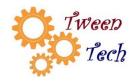


## Tween Tech at Stockton University Wednesday, January 3, 2024

| USC 2              | Build a Wind-Powered Turbine: Become budding engineers working in teams             |  |
|--------------------|---|--|
| 101                | to design and build wind-powered turbines with their unique wind turbine            |  |
|                    | blade design. Then they will test their turbines in a wind tunnel to see how        |  |
|                    | efficiently they can harness the wind's energy. Finally, they will analyze the      |  |
|                    | results and make improvements to optimize performance with Stockton                 |  |
|                    | Technology Integrationist, Michelle Wendt.  |  |
| Compus Ctr         | Coding Vous Subara Dabate Most Subara Dat on amazing subarias rabat                 |  |
| Campus Ctr<br>MR 5 | Coding Your Sphero Robot: Meet Sphero Bot, an amazing spherical robot               |  |
| IVIN 3             | that provides endless possibilities for learning and creativity. Users will learn   |  |
|                    | block-based coding, with a small glimpse at the text-based coding option.           |  |
|                    | Participants will explore how to apply basic programming concepts to create         |  |
|                    | various movements and behaviors, including lights and sounds. We will also          |  |
|                    | look at using sensors to detect obstacles, a basic introduction to artificial       |  |
|                    | intelligence, with Stockton Technology Specialist Phil Polsinelli.                  |  |
| Campus Ctr         | Egg Drop Challenge: Humpty Dumpty needs our help to make a safe getaway             |  |
| Event Room         | from the wall. Design the perfect parachute with Burlington County Institute        |  |
|                    | of Technology Teacher Jackie McGuinness.  |  |
| LICC 2             | Food Chamistury This workshop looks at some of the above intuition to kitch an      |  |
| USC 2              | <b>Food Chemistry:</b> This workshop looks at some of the chemistry in the kitchen, |  |
| 226                | from gels to nucleation (ice cream!) with Stockton Professor Elizabeth Pollock.     |  |
| USC 2              | Oceans and Climate: Get ready for some hands-on investigation of ocean              |  |
| 326                | density layers and melting ice, using tank models of the ocean with Stockton        |  |
| 323                | Marine Science Professor Anna Pfeiffer-Herbert.                                     |  |
| USC 2              | Lasers and Lissajous Figures: Build a device to display laser figures on the        |  |
| 225                |   |  |
|                    | and Physics Majors.   |  |
| Maple              | Sap to Syrup: Learn how Stockton is tapping and collecting sap from the red         |  |
| Grove              | maple trees at our Maple Grove. Then they will go to the Sugar Shack to see         |  |
|                    | how the sap is cooked down and made into maple syrup. The girls will get to         |  |
|                    | taste Stockton's Maple Syrup with Educational Specialist Debby Sommers.             |  |
|                    | Students should dress to be outside in the cold!                                    |  |
| Campus             | Upcycled STEM Challenge Lab: This open session serves late bus arrivals or          |  |
| Center             | early departures. An open format, each table will have all the household            |  |
| Event Room         | materials to design an engineering solution with popsicle sticks, toothpicks,       |  |
|                    | twine, and duct tape! with Stockton Dean of Education Claudine Keenan.              |  |



## Tween Tech at Stockton University Wednesday, January 3, 2024

## Agenda for the Day

| Time            | Event  | Location                               |
|-----------------|--|--|
| 8:00 – 8:45am   | Arrival, Pre-survey, Name Tags & Welcome         | Bus Drop-off, Campus Center Event Room |
|                 | Do Now Activity                                  |  |
| 9:00 – 10:30am  | Workshop 1 Options                               | See details (reverse)                  |
|                 | Students follow Volunteer Guides to Sessions     |  |
| 10:45 – 11:15am | Brunch Time Lunch Food                           | Campus Center Event Room               |
| 11:30 – 1:00pm  | Workshop 2 Options (Repeat)                      | Same locations                         |
|                 | Educators to any workshop(s) of their choice     |  |
| 1:15 – 2:00pm   | Wrap Up (Post-survey and Tech Trek video, forms) | Campus Center Event Room               |
|                 | Question/Answer cards, STEM Activities           |  |

**DO NOW:** Make your STEM questions for the day index cards. You can ask questions about what field(s) of study the workshop includes, what careers are related to it, what high school and college classes lead up to it, what % of women are enrolled in those related majors or careers (see samples)

Session 1: what is the engineering design process?

Session 2: can you tell me more about some careers in biology?

Girls: please stay with the volunteer holding your Workshop Group sign. If you need to use the restroom, your volunteer or chaperone will walk you (and a friend – always go in pairs) both to and from the restroom. Please put your cell phone away for today, unless your workshop volunteer asks you to use it in the session! Remember to ask your STEM questions for the day in both sessions – they can be the same questions or different ones based on which workshops you plan to attend – the more you ask, the more you learn!

## Remembering Dr. Vera King Farris



(July 18, 1938 - November 28, 2009) A Tribute by Jan Harris, AAUW NJ, Garden State Branch Member

The late Dr. Vera King Farris was the third president of Stockton who served for 20-years from 1983 until her retirement in 2003. A distinguished woman scientist, President Emerita Farris became the first female African-American president of a New Jersey public college, and one of the first in the nation.

Dr. Farris was a native of Atlantic City, New Jersey and attended Atlantic City High School, graduating third in the class of 1954. She earned a biology degree from Tuskegee University in 1959. She later earned master and doctorate degrees in zoology from the University of Massachusetts Amherst. She held administrative and teaching positions at the State University of New York at Stony Brook and Brockport, and the University of Michigan. Dr. Farris returned home to New Jersey to become Vice President for Academic Affairs at Kean University in Union before leading Stockton to become nationally ranked, more diverse, and a more beautiful campus.

How proud Dr. Vera King Farris would be to know that in the tradition of AAUW New Jersey's own highly successful Teen Tech program for high school girls, members of the Atlantic and Cape May branches are holding annual Tween Tech events for 6<sup>th</sup> – 8<sup>th</sup> grade girls. As Tween Tech stimulates and inspires the interests of middle school girls in STEM, Dr. Farris' spirit will certainly be with this innovative program on the campus of her beloved Stockton University, in the company of girls from her Atlantic City district and its neighboring schools of southern New Jersey.