Developing, Supporting, and Sustaining Future Ready Learning
Executive Summary
Professional Development: Developing and Supporting Future Ready Schools
Access to Future Ready Connectivity and Devices
Future Ready Research and Evaluation
Executive Summary

Goal/Purpose: In order to prepare students for success in the future workforce, Hawaii needs schools that are Future Ready. Schools that go beyond computer labs and traditional project based learning to seamless integration of technology in a way that expands learning beyond the four walls of the classroom. Developing Future Ready schools requires a comprehensive approach - coupling administrative support for developing a schoolwide technology vision and plan; professional development to support and empower teachers; training for technology coordinators to manage technology rich facilities; high speed connectivity; and access to devices. This document provides a strategy for how the Department can support schools as the move to integrate technology, with the longer term goal of full 1:1 implementation across the state.

Alignment to the Strategic Plan: In the Board of Education/Department of Education Strategic Plan, Superintendent Matayoshi describes the need for building 21st century schools, classrooms and learning opportunities. The importance of preparing students for success in the future is further woven throughout each of the goals, strategies, and metrics in the Strategic Plan. The list below provides an overview for how each of the pillars of our plan for future ready technology integration align to and support the Strategic Plan.

1. Goal 1: Student Success
   a. Promoting Student Agency: Students have opportunities to explore their learning interests, engage in personalized learning activities, and produce authentic work. Students are tasked with solving real world issues and collaborating with local and global peers.

2. Goal 2: Staff Success
   a. Courageous Leadership: Specific goals, clear communication, engaged staff, and strong partnerships help build an ecosystem that supports digital learning
   b. Empowered teachers: Access to professional learning communities, and instructional experts, gives teachers the support they need, when they need it.

3. Goal 3: Successful Systems of Support
   a. High Speed Connectivity: Schools need the infrastructure to support digital learning. That means high-speed Internet connections, a powerful wireless network and the tech expertise to support the two.
   b. Ready Access: Access to the tools of the modern economy and how to use them effectively are essential to a student's future success.
   c. Tools and Resources: Videos, simulations, animations of complex problems and interactive applications enable students to connect with learning in a way not possible with textbooks alone.
Professional Development: Developing and Supporting Future Ready Schools

Summary: The Department proposes a 5-year, multi-prong implementation plan comprised of:

- external vendor support for large scale PD, building internal state capacity, and resource development;
- internal staff support for follow up on-demand PD and resource development; and
- complex area/school capacity to provide peer to peer support.

By coupling school level, internal state office, and external capacity, the Department will be able to deploy a plan that builds capacity closest to the point of implementation and scales to statewide implementation with minimal adjustments to existing position counts at the state office. This focus on capacity building allows the Department to provide the necessary supports and resources at a lower cost point because growth begins to happen organically, building on the foundation set in year 1.

Based on lessons learned from implementation of the Access Learning Pilot project, the implementation plan begins with a focus on supporting administrative vision/planning and professional development. Student level implementation begins in the second phase, only after school level staff are prepared. This staggered approach to implementation places schools in one of three tiers:

- **Future Ready Pathway Schools**: those schools in the process of preparing to embark on the Fast Track. The schools in this tier are participating in the leadership and staff professional development to plan for implementation.

- **Future Ready Fast Track Schools**: those schools that have received the necessary leadership training, taken the Future Ready Assessment, developed a Future Ready Implementation Plan, and committed to the programmatic and evaluation components of the Future Ready Fast Track Program.

- **Non-Track Schools**: the schools in this tier come online organically, as their peers enter the Future Ready Pathway and/or Fast Track.
Future Ready Pathways

Goals
- Create a Future Ready Skills assessment to identify gaps between current levels and benchmark levels of readiness for technology integration.
- Identify schools ready for targeted professional development to fast track future readiness.
- Build an organic, vibrant, and collaborative statewide 21st century professional learning community for all Department teachers. Initiate application process for schools interested in going deeper.
- Develop statewide, school-based TC and UST capacity for supporting technology integration.
- To support classroom-level exemplars of 21st century learning and develop sustainable professional development opportunities based on existing levels of success.

Activities
Understanding the Change and Future Ready Planning. While tackling a 1:1 deployment, schools oftentimes focus on getting devices to students first and foremost. However, lessons learned from the Access Learning schools, other 1:1 schools in Hawaii, and research from around the world shows that a successful 1:1 deployment needs much more than just devices. This workshop uses the 1:1 Deployment & Change Management Guide, created as part of the Access Learning Pilot, to help school level leadership and technology teams map out a successful 1:1 program. Content includes internet safety training, parent nights, questions to ask when selecting the device that works best for your school, professional development and a host of other integral pieces. This workshop is the gateway to a six month guided workshop where schools access customized support to write and detail their Future Ready Plan.

