

Alternate Unit Plan

Project / Event Name	Computer Literacy through Coding
Description	Teaching today's students and keeping them engaged is becoming more and more of a challenge. However, using technology, for example Disney Codeillusion, will present students with a series of challenges to solve while teaching them the basic coding skills needed to solve them. Teaching fundamental concepts like coding exposes students to more than just language; it teaches the kind of logic that will be applicable regardless of what programming tools a student may pick up in the future. Further, by providing opportunities for this hands-on learning and a visual environment that exists side-by-side with the Disney Codeillusion, Swift Playground, and other platforms for coding challenges, students can see the results of their efforts in real time, giving them a better understanding of what to do next. More importantly, as we are talking about careers for our students, right from the elementary school, it is imperative to equip them with skills that do not only include their interests, but skills that will be relevant in their future career plans. Most of the best ones today require the ability to code, software engineering, web development, data science understanding all need coding as an important skill. More importantly, students love to do it!
Purpose	Statement for why this project/event is being created – This project is being created because we have seen the importance of coding in our students' lives and the interest that they attach to it. Even our most challenging students tend to respond much better to this type of learning activity.
<u>Established Goals;</u> Standards Being Met	Outcome of the project/event ISTE Standards 4a - Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. 4d - Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. 5a - Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
<u>Essential Question(s)</u> (at the end of this project/event) what people will be able to answer or do	Highwood Hills is one of the pilot sites for Early Career Initiatives, and students in grades 4 and 5 are expected to develop a Personal Learning Plan (PLP) by the time they finish 5 th grade. Given the ubiquitous nature of technology and how coding is everywhere, the big question for us is how we can prepare our students for success in an ever-growing field of Information Technology.
Audience	Students in Grades 4 and 5
Timeline	Project start/event date - September – May, 2021 Planning start date – August, 2020 Milestone dates – May 14, 2021 – Culminating Activity Day during ESTEM Night
Materials / Resources Needed	Black Girls Code - https://www.blackgirlscode.com/

	Girls Who Code - https://girlswhocode.com/ Code.org https://code.org/ Coding workshops https://code.org/professional-development-workshops Hour of Code - https://hourofcode.com/us
Tools/Equipment Needed	Laptop for teacher; iPads for students, shared digital space for curated files
Technology Needed:	<input type="checkbox"/> Have in place X <input type="checkbox"/> Need to secure <input type="checkbox"/> Need training X <input type="checkbox"/> Students have access X <input type="checkbox"/> Families have access
Who to Involve	Collaborators, team members planning the event – Classroom Teachers, Learning Lab Teachers, Counselor.
Research/Rationale	
Unit Plan Author (name, school and optional email address or hyperlink to educator's web page)	Fatima Lawson, Ph.D. Highwood Hills Elementary School – Fatima.lawson@spps.org
Additional Credit Given To	Learning Lab Teachers who will be helping to teach and monitor student' implementation and progress of the projects.