

Learning Organization

Pilot

Projects

Design

Thinking

Excellence

Innovating in Support of the Core

New strategies and systems for delivering Teaching & Learning.

Pipeline of Emerging Ideas

To prepare for emerging trends, advancements and changes that impact education, ideas are tried and vetted by our schools and teams; some will advance to support the core.

Teaching & Learning Core

Focus: equity and excellence in core curriculum and supports.



Advancing innovation through Computer Science

School Design is the leading strategy of our Strategic Plan implementation because we are committed to ensuring that "every school is purposefully designed to ensure that every child is highly engaged in a rigorous, creative and innovative academic curriculum, their learning environment, and powerful applied learning practices aligned to college, careers, and community." As we deliver on this promise to our students and consider the tremendous opportunities and advancements of computer science in our local, national and global workplace, we are starting to refocus on rich, rigorous and applied learning opportunities in the areas of design, coding, programming, modeling, engineering, information management and research, scientific discoveries, and a variety of approaches to engage students in solving problems and boosting quality of life in their communities. This refocus is about making learning fun and relevant for our students, while preparing them for competitive and exciting careers in a variety of growing and emerging fields right here in Hawai'i.

Here are some compelling data points informing our work:

In 2017, 499,853 computing jobs existed nationwide with only 42,969 Computer Science graduates.

Hawaii had 1,293 related jobs with only 155 graduates. https://code.org/advocacy

According to the United States Department of Labor, Bureau of Labor Statistics, computer and information technology occupations offer a national median wage of \$82,860 versus \$37,040 for all other jobs. https://www.bls.gov/ooh/computer-and-information-technology/home.htm

So how is the Hawai'i State Department of Education (HIDOE) preparing students for these opportunities?

The HIDOE is collaborating with key stakeholders including students, teachers, administrators, industry leaders, higher education and community partners to review K-12 Computer Science standards with a focus on expanding computer science learning opportunities for the 2018-19 school year and beyond. Broad stakeholder input will be key to inform next steps in course

development, teacher professional development, statewide academic competitions and student project demonstrations, model classrooms, and community-centered design thinking projects. With this holistic approach we are focused on the following deliverables:

- 1. Adoption of Computer Science Standards aligned to national efforts,
- 2. Development of single courses and pathway courses for maximum student access,
- 3. Identification of standards-based curricular resources,
- 4. Quality K-12 professional development in computer science including fellowships and externships for teachers.
- A schedule of academic competitions in partnership with business, industry and government,
- 6. Expansion of regional and school-based student demonstrations,
- 7. Increased partnerships for access to meaningful internship and apprentice models, and
- 8. Improved career counseling and information sharing around current and emerging computer science related work and study opportunities in Hawai'i.

Through these eight areas, we will provide equitable and expanded access to Computer Science learning opportunities for every K-12 student by 2022.

In September 2017, the HIDOE established a work team to lead the statewide effort, communicate with key stakeholders, partner with the University of Hawai'i to offer grant-funded professional development, and identify K-12 stepping stones to pave the path for post-secondary college and career opportunities in the area of Computer Science. A comprehensive work plan will be presented to the HIDOE Governing Board during this spring semester followed by a statewide presentation of goals, actions steps and deliverables.

Parent Talk Story with the Superintendent, Spring 2018

During this second semester of the school year, I will be hosting several sessions in the form of Conversations with Parents. The goal of these conversations is to invite approximately 25 parents per session to discuss the work of the HIDOE in supporting college and career readiness for all students. I am seeking six school sites across our Islands to work with our Community Engagement Office to serve as a host site in late February and March. I want to thank Hilo High, which has offered to serve as a host site on the Big Island! Parents from schools in proximity to the host site will be invited for this cross-school conversation. Based on collective parent input, I will dedicate a future Kick Off Your Week brief to the ideas raised about how we can further improve college and career readiness for all students through parent engagement strategies.