Future Ready Pillars Institute. This course is meant to help schools build Future Ready capacity via the specialized training of selected faculty members. These Pillars will receive high levels of training technology integration strategies to support implementation of the Common Core Anchor Standards, next generation literacy cycles, formative assessment and advanced applications to launch their classrooms into the future. Pillars will also spend time observing classrooms at model Future Ready schools. Current future ready schools include the University Laboratory School, Keaau Elementary, and Moanalua Middle. The Department project team will add to the list of options as more schools come on line.

Pillars will then return to their schools to serve as exemplars of Future Ready teaching as well as resources for local school faculty and the greater ACE21 community of teachers and students. Teachers will be chosen based on administrator nomination and acceptance.

Future Ready Technical Retreats. These workshops for technology coordinators and User Support Technicians will help schools design and deploy a safe, collaborative and communicative technology integration strategies that support deploying 1:1 computing technology effectively. The course will build on the resources developed in the Access Learning Pilot, to help administration get their schools Future Ready.
Alignment to the Strategic Plan and Future Ready Goals

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Future Ready Pathways Year 1 Timeline & Impacts

1:1 institutes
- Total administrator enrollment: 50 schools/200 administrators
- Guided Future Ready Implementation Plan Workshop: 6/15 to 12/15

Application process
- First draft of Future Ready Implementation Plan due: 10/2015
- Final draft of Future Ready Implementation Plan due: 12/2015
- 20 FRS Fast Track schools chosen for Year 2: 2/2016

Pillars Institutes
- Two institutes to be held 9/2015 and 3/2016
- Total Faculty Enrollment: 200 from the 50 chosen Future Ready Pilot Schools (100 per institute)

Complex Wide Future Ready Technical Retreats
- Total Enrollment: 7 Full Complex Technical Retreats in July 2015
FUTURE READY LEARNING PLAN: Hawaii DOE Access Learning Team

Future Ready Pathways Year 2 Timeline & Impacts

1:1 institutes
Total administrator enrollment: 60 schools/240 administrators

Application process
First draft of Future Ready Implementation Plan due: 10/2016
Final draft of Future Ready Implementation Plan due: 12/2016
30 FRS Fast Track schools chosen for Year 2: 2/2017

Pillars Institutes
Three institutes to be held 9/2016, 1/2017 and 3/2017
Total Faculty Enrollment: 300 from the 60 chosen Future Ready Year 2 Schools (100 per institute)

Complex Wide Future Ready Technical Retreats
Total Enrollment: 8 Full Complex Technical Retreats in July 2016

Future Ready Pathways Year 3 Timeline & Impacts

1:1 Institutes
Total administrator enrollment: 70 schools/280 administrators

Application process
First draft of Future Ready Implementation Plan due: 10/2017
Final draft of Future Ready Implementation Plan due: 12/2017
40 FRS Fast Track schools chosen for Year 3: 2/2018

Pillars Institutes
Four institutes to be held 9/2017, 11/2017, 3/2018, 5/2018
Total Faculty Enrollment: 400 from the 70 chosen Future Ready Year 3 Schools (100 per institute)
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Total 3 Year Program Impacts
● 1:1 Institutes impact 180 schools and 720 administrators serving approx. 113,000 students.
● Pillars Institutes impact 900 teachers at 180 schools serving approx. 113,000 students.
● Future Ready Technical Summits impact technology coordinators and user support technicians at all schools.

Future Ready Fast Track

Goals
Once school-based administration teams have established their Future Ready Implementation Plan and participated in the Future Ready Pathways program they become eligible for additional professional development opportunities under the Future Ready Fast Track program. Goals for the Fast Track program include:

● Close the gaps found on the Future Readiness Assessment
● Begin implementing school-based programs to build Student Agency and promote Moonshot Thinking
● Full faculty professional development towards Future Ready goals
● Establish channels for intra-school sharing of best practices
● Build capacity to design and deploy school-based, mission consistent professional development

Activities

Future Ready Fast Track Summits. These Summits will include all schools engaged in the FR Fast Track program and will serve two goals: 1) To provide advanced levels of 21st century training for teachers and administrators in the Fast Track and 2) To give both teachers, administrators, technology coordinators AND students a chance to share their Future Ready stories, best practices and lessons learned along the way.

