




STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

August 15, 2017

TO: The Honorable Kenneth Uemura
Chairperson, Finance and Infrastructure Committee

FROM: Dr. Christina M. Kishimoto 
Superintendent

SUBJECT: **Update on Department of Education Status on Hawaii's 21st Century Design Progress**

1. DESCRIPTION

The Department of Education designs its new facilities based on current Educational Specifications (EdSpec). The EdSpec allows the design team to advance learning environments during the design process by way of direct input from the learning community.

2. UPDATE OR PRESENTATION

The Office of School Facilities and Support Services to provide an update of Hawaii's 21st Century Design Progress.

CMK:jmb
Attachment

c: Office of School Facilities and Support Services

Update on Department of Education status on Hawaii's 21st Century Design Progress

Finance and Infrastructure Committee Meeting
August 15, 2017



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Overview of Today's Presentation

- **Definition of 21st Century Learning**
- **Definition of Interactive Design Process**
- **Key Characteristics of 21st Century Schools**
- **Examples of DOE's 21st Century Schools**

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Definition of 21st Century Learning

- **Rigorous Academics**
- **Critical Thinking & Reasoning Skills**
- **Collaborative Skills**
- **Proficiency in Technology**

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Definition of 21st Century Learning

Three Categories of 21st Century Learning Skills

1. Learning and Innovation Skills

- **Creativity & Innovation**
- **Critical Thinking & Reasoning**
- **Communication & Collaboration**

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A background image of a modern classroom with green walls, large windows, and several wooden desks with black chairs arranged in rows. The text is overlaid on this image.

Definition of 21st Century Learning

Three Categories of 21st Century Learning Skills

2. Information, Media & Technology Skills

- **Information Literacy**
- **Media Literacy**
- **ICT (Information & Communication Technology) Literacy**

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A background image of a modern classroom with green walls, large windows, and several wooden desks with black chairs arranged in rows. The text is overlaid on this image.

Definition of 21st Century Learning

Three Categories of 21st Century Learning Skills

3. Life and Career Skills

- **Be Flexible and Adaptable**
- **Possess Initiative and Self-Direction**
- **Have Social and Cross-Cultural Skills**

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Facilities need to be Program Driven

**Therefore an understanding
of 21st century learning
is key to designing 21st century
educational facilities**

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Definition of the Interactive Design Process

- **Identify the Stakeholders**
- **Develop an Educational Plan**
- **Set the Design Parameters**
- **Select the Design Team**
- **Form the Steering Committee**

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Definition of the Interactive Design Process

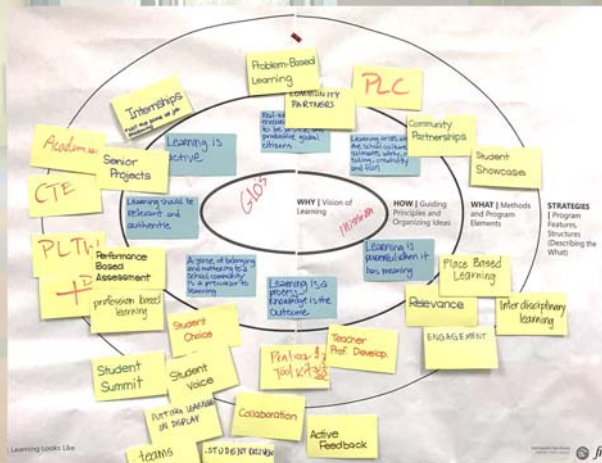
• Identify the Stakeholders



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Definition of the Interactive Design Process

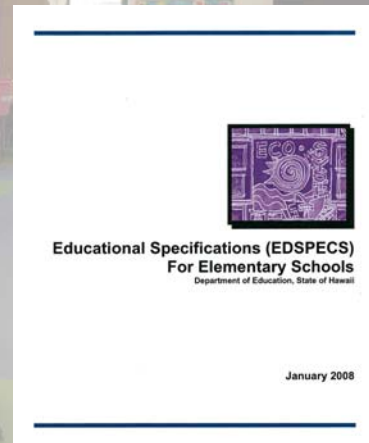
• Develop an Educational Plan



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Definition of the Interactive Design Process

- Set the Design Parameters
 - Scope
 - Overall Square Footage
 - Budget



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Definition of the Interactive Design Process

- Select the Design Team



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Definition of the Interactive Design Process

- **Form the Steering Committee**



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Benefits of the Interactive Design Process

