2020

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

STARBASE Battle Creek Partners with Kellogg Community College

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It provides an opportunity for my students to connect textbook theory with practice."

Professor Jamie Bishop





The partnership between STARBASE Battle Creek and Kellogg Community College began during the 2009 - 2010 school year. Dawn Larsen, Kellogg Community College Director of Early Childhood Education, attended STARBASE Battle Creek as a parent volunteer with her son from Pennfield Community Schools, Dunlap Elementary.

Ms. Larsen was so impressed with the curriculum and the "Hands on Minds on" instructional approach she felt all students who were interested in becoming teachers should be introduced to this style of STEM instruction. Based on her belief that what she observed should be shared with future teachers the partnership was put into motion. Ms. Larsen introduced Bruce Medaugh, STARBASE Battle Creek Director, to Kellogg Community College, Foundations of Education instructor, Jamie Bishop. Together they hatched the plan that is still followed.

Mr. Medaugh makes a class presentation which includes the history and philosophy behind DoD STARBASE. One historical note of special interest is that in 1956 the WK Kellogg Foundation provided the funding that led to the establishment of Kellogg Community College. In 1991 the WK Kellogg Foundation provided the funding that led to the establishment of DoD STARBASE.

(Continued on Page 2)



"Don't let anyone rob you of your imagination, your creativity, or your curiosity. It's your place in the world; it's your life. Go on and do all you can with it, and make it the life you want to live."

- Mae Jemison

UPCOMING DATES

May-June 2020

All STARBASE Directors will be enrolled in the "STARBASE Director's Questionnaire 2020" course. All locations must complete Parts 1-8 of the Director's Questionnaire (DQ).

Suspense for these items is 30 June 2020. The reporting time period for these parts of the DQ have been changed from "fiscal-year" to "academic-year" (1 July 2019 - 30 June 2020).

May-June 2020

STARBASE 2.0 Director's Questionnaire

Sites with a 2.0 Program must complete.

July-August 2020

Submission of Upcoming School Year Curriculum Schedule

Instructions will be sent prior to submission date.

July-August 2020

Submission of Photos & Accolades for Annual Report

October 2020

Submission of Financial & Property Management Information

After end of **Fiscal Year**, instructions will be sent regarding submission.

(STARBASE Battle Creek...Continued from Page 1)

Following the program outline, Mr. Medaugh shares a few lessons that are taught at STARBASE Battle Creek. The difference is that the "learners" now range in age from late teenagers to thirty somethings instead of eleven and twelve year olds. The presentation fills the (90) minute class period and is received with the same level of enthusiasm by the adult students.

Professor Bishop then coordinates a date when her class visits the STARBASE Battle Creek. Her students are then able to get a first-hand look at how the program is delivered to fifth grade classes. This "presentation" and "visit" pattern occurs each semester.

Professor Bishop comments, "The STARBASE collaboration is one of the highlights of our Foundations of Education course! It provides an opportunity for my students to connect textbook theory with practice. As future teachers, they gather insight into effective instructional approaches when delivering STEM focused curriculum. They are also exposed to nontraditional teaching positions and the importance of community relationships. The support we receive from Mr. Medaugh and his staff is greatly appreciated, and we look forward to many future semesters of collaboration!"

STARBASE Definitions

The DoD STARBASE definitions were approved for publication by OASD M&RA on 28 May 2020. The definitions are being published in the following documents: FY20 STARBASE Director's Questionnaire, STARBASE 2.0 Director's Questionnaire, and DoD STARBASE 2.0 Guide (In development).

STARBASE

The DoD STARBASE Program is a 12-month, year-round program. The DoD STARBASE Program academies currently operate with either a basic or an advanced structure. A basic DoD STARBASE Program operates with elementary students at the host location, usually at the 5th grade level, and can be broken down into two phases — during the school year and outside the normal school year. During the school year, DoD STARBASE Program academies provide 25 hours of instruction per classroom using the approved DoD STARBASE core curriculum. Outside the normal school year schedule, DoD STARBASE Program academies also provide supplemental classes. An advanced DoD STARBASE Program performs all the operations of a basic DoD STARBASE Program and also offers a secondary community outreach and after-school program called STARBASE 2.0.

STARBASE 2.0

A STEM-based program targeting underserved and underrepresented middle school students (typically in 6th to 8th grades), based at a collaborating school site and usually conducted outside the normal academic hours. The objective is to engage middle school students in advanced STEM activities and projects. The DoD STARBASE 2.0 program is highly structured and helps support school goals, provides safe environments for students, and improves student-teacher relationships. The DoD STARBASE 2.0 program is conducted during the school year for a period of at least 10 weeks/ 20 hours.

Outreach

DoD STARBASE Programs providing information and services to populations who might not otherwise have access to those services. A key component of the outreach effort includes educating and promoting the DoD STARBASE experience within the community. Outreach also allows for mobile services by STARBASE staff where needed. Examples might be: Science Fairs, Open-House Displays/Events, Base Family Events, Museum STEM activities, etc.

(Continued on Page 4)

Top Level Programs

Five DoD STARBASE Locations Receive Top Level Program Designation in 2019

During FY19, select DoD STARBASE locations were evaluated for designation as a "Level III - High Performing DoD STARBASE Academy". To be eligible for consideration, the location must have maintained a fully compliant Basic Level I and Advanced Level II program for the past six consecutive years, which included having a sustainable STARBASE 2.0 program. In addition, they must have developed an activity or set of activities that significantly advanced the DoD STARBASE program mission and vision.