Future Ready Fast Track Professional Development. Schools selected for the FR Fast Track program will received a targeted blend of standards-based, 21st century professional development for all faculty in the school. Also, teachers, administrators and technology support staff will receive specialized support from the Office of Curriculum Instruction & Student Support to target 1-on-1 professional development at the school and classroom level.

Future Ready Deeper Learning Opportunities(for FR Fast Track Schools). As schools become Fast Track schools, the project team will work with them on Future Ready Deeper Learning Opportunities. These opportunities will focus on technology integration to develop creative problem solvers, build global awareness, able to respond and contribute to 21st century society, and to create positive change in their local and global communities. These opportunities would build on the work in Future Ready Fast Track schools, taking the curricular goals and approaches that already exist and expanding them beyond the four walls of the classroom.
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Alignment to the Strategic Plan and Future Ready Goals

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Future Ready Fast Track Year 1 Timeline & Impacts

- Future Ready Deeper Learning Opportunities
  - Academy teacher training in first semester SY 2015-2016 with local Academy launch in January 2016
  - Total faculty enrollment: 16

Future Ready Fast Track Year 2 Timeline & Impacts

- Future Ready Deeper Learning Opportunities
  - Teacher training in first semester SY 2016-2017 with opportunities launching in January 2017
  - Total faculty enrollment: 32

Future Ready Fast Track Summit
- Summits would occur before school during July/August 2016
- Total faculty enrollment for 20 FR Fast Track Schools: 300 teachers

Fast Track Professional Development
- Professional development would be ongoing for SY 2016-2017 for 20 FR Fast Track Schools
- Total faculty enrollment for 20 FR Fast Track Schools: 1040 teachers

FUTURE READY LEARNING PLAN: Hawaii DOE Access Learning Team
Future Ready Fast Track Year 3 Timeline & Impacts

Future Ready Deeper Learning Opportunities
Teacher training in first semester SY 2017-2018 with opportunities launching in January 2018
Total faculty enrollment: 48

Future Ready Fast Track Summit
Summits would occur before school during July/August 2017
Total faculty enrollment for 50 FR Fast Track Schools: 900 teachers

Fast Track Professional Development
Professional development would be ongoing for SY 2017-2018 for 50 FR Fast Track Schools
Total faculty enrollment for 50 FR Fast Track Schools: 2,600 teachers

Total 3 Year Program Impacts
- FR Fast Track program puts 50 schools on pace to be certified Future Ready by 2018
- 24 FR Deeper Learning Opportunities launched impact 200+ students and 96 teachers
- FR Fast Track Summits impact 1,200 teachers servicing 20,000 students
- FR Fast Track Professional Development impact 2,600 teachers servicing 42,000 students

Future Ready Sustainability

Goals
- Sustain impacts of Fast Track program and provide additional opportunities for Pathway schools to close the gap to Future Readiness
- To leverage school-level resources to support program goals and mission
- To grow both virtual and local professional learning networks to bolster sharing and support of 21st century best teaching practices

Activities
ACE21 Virtual Community Expansion. Currently the state of Hawaii has the second largest virtual learning community in the world behind the country of India. Over the past year this community has been a leader in the field in providing synchronous and asynchronous professional development opportunities to over 1,100 local administrators and teachers. Participants have access to live professional development seminars, classroom observations, virtual field trips, and certified trainers from around the world.

HIDOE Future Ready Technical Summit. This statewide Summit will capitalize on the complex level Technical Retreats that create the local, school-based capacity to support 1:1 initiatives and 21st century
environments. These Summits will bring together all of the USTs and Technology Coordinators statewide to share and learn with local leaders and national experts and trainers in the field of Future Ready preparedness.

**21st Century Learning Summits.** These island specific Summits will provide teachers an opportunity to both share their best practices or learn from other teachers and professional trainers. These retreats will also be a chance for members of the ACE21 Community to meet in person and strengthen the relationships necessary for a vibrant and productive virtual PLN.

**Pillars of the Community.** These highly trained products of the Future Ready Pillars Institute will serve as local school-based providers for both professional development and observation opportunities. This will ensure ongoing support for teachers at the school level while also making sure PD is mission-consistent and environmentally appropriate.