- **Strengthens understanding by all decision makers**
- **A broader range of perspectives = better solutions**
- **Stronger ownership & commitment to the school by stakeholders**
- **Increases participation & effort by all involved**

This process reflects the values of HĀ

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21st Century Schools need to be

**Designed for the implementation of
today's instructional strategies
and educational needs
with flexibility for the future**

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Key Characteristics of 21st Century Schools

- **Flexibility of Spaces**
- **Furniture Choices for Mobility and Ergonomics**
- **Robust Technology Infrastructure**
- **Sustainable Design**
- **Safe and Secure Environment**

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Flexibility of Spaces

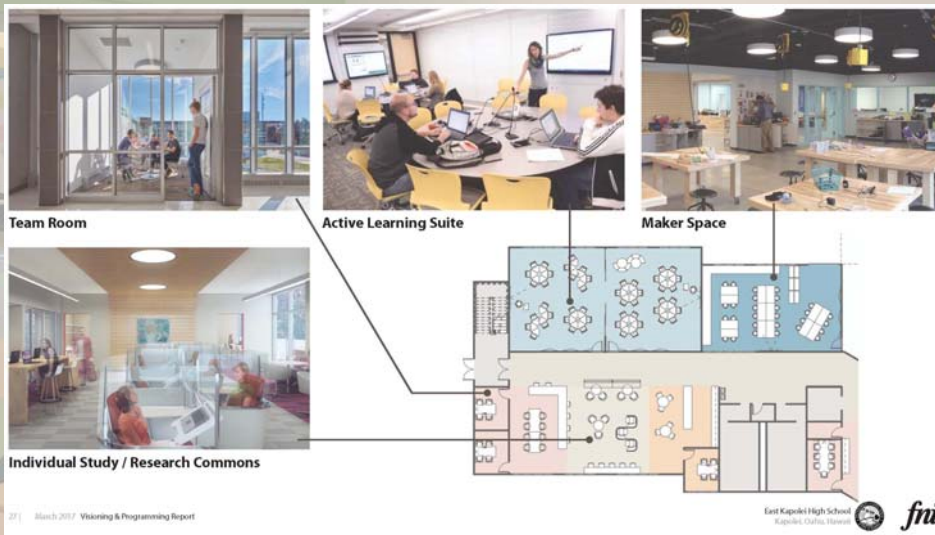
Openness in layout of instructional spaces



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Flexibility of Spaces

Variety of spaces and room sizes



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Flexibility of Spaces

Transparency between spaces



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Flexibility of Spaces

Operable walls



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Flexibility of Spaces Learning Commons



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Flexibility of Spaces Outdoor learning areas



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Flexibility of Spaces

Outdoor & transitional learning areas



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Key Characteristics of 21st Century Schools

Furniture choices for mobility & ergonomics



Key Characteristics of 21st Century Schools

Robust Technology Infrastructure



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Key Characteristics of 21st Century Schools

Sustainable Design

- Indoor Air Quality
- Thermal Comfort
- Daylighting
- Energy Efficiency



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Key Characteristics of 21st Century Schools Sustainable Design

- Water Efficiency / Conservation
- Use the Building as a Teaching Tool
- Ease of Maintenance



Characteristics of 21st Century Schools Safe and Secure Environment

- Ability to control campus access
- Ability to secure for after hours
- Ability to lockdown for an intruder



Examples of DOE's 21st Century Schools

Kapolei High School

Ewa Makai Middle School

Stevenson MS STEM Facility

Kailua HS Science & Technology Facility

Daniel K. Inouye Elementary School

Ho'okele Elementary School

East Kapolei Middle School (in design)

Kihei High School (in design)

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Kapolei High School

Studio Concept for Academies / SLCs

Teacher Collaboration Spaces

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Kapolei High School

Student Support –
Counselors & VP
Offices located
within Houses

Outdoor
Presentation &
Gathering Areas



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Ewa Makai Middle School

School in 1 facility

Secured Entry

Dining Commons

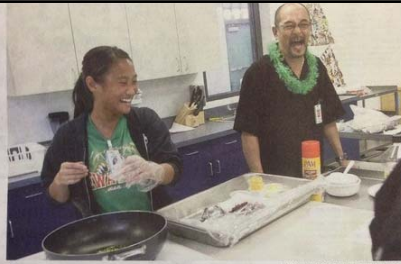


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Ewa Makai Middle School

Elective Wing

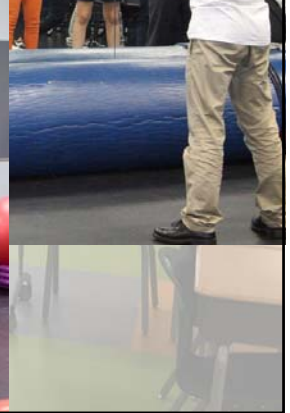
Central Hallways
double as
Learning Commons



Ewa Makai Middle School eighth grader Charline (top) and eighth grader Danyel (bottom) during a food preparation competition for students in the culinary arts program. Charline took first place.



