

News from the field of the premiere DoD Youth STEM education program.

DoDI Updates: What's New?

The new DoD-Instruction (DoDI) was published in January of 2021, and while the DoD STARBASE governing document remains similar at its core, there are some changes that sites need to keep in mind while planning for the next school year and to ensure continued compliance. Take a look at some of the key differences that have come along with the updated DoDI.

- » Clearly outlines the roles and responsibilities of OASD (M&RA) and those of the Military Departments and the National Guard Bureau.
- » Expands description of the process for requesting and receiving approval for a new STARBASE program.
- » Establishes that STARBASE Academies must see no less than 30 classes per year (as opposed to the required 28 from the old DoDI). Instruction will take place for a total of 25 hours over a period of 5 days. Any differential from that model requires an Exception to Policy waiver. *(Note: The 20-hour instruction over a period of 4 days has been removed as an option in the new DoDI.)*
- » Requires STARBASE Academies to conduct 2 weeks (20-25 hours) of classroom contact hours over schools' vacation breaks. Priority should be given to providing a DoD STARBASE Program opportunity to military dependents at the hosting facility.
- » Directs that when not in classroom sessions, DoD STARBASE programs will perform at least four community outreach activities that may include: workshops, teacher trainings, participation in school science nights and fairs, etc. Any event that fosters community and strategic partnerships can be considered outreach. Strategic partnerships can be considered community outreach as well.
- » Requires that all DoD STARBASE programs will have an employee manual that outlines procedures for DoD STARBASE personnel and procedures on using voluntary support.
- » Explains that sites are required to complete a criminal history background check on all DoD STARBASE personnel.



"Perseverance is more than a rover, and more than this amazing collection of men and women that built it and got us here. It is even more than the 10.9 million people who signed up to be part of our mission. This mission is about what humans can achieve when they persevere. We made it this far. Now, watch us go."

-- John McNamee, Project Manager of the Mars 2020 Perseverance rover mission at JPL

TASK REMINDER

Updates to the COVID Operational Status Tracker spreadsheet are due no later than February 28th (last day of the month).

These updates are provided to OSD/M&RA as a report monthly.

The link to the spreadsheet is available in STARBASE-U. If you are having trouble accessing the tracker, please contact email@dodstarbase.org for assistance.

(Continued from Page 1)

- » Increased real property maintenance and upgrades from no more than \$50,000.00 in a fiscal year to \$100,000.00.
- » Approves uniform items as an allowable expense. This is in regards to outfitting STARBASE Staff members with program attire. Expenses not specifically indicated in the new DoDI will be dealt with through the budgeting submission, justification, and approval process.
- » Authorizes STARBASE 2.0 and includes extensive program practices, policies, staffing, and requirements.
- » Outlines DoD STARBASE position qualifications and responsibilities, and an instructor assistant position was added as an optional 4th position/hire.
- » Establishes into policy the STARBASE Performance Levels, as well as describing the qualities and criteria of a basic and an advanced STARBASE program.

[Click here to read the full document.](#)

Strong STEM Partnerships at STARBASE Tinker

Women's Energy Network (WEN) partnered with STARBASE Tinker on engaging in STEM activities for their annual Teacher's Workshop on July 30th, 2020. The Women's Energy Network is an international organization of professionals who work across the energy value chain. STARBASE Oklahoma has multiple locations throughout the state and 2.0 mentoring programs across several school systems. WEN is part of the Oklahoma site's 2.0 Mentoring program. They have committed to the mission of reaching out to young women in the community to instill confidence in STEM careers. Another goal for WEN is to provide networking opportunities and foster the career and leadership development of women who work in the energy industries.

WEN's vision is to be the premier global organization that educates, attracts, retains, and develops professional working women across the energy value chain. WEN offers educational, networking, and leadership opportunities to more than 6,000 professionals nationwide through networking events, conferences, community initiatives, social outings, and mentoring programs. Learn more about the WEN organization by visiting their website at www.womensenergynetwork.org.

Prior to the WEN STEM activities, Janelle Stafford, vice president of the Air Force Central Oklahoma Gerrity Chapter and The State Air Force Association Treasurer, spoke to the group. Her presentation was based on the expansion of the many possibilities for the future with the STARBASE programs. Ms. Stafford also presented a video from Jim Bridenstine, NASA administrator and fellow Oklahoman. Mr. Bridenstine made several positive comments about the STARBASE program and expressed his support for the program that will assist in inspiring the future workforce in STEM careers.