### Alignment to the Strategic Plan and Future Ready Goals

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**Total 3 Year Program Impacts**

- ACE21 Community will impact 6,000+ teachers servicing 98,000 students
- Pillars of the Community will impact 180 schools servicing 113,000 students
- 21st Century Learning Summits will impact schools on all 5 islands
- HIDOE Future Ready Technical Summit will impact 500 technology coordinators and USTs from around the state
- Research & Evaluation will inform best practice for this and other programs moving ahead
Access to Future Ready Connectivity and Devices

**Summary:** Preparing students to be ready for the future - whether that’s college, career, or both - requires providing students with opportunities to master the digital tools they will be expected to use. Too often, these opportunities are constrained by a school’s zip code and resources. The Access to Future Ready Connectivity and Devices portion of Hawaii’s Future Ready Schools plan seeks to mitigate these constraints by ensuring all schools have access to high speed connectivity and pathways for purchasing high quality digital devices, at a significantly reduced price.

**Future Ready Connectivity:** The Hawaii Department of Education's Office of Information and Technology Services (OITS) has successfully establish WiFi connectivity in all of the DOE-public schools. Moving forward, OITS is delivering on a Network 2.0 plan. Network 2.0 increases bandwidth to schools and state offices while maintaining compliance with privacy laws. The classroom results will be reliable and responsive access that enables our educators to provide students with Future Ready learning tools, knowledge, and skills.

More specifically, as a result of these efforts, the Department anticipates schools will have:
- capacity to allow schools to use technology (internet capacity, collaboration tools, etc.) to support their initiatives;
- business/information systems with high availability to users;
- an aggregate bandwidth of 1Mb per student;
- reliable and responsive access to online systems and assessments; and
- a device-friendly wireless infrastructure to support access learning (aka 1:1).

**Future Ready Devices:** In order to support schools’ access to high quality future ready devices, the Department will work to develop a procurement pathway that allows schools to choose from a state approved list of tablets and laptops. This list would allow the state to leverage its buying power to secure higher discount rates, while preserving each principal’s autonomy to select the device that best fits their school’s vision and implementation plan. Without access to this technology, students would continue to be constrained by the limits of resources at their specific schools – limited by zip code when they could be exposed to global opportunities. With new technology, students also have increased opportunities to work at their own speed and receive additional one-on-one help they need to develop their knowledge and skills.
Future Ready Research and Evaluation

The Department’s plan to implement Future Ready Learning across the state of Hawaii holds significant opportunity to contribute to national research on the implications of technology integration for implementation of the Common Core State Standards, student preparedness for the demands of a global workforce -including technical/STEM careers, and the potential resource benefits for schools. As the ninth largest district in the country, Hawaii provides an opportunity to scale the work in a consistent manner and study the impact of large scale technology integration on systems change (state/district office to school level to classroom level).

In addition, both a summative and formative research component will support continuous improvements to ensure the project design is meeting the needs of administrators, teachers and students.

Defining Success. Long term success of the Future Ready Technology Integration Plan will result in improved student achievement and improved continuous access to technology for all students in all schools. Based on the impact of technology integration in K-12, students will be more prepared to enter college and the workforce with the skills necessary to succeed. In order to further define and measure the impact of the project, the research and evaluation work will focus on the following:

- **What is the impact on student success (all students, ELL, SWD, FRPL, and by school level)?**
  - Frequency of disciplinary actions.
  - Student attendance.
  - Achievement data (high stakes test scores and existing formative assessment systems. Focus on math and science).
  - Tripod survey data.
  - Student writing analysis.
  - Course completion rate.
  - Graduation rate.
  - Dropout rate.
  - College enrollment rates.
  - College remediation rates (both ELA and math).
  - Students entering STEM fields in college.
  - Student collaboration and innovation via digital tools.
  - Student perception data.
  - Students exiting ELL status (and their literacy performance pre and post).

- **What is the impact on staff success?**
  - Teacher attendance.
  - ACE21 Community enrollment and participation.
  - Quality and impact of professional development.
  - Teacher perception data related to burden and impact.
  - Evidence of use for innovative and engaging classroom activities.
  - Expectations for staff use (principal modeling, etc…).

FUTURE READY LEARNING PLAN: Hawaii DOE Access Learning Team
What is the impact on system success?

- Paper and copying expenses.
- Substitute teacher costs.
- Long term professional development costs as the grassroots peer to peer model overtakes centralized state/contractor professional development.
- Projected cost savings from student achievement impacts (remediation).
- Paperwork reduction.
- Network up-time.
- Bandwidth per student.
- Devices per student (by school, over time).
- School Quality Survey data.
- Loss/Theft/Damage data.