This is the final of a five-part series to introduce you to the new Level III programs. This month, we highlight STARBASE Wright-Patt. Congratulations to all of these exemplary locations who are now officially designated as a "Level III - High Performing DoD STARBASE Academy."

STARBASE Wright-Patt

Wright-Patterson Air Force Base, Dayton, Ohio – Air Force

STARBASE Wright-Patt has taken an active role to develop partnerships with local and statewide STEM and outreach

programs. This helps solidify their position as a key player in the education of participating students and their exposure to the limitless possibilities of a STEM-related future. During FY19, over 500 hours of outreach activities were contributed by the STARBASE Wright-Patt staff. This is in addition to the basic STARBASE Wright-Patt program which currently serves over 3200 students each year, all of whom come from Title 1 eligible or designated school districts.

Their relationship with the WPAFB Educational Outreach office has opened many doors to increase visibility of the DoD STARBASE program and promoting STEM education in the greater Dayton Area as well as across the State of Ohio. The range of activities can provide ideas for other STARBASE programs on how to get involved in their communities and forge partnerships to help develop and influence the next generation of scientists and engineers in STEM.

Outreach and community activities range from involvement with the Ohio FIRST LEGO League to summer teacher workshops and summer camp opportunities for students. Partnerships are solicited and encouraged to provide the best possible STEM experiences for the students involved. Flight camps for 5-6th and 7-8th grade students are conducted each summer in conjunction with the National Museum of the United States Air Force in Dayton, Ohio. The camps are so popular that they are filled within five minutes of the opening announcement.



Wright-Patt

(Continued on Page 4)



(Top Level Programs Continued from Page 3)

STARBASE Wright-Patt provides interactive activities for annual STEM events such as the weekend long "Tech Fest" which is the Dayton Regional Science Festival and the NCAA First Four Big Hoopla STEM Challenge where students, teachers and families can learn about area STEM programs.

STARBASE Wright-Patt also assists with the Air Force "LEGACY" program designed to propel middle school students into an Air Force STEM career after college graduation. Participating students are inspired by a series of week-long camps with hands-on experiences/opportunities to engage with peers. STARBASE staff members handle camp logistics/scheduling and assist in classrooms. In 2019, over 60 percent of the 110 LEGACY student participants were STARBASE Wright-Patt alumni.

The 2020 Call for Participation

Throughout 2020, 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.

(STARBASE Definitions Continued from Page 2)

Supplemental Classes

STEM instructional classes that do not meet the DoD 25-hours of instruction using the approved DoD STARBASE core curriculum. Supplemental Classes may be designed to reach students that are not affiliated with the participating schools or may be provided in response to requests by members of the community to serve other groups of students. In many cases, supplemental classes are established in response to the demand created by the popularity and success of the DoD STARBASE program within the community. Examples might be: 1-day events, 2-day "Best of STARBASE", Summer/School Break Programs, etc.

Satellite Programs

STARBASE programs physically distanced from the managing DoD STARBASE approved academy location. A Satellite Program is typically staffed with two designated instructors (or an Instructor and an Aide/Teaching Assistant) per classroom and may also have a separate office manager. Neither the Director nor Deputy Director is on the premises for the full 25-hours of instruction. The owning Academy Director is responsible to insure all other satellite program operations meet the DoDI requirements expected of a 25 hour/5-Day Academy. Examples: OR-Camp Rilea, SD-NOVA Programs, OK-Burns Flat.

STEM Coach

A responsible adult who guides STARBASE 2.0 students on STEM projects during 2.0 Club meetings and activities. Preference should be given to selecting professionals in STEM career fields.

STEM Coach Assistant

A young adult, typically high school or college student who assists STARBASE 2.0 students on STEM projects during the instructional period. May or may not have experience in a STEM field. Must be supervised by a STEM Coach or School Liaison.

STARBASE Edwards Participates in the Purple Up Car Parade

Each year, April is set aside as a way to appreciate and celebrate the month of the military child. Several organizations and agencies use the month to recognize and applaud military children for their daily sacrifices and the challenges that they overcome.

With our current global pandemic challenge, Edwards Air Force decided to celebrate in a unique way this year. A clever salute to military children by carrying out a "Purple Up for military Kids" car parade that included decorated vehicles with signs, streamers, and balloons. STARBASE Edwards staff drove two hours throughout the housing divisions, CDC, school-age center, and family camp. STARBASE Edwards teamed up with base leaders, school teachers, and administrators to support the event and donate several STEM-friendly kits to the community.

To witness students and their families on their lawns, waving their "thank you" and "I miss you" signs was the sincerest gesture of appreciation. Director Flores explains, "witnessing the community come together as one to celebrate our students, brought joy to my heart." Our crew will continue to thrive despite the challenges we face.





Director's Questionnaire Hints

Completing Your Surveys

It has been noted that several sites are not going past the final question when completing the various parts of the 2020 Director's Questionnaire. When this happens, the submission is classified as "incomplete" and does not register in the survey system. Please insure that you proceed PAST the last survey question of each part ("Anything you want to add/couldn't complete") by hitting "NEXT" which takes you on to the final "Thank You" screen. From the "Thank You" screen, select "DONE" to finalize and submit your survey.

List of Participating Schools - SY2019-2020

Please list ALL schools scheduled to participate during School Year 2019-2020. Schools that were not actually able to participate due to COVID-19 cancellations should be marked with an asterisk "*".

5