 sponsors one full scholarship for summer or winter camp.
- \$1,000 sponsors four classes in one school for an online live class with hands-on activity kits.
- \$2,000 sponsors an entire school PreK – 12 grade science teachers professional development series.
- \$10,000 sponsors a new exhibit such as a new weather and climate experience.
- \$100,000 sponsors AMOS's educational programs for 3 months.



ASHEVILLE MUSEUM OF SCIENCE

The Asheville Museum of Science (AMOS) is Western North Carolina's home for experiential science learning, discovery, and exploration. AMOS strives to spark the imagination and foster lifelong curiosity. AMOS is a 501(c)(3).

AMOS is open and follows strict health and safety guidelines. Despite our exhibit halls and STEM Labs being closed to the public for six months in 2020, we remain committed to making science education accessible for all through robust digital programming and smartly designed small group programming.

## What is STEM Education?



SCIENCE



TECHNOLOGY



ENGINEERING



MATH

STEM fields are considered the core technological underpinnings of an advanced society. These skills are needed to solve today's problems and prepare and create solutions that will be needed for tomorrow.

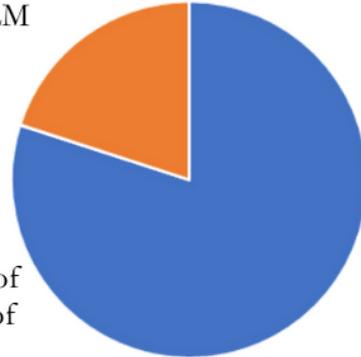
## The Importance of STEM Education

Early exposure to STEM helps students with a lifetime of academic achievement, confidence to take on more challenging education, and an ability to identify oneself in a STEM related career as an adult.

**80%** of all jobs by 2030 will require STEM skills.

**25%** The estimate of STEM jobs filled with individuals lacking the STEM skills needed for full job competency.

- The U.S. ranks 34th out of 71 developed countries in science and math proficiency.
- The government has seen a growing number of jobs in STEM careers with a limited number of qualified individuals to fill the positions.
- Statistics continue to show that not enough American students pursue expertise in STEM fields, especially women and minorities - and we have an inadequate pipeline of teachers skilled in those subjects while STEM-oriented job skills are skyrocketing.

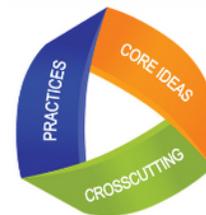


## Next Generation Science Standards (NGSS)

All of AMOS's expertly designed programming uses Next Generation Science Standards. The NGSS are national science standards that improve science education for all students by preparing them with a well-rounded knowledge base for future scientists and engineers.

Developed through a [wide-ranging partnership](#), including

- The National Academies of Science, Engineering, & Medicine
- The National Science Teachers Association
- The American Association of the Advancement of Science
- State-level representatives and other stakeholders



## How STEM Builds Skills

STEM is an ever-evolving and expanding field. Success requires the ability to continue to [learn and adapt to new situations](#).

Project-based lessons help to build soft skills like:

- Creativity & Innovation
- Problem-solving & Critical thinking
- Collaboration & Leadership



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# Community Served in 2020

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255,000+ Individuals served in 2020 so far.



11,338 Individuals served in-person so far.

5,690 Young scientists/students served in-person.



203 Virtual programs developed by AMOS since COVID-19 closure.

135 Science activity boxes created.



82 Classrooms to be served with virtual learning and activity kits in January 2021.



6 Months of AMOS exhibits and STEM lab were closed.



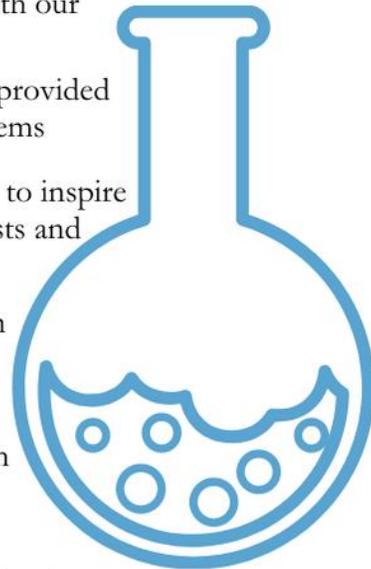
42% Of AMOS's budget comes from private donations just like yours.

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## STEM PROGRAMMING AT AMOS

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- Virtual Classes:** Expert designed science programming that aligns with state and national standards
- Ask a Scientist:** Weekly Facebook Live talks, giving our younger audience the opportunity to engage directly with science experts
- Science Lecture Series:** Summer of Science and Fall into Science provides interesting live and recorded interviews with scientists on a wide range of topics geared for adults
- Summer Camps:** Bringing scientists and fun science activities to area summer camps
- AMOS Camp & After School:** Supporting our community and families with school pod support and afterschool programming
- Little Explorer's Club:** Virtual live science hour with our youngest scientists
- Library STEM Activities:** STEM lessons & activities provided through county library systems
- Daily Dose of Science:** Daily lessons and activities to inspire teachers and young scientists and their parents at home
- Science Activity Kits:** AMOS in a box. Hands-on science activities anyone can do from home
- AMOS STEAM Team:** AMOS's volunteer program with in-person and virtual opportunities
- Internships:** Through partnerships with local schools and universities both in-person and virtual opportunities

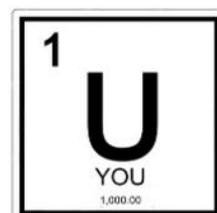


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## The Missing is Element You!



By supporting AMOS, you are also supporting science education & literacy with your financial gift. Thank you!



[www.ASHEVILLESCIENCE.ORG](http://www.ashevillescience.org)

AS OF NOV. 2020