KNIFE SKILLS
LIFE SKILLS



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Ewa Makai Middle School

Outdoor Learning



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Stevenson MS STEM Facility

Science &
Robotics
Classrooms

2nd floor deck for
Gardening &
Astronomy

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Stevenson MS STEM Facility

Covered
Multi-Purpose
Outdoor Learning
Space

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Stevenson MS STEM Facility

Science & Robotics
Classrooms

Mobile Lab Furniture



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Kailua HS Science Building

Facility for
Science,
Aquaponics,
Horticulture, &
Technology

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Daniel K. Inouye Elementary School

Classrooms open
into hallway

Maximize natural
daylighting

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Daniel K. Inouye Elementary School

Use of soft &
mobile furniture

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Daniel K. Inouye Elementary School

Restroom design
for visual
supervision

Water efficiency

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Daniel K. Inouye Elementary School

Covered Playcourt
for PE & Assembly
Activities

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Ho'okele Elementary School

Learning Commons

Openness of Space

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Ho'okele Elementary School

Learning Commons

Mobile & Soft Furnishings

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Ho'okele Elementary School

Transparency of Walls

Indoor Air Quality & Ease of Maintenance

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Ho'okele Elementary School

Transparency of Walls

Indoor/Outdoor Learning Opportunities

Planting & Gardening Areas

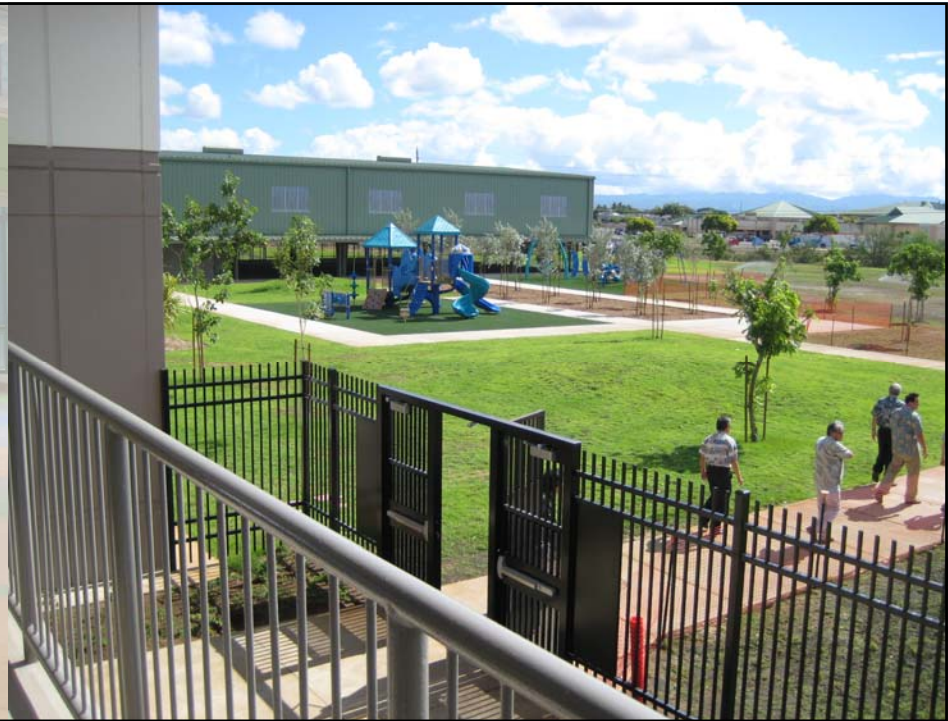
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Ho'okele Elementary School

Securable Campus with Controlled Entries

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Ho'okele Elementary School

Covered Playcourt for PE & Assembly Activities

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East Kapolei Middle School

Phase 1
Anticipated Bid
Opening
End of 2017



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Kihei High School

Phase 1
Anticipated
Bid Opening
June 2018



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