Regular Governing Board Agenda

CABRILLO UNIFIED SCHOOL DISTRICT

Thursday, October 8, 2020

Closed Session 6:00 PM | Via Zoom: https://cabrillok12.zoom.us/j/95891250369

(For public comments on Closed Session items only)

Public Session 7:00 PM | Via Zoom: https://cabrillok12.zoom.us/j/94233285733

Governing Board Meeting broadcast live on the CUSD YouTube channel, on http://www.PacificCoast.tv/, and on Xfinity Channel 27 in Half Moon Bay

In response to the COVID-19 pandemic, Governor Newsom issued Executive Order N-29-20, which temporarily suspended provisions of the Brown Act relating to public meetings. As such, Cabrillo Unified School District will be conducting its Governing Board meeting at the regular time, in a different modality. The District will be leveraging a Webinar format (using Zoom) in order for the Governing Board members to participate remotely, and to allow for orderly public comment. There will not be a physical location for this meeting.

The Governing Board will meet for Closed Session to discuss labor negotiations, student discipline, personnel matters, litigation, anc other matters as provided under California state law as set forth on the agenda below. Following Closed Session, the Board reconvenes to Public Session. Adjournment of the Public Session will be no later than 10:00 PM for all regular and special meetings unless extended by a majority vote of the Board. Writings relating to a board meeting agenda items that are distributed to at least a majority of the Board members less than 72 hours before the noticed meeting, and that are public records not otherwise exempt from disclosure, will be available for inspection at the District administrative offices, 498 Kelly Avenue, Half Moon Bay, CA. Such writings may also be available on the District's website. (Government Code 54957.5b).

Individuals who require special accommodations (Spanish interpreter, accessible seating, documentation in an accessible format, etc.) should contact the Administrative Assistant to the Superintendent at acostar@cabrillo.k12.ca.us no later than 48 hours preceding the meeting.

PUBLIC COMMENTS GUIDELINES

There are two ways in which members of the public may provide comments as part of a Cabrillo Unified School District Governing Board remote meeting:

1. Submit Comments in Advance:
Members of the public may submit comments in advance of the meeting through the following link: http://bit.ly/cusdcomments. Comments will be read out loud by the Board President or a designee during the meeting. Written comments should be limited to no more than 300 words; longer comments might not be shared publicly during the meeting.

However, all comments received, whether or not they are shared publicly during the meeting, will be made available to all Board members.

2. Provide Comment in Real-Time During Remote Meeting:
Members of the public may submit a request to comment in real-time in advance of the meeting by through the following link: http://bit.ly/cusdcomments. When called upon by Board president or designee, speakers will be unmuted. After the allotted time, speakers will be placed on mute.

Because of technical limitations, please submit your comments or request to address the Board in real-time before 6:00 PM on Thursday, October 8, 2020. We ask the participants to type their full name when joining the meeting, as prompted. "Hand Raised" feature only for interpretation.

Individual speakers shall be allowed three minutes to address the Board on each agenda or nonagenda item. The Board shall limit the total time for public input on each item to 20 minutes. With Board consent, the president may increase or decrease the time allowed for public presentation, depending on the topic and the number of persons wishing to be heard. The president may take a poll of speakers for or against a particular issue and may ask that additional persons speak only if they have something new to add. (Governing Board Bylaw 9323 - Meeting Conduct)

IMPORTANT BOARD PROTOCOLS REGARDING PUBLIC COMMENTS

The CUSD Governing Board does not act upon any matter that has not been agendized except under limited circumstances as permitted by law. It is the policy of the CUSD Governing Board to refer matters raised in this forum to staff for further examination and/or action where appropriate.

Instructions to join the Board Meeting are as follows:

> **Please click the link below to join the webinar:** https://cabrillok12.zoom.us/j/94233285733
> **Webinar ID: 942 3328 5733**
> Or Telephone: +1 669 900 6833

Open Board meetings may be recorded and broadcast.

1. CALL TO ORDER

a. Public Comments on Closed Session Topics

b. Adjourn to Closed Session - 6:00 PM

Board Members will meet privately via Zoom for Closed Session. Any action taken during Closed Session will be reported out under "Closed Session Action Report."

1. **Matters Related to Students (Education Code §35146, §48912, §49070)**

   The Board may hear expulsion cases and consider the requests from students for re-admittance following expulsion. Also, the Board may hear matters related to student suspensions/other disciplinary actions, student grade change appeals, and confidential student matters according to Education Code. The Education Code requires closed session in these cases to prevent disclosure of confidential student record information.