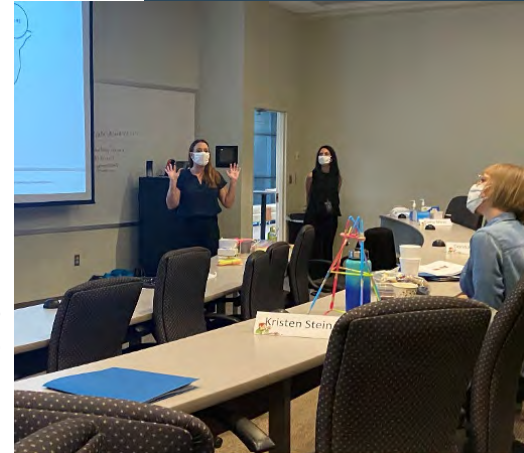


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Another speaker for the workshop participants was Jeff James. Mr. James briefed the teachers about two programs supported by the Air Force Association: the CyberPatriots (K-12) and the StellarXplorers (high school challenge).

- » CyberPatriots is a national youth program created to motivate students toward careers in cyber security and STEM disciplines. They provide competitions, cyber camps and cyber education. More information is available at www.uscyberpatriot.org.
- » StellarXplorers engages in competition to excite young people about STEM. Students are provided with the knowledge they need to understand operations in outer space and the hands-on experience in planning and executing space missions www.stellarxplorers.org.

Following the great presentations from the guest speakers, WEN provided hands on training activities for the teachers in attendance. Activities focused on Geology, including rocks and fossils, drilling oil wells, renewable resources, and transportation of oil. At the conclusion of the workshop, the teachers commented that they loved the hands-on experience because it helps the lessons understandability. Teachers were very excited to receive new ideas to share with students.



STARBASE Edwards distributes 1500 STEM Kits to Local Schools

STARBASE Edwards Inc, received an in-kind donation from Lockheed Martin to provide STEM kits to historically underrepresented students and communities within the Antelope Valley area. The STEM Kits are a collaborative project between industry partners to include STARBASE DoD STEM, NASA-Armstrong Research Center, and the Museum of Art and History (MOAH). The kits will be distributed to five Lancaster elementary school districts, five Palmdale elementary school districts, and The Palmdale Aerospace Academy (TPAA). The kits are designed to expose students to STEM and the various career opportunities in the fields and within the Antelope Valley. The DoD STEM extension lessons will be remotely taught by STARBASE instructors and assisted by a NASA educator.

After a recent spike in COVID-19 cases, a stay-at-home order was imposed in November 2020 cancelling the planned STARBASE "On Wheels" in-person classes. STARBASE Edwards pitched the idea to incorporate STEM kits into the curriculum by providing a more tangible and interactive experience to enhance students' outlook on STEM. Lockheed agreed and provided the grant to support students and community members. "At Lockheed Martin, we are committed to partnering with organizations like STARBASE to inspire students to study science, technology, engineering and math," said Claudia Clark of Lockheed Martin Community Relations. "Local STEM outreach is one of the most impactful ways to make a real difference and give back in the communities where our employees live and work."

"We are truly appreciative to all of our donors that have made a positive impact on our program and mission to provide STEM exposure to our youths," said Amira Flores, STARBASE Edwards Director. STARBASE Edwards has scheduled 14 weeks of distance learning to all participating schools receiving the kits which will roughly reach 1,489 fifth grade students.