2. **Public Employee Discipline/Dismissal/Release (Government Code §54954.5, §54957)**

3. **Conference with Legal Counsel—Anticipated Litigation (Government Code §54956.9 (d)(2) or (3))**

4. **Conference Regarding Labor Negotiators (Government Code §54957.6)**

    - Cabrillo Unified Teachers' Association
    - California School Employees' Association, Chapter 485

5. **Public Employee Performance Evaluation (Government Code §54957)**

c. Reconvene to Public Session - 7:00 PM - Welcome

1. Closed Session Action Report: If applicable
2. Pledge of Allegiance

2. APPROVAL OF AGENDA

3. COMMUNICATIONS

a. Public Comments

b. Employee Organizations Report

1. CUTA Representatives
2. CSEA Representatives

c. Board Members Report

d. Student Board Representative Report

e. Superintendent Report

4. CONSENT AGENDA

a. Approval of Certificated Personnel Report (Consent Agenda)

4.a Board Memo Certificated Personnel Report.pdf (p. 5)

b. Approval of Classified Personnel Report (Consent Agenda)

4.b Board Memo Classified Personnel Report.pdf (p. 6)

c. Approval of CUSD Districtwide COVID-19 Readiness Proposal Contract (Consent Agenda)

4.c Board Memo Districtwide COVID-19 Readiness Proposal.pdf (p. 7)

4.c.1 Eichler Associates COVID-19 Readiness Proposal.pdf (p. 8)

4.c.2 CASH COVID-19.pdf (p. 16)

4.c.3 CHPS COVID-19 White Paper School Ventilation.pdf (p. 51)

4.c.4 NEMI White Paper Proposed School Ventilation.pdf (p. 68)

d. Approval of Quarterly Report on Williams Uniform Complaints (Consent Agenda)

4.d Board Memo Williams UCP Report.pdf (p. 78)

4.d.1 2020-21 Williams UCP Report Q1.pdf (p. 79)

e. Approval of Minutes of Special and Regular Governing Board Meeting (Consent Agenda)

4.e Board Memo Minutes.pdf (p. 80)

4.e.1 2020-08-10 Special Board Meeting Minutes.pdf (p. 81)

4.e.2 2020-08-12 Special Board Meeting Minutes.pdf (p. 82)

4.e.3 2020-08-13 Regular Board Meeting Minutes.pdf (p. 83)

f. Approval of Board Policy Updates as Recommended by the California School Boards Association (Consent Agenda)

4.f Board Memo Policy Updates.pdf (p. 88)

4.f.1 Policy Guidesheet.pdf (p. 89)

4.f.2 4119.11 BP Sexual Harassment 201008.pdf (p. 90)

4.f.3 5145.7 BP Sexual Harassment 201008.pdf (p. 94)

5. GENERAL BUSINESS

a. Presentation of Administrative Regulation 0415.1 Sexual Orientation, Gender Identity, and Gender Expression (SOGIE) (Information)

5.a Board Memo AR 0415.1 SOGIE Presentation.pdf (p. 99)

5.a.1 AR 0415.1 SOGIE Presentation.pdf (p. 100)

5.a.2 AR 0415.1 SOGIE Revision.pdf (p. 107)

5.a.3 CDE Equity Grant.pdf (p. 116)

5.a.4 BP 0415 Equity 190912.pdf (p. 123)

b. Proclamation Endorsing November as National Native American Heritage Month (Action)

5.b Board Memo Proclamation October as Native American Heritage Month.pdf (p. 127)

5.b.1 Proclamation November as Native American Heritage Month.pdf (p. 128)

c. Update on Opening of School Plan and Approval of New Recommendations (Action)

5.c Board Memo Opening of Schools Update.pdf (p. 130)

5.c.1 Opening of Schools Update Presentation.pdf (p. 131)

d. Update on the Cabrillo Unified School District Solar Project (Information)

5.d Board Memo CUSD Solar Project Update.pdf (p. 172)

5.d.1 Focusing on Energy to Plan for the Future Presentation.pdf (p. 173)

6. FUTURE EVENTS

a. October 14 - PTO Alliance Meeting, via Zoom - 6:00 PM

b. November 12 - Regular Board Meeting, via Zoom - 7:00 PM

7. RETURN TO CLOSED SESSION (IF NECESSARY)

8. ADJOURNMENT OF THE MEETING

CABRILLO UNIFIED SCHOOL DISTRICT

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SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Jason Owens, Director of Personnel and Pupil Services
CATEGORY: Consent
ITEM TITLE: Approval of the Certificated Personnel Report

BACKGROUND

The following personnel items are submitted for your ratification/approval.

1. OFFER OF PROBATIONARY EMPLOYMENT FOR 2020-2021

Renee Vences Marson, Immersion Teacher, Hatch Elementary School, effective August 10, 2020.

2. LEAVE OF ABSENCE

Amy Bennett, Speech and Language Therapist, Special Education Department, from October 2, 2020 through June 4, 2021.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

Approve as submitted.

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MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Jason Owens, Director of Personnel and Pupil Services
CATEGORY: Consent
ITEM TITLE: Approve the Classified Personnel Report

BACKGROUND INFORMATION

The following personnel items are submitted for your ratification/approval.

1. REHIRE

Julie Pedersen, Paraprofessional, Kings Mountain Elementary School, effective August 13, 2020.

2. RESIGNATION

Mayra Rodriguez, Family Services Specialist, Migrant Education Department, effective October 9, 2020.

Constantino Torres, District Computer Technician, IT Department, effective October 2, 2020.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

Approve as submitted.