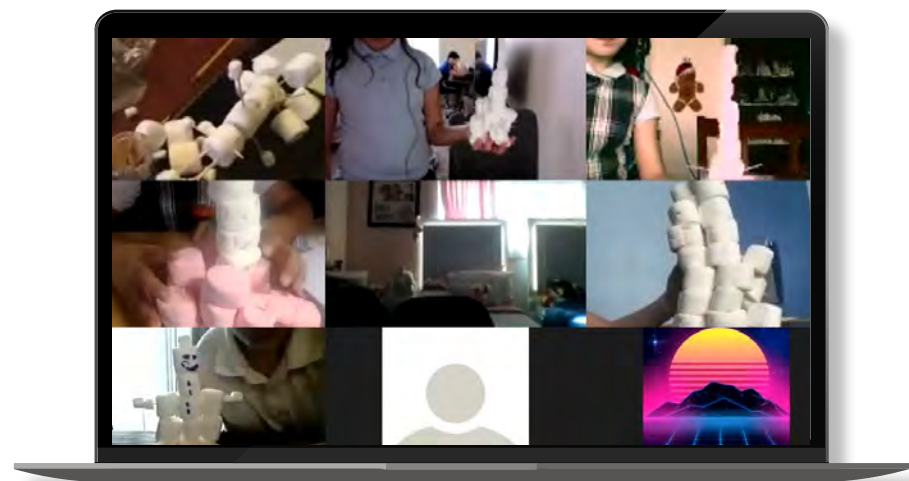
A STEMonstrations at STARBASE Nellis

STARBASE Nellis, located in Clark County, Nevada, serves the southern part of the state. Currently, the base is at HPCON 3, and the school district is 100% virtual education. So, what is a STARBASE to do? "I have an idea," started a whole new adventure for STARBASE Nellis.

Kirsten Lambert, lead instructor of STARBASE Nellis, leads the team that created STARBASE STEMonstrations – a program that virtually engages third through fifth grade students in a unique reexamination of standards. In creating the program, STARBASE Nellis focused on grade appropriate National Standards in Math and Science. All lessons and experiments directly correlate to a standard, making it a turnkey operation for teachers to use as a supplemental learning activity. Teachers receive a daily lesson for their students to work on that leads to a culminating experiment or activity on Friday. To ensure accessibility, experiments and activities were planned to use typical household items and materials that can be bought for under five dollars. Additionally, since this program is supplemental, Title I and Title III funding could be used to pay for the materials to be distributed to students.

STARBASE STEMonstrations is on a five-day schedule. Day 1 consists of reviewing the week's objectives and a list of materials for students to gather for Friday's activity. Day 2 is a short article related to the standard. Day 3 students watch a video that correlates with the weekly standard. Day 4 students use their knowledge from the previous days lesson to complete a task. Day 5 is a hands-on activity that reinforces the knowledge they have gained from the week's objective and standards. As the schedule was planned, there was a lot of importance put on knowing all learning styles would be addressed so all students would benefit from the program. The consistency of this schedule will also ensure that students know what is in store for the day. With many things in the world out of order, Lambert and her team wanted to make sure the students had a structure they could rely on.

The STEMonstrations team had a few technology bugs to work out, but they are now doing a check with teachers 30 minutes prior to the session to make sure that their computers are working right and tying into the student computers successfully. Instruction on Fridays is also now being recorded, so that it can be uploaded by the teachers. This will stop some of the computer lag that was worrisome. One of the STARBASE Nellis staff members is working behind the scenes with teachers to make sure that the hour runs smoothly, especially since they don't show student faces, they have to be ready to turn off cameras with a second's notice.



The annual DoD STARBASE Workshop is tentatively scheduled for July 26-29, 2021.

Details will be released as soon as they are available. At this time, please try to protect these dates in your schedule. Thank you!



(Continued from Page 4)

STARBASE STEMonstrations is currently reaching over 6,600 students within the Vegas Valley. Originally, the program was a support for the homeschooled students that either attended STARBASE Nellis previously or who were signed up to attend once the program starts again. After sending out invitations to attend the program, they received 21 “yes” responses for 32 third, fourth, and fifth grade students. They were excited with this success but wanted to help their community more.

Clark County School District’s School-Community Partnership Program office works with groups like STARBASE Nellis to share community programs to schools. STARBASE worked with the school Coordinator, Cheryl I Wagner, to modify the program so that teachers within the school district could also access STARBASE STEMonstrations. With her help, invitations were sent to CCSD elementary schools. They did not know what to expect from the teachers. They had no idea if they would even be interested in this supplemental program. STARBASE Nellis now has 140 teachers from 85 schools participating in their program.

At the end of each week, STARBASE staff ask the teachers for feedback to ensure that the program is meeting their needs. One teacher noted, “These [lessons] are 100% helpful. My kiddos love this, and you made it a gift to classroom teachers. You did a fantastic job with everything!” COVID-19 isolation has caused more challenges than imaginable for a newly created STARBASE, but at the same time, they have been able to create a program that is completely unique to their original goals for the 2020-2021 school year.

A Call for Participation

Throughout the year, this newsletter will continue to spotlight the achievements, partnerships, and tips of the participants of the DoD STARBASE program. Please share your achievements, success stories, and helpful tips with us at email@dodstarbase.org.