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MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: J Jesus Contreras, Chief Business Officer
CATEGORY: Consent
ITEM TITLE: Approval of CUSD Districtwide COVID-19 Readiness Proposal Contract

BACKGROUND INFORMATION

CUSD is in need of assessing its classrooms ventilation systems to prepare schools for reopening during the COVID-19 crisis. CUSD must certify that its school facilities have functioning air ventilation and filtration systems to meet or exceed OSHA and California Energy Commission requirements for the reopening of schools as set forth by the World Health Organization, the Centers for Disease Control and Prevention, and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHIRAE).

REPORT/PROPOSAL

Staff requests approval of the proposal for the assessment of classrooms ventilation systems not to exceed $50,000.

RECOMMENDATION

Staff recommends approval of the ventilation assessment and repair proposal.

Eichler Associates, Inc.

ROSEMARY BRYAN - P.E., LEED AP (BD+C)
Principal – Cx Authority 9.18.20

Proposal

Districtwide COVID-19 Readiness Proposal

Cabrillo Unified School District

Eichler Associates, Inc. would like to submit the following proposal to Jesus Contreras, Chief Business Officer, Cabrillo Unified School District.

This proposal includes the scope of Engineering and Commissioning (Cx) based on the NEMI/UC Davis and CASH COVID-19 readiness for school opening documents (see red items). Two other resources, ASHRAE and Taylor Engineering, are included for comparison:

- NEMI/UC Davis Energy & Efficiency Institute
  Proposed Ventilation and Energy Efficiency Verification/Repair Program for School Reopening (White Paper)
- ASHRAE Epidemic Task Force
  Schools and Universities
- CASH
  Healthy Schools: Cleaning, Disinfecting, Healthy Air Quality, Scheduling and Social Distancing June 2020
- Taylor Engineering
  COVID-19 White Paper dated 6-2-2020

Summary Table of Tasks

Tasks	NEMI	ASHRAE	CASH	Taylor
PHASE I - (a) Assessment, Maintenance, Adjustment and Repair of Existing Facility Ventilation System				
1. Filtration - Determine if feasible	MERV13	MERV13	MERV13	MERV13
2. Economizer	MECH-05-A	YES	MECH-05-A	YES
3. Ventilation & Exhaust				
A. Assessment (i) Calculation (ii) Measurement vent rates (iii) Survey readings (all distrib) (iv) Bldg pressure	Table 120.1-A MECH-02-A TAB YES	ASHRAE 62.1 Consider Consider YES	Table 120.1-A MECH-02-A TAB YES	YES

1165 Lincoln Avenue #8232
San Jose, CA 95155
408.841.9488
408.482.7027 cell
rosemary.bryan@ea-cx.com
http://www.ea-cx.com

(v) Coil velocities (vi) Intake/exhaust separation (vii) Air flows per design (viii) Measure exhaust air (ix) ERV operation B. Adjustment (review vent rates)	TAB YES YES TAB[1] YES YES	YES YES YES NO NO YES	TAB YES YES TAB[1] YES YES	
4. Demand Control Ventilation	MCH-06-A 800 ppm	Disable or 800 ppm	MCH-06-A 800 ppm	Disable or 800 ppm
5. General Maintenance	YES	YES	YES	YES
6. Operational Controls	YES 2 hr pre-purge 2 hr post-purge	-Purge one week prior -2 hr pre-purge -Disable OCC	YES 2 hr pre-purge	-24/7 NO -Disable OCC SOO
7. Repairs	-Service Unlimited? -District Staff?			
Phase II – (b) CO2 Monitoring	Proposal?			
1. Hard wired sensor				
2. Displays CO2 readings				
3. Notifies teacher				
4. Maintains record				
5. Range of 1-2000 ppm or greater				
6. Certified accurate				
Phase III – (c) HVAC Assessment Report	YES			
1. Name of person certifying report				
2. Description of Assessment and Outcomes				
3. Verification from LEA				
4. Verification of MERV13 filters				
5. Verification of ventilation rates				
6. Verification of exhaust rates				
7. System Deficiencies & Recommendations				
8. Reports documenting initial and final operation				
9. Verification of installation of CO2 monitors				
Phase IV – (d) COVID-19 Reopening Ventilation Verification Certificate	Office of Public School Instruction			

Note 1: Nurses offices only.

1165 Lincoln Avenue #8232
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408.482.7027 cell
rosemary.bryan@ea-cx.com
http://www.ea-cx.com

Phase I Services:

1) Filtration.
   Consistent with the recommendations of the ASHRAE Guidance for Reopening Schools, MERV 13 or better filtration shall be installed in the facility's HVAC system where feasible. Qualified personnel shall review system capacity and airflow to determine the highest Minimum Efficiency Reporting Value (MERV) filtration that can be installed without adversely impacting equipment, shall replace or upgrade filters where needed, and shall verify that such filters are installed correctly. Where a system uses Ultraviolet Germicidal Irradiation (UVGI) to disinfect the air, the UVGI lamp shall be checked for proper operation, replacing bulbs as needed and verifying that the ultraviolet light does not shine on filters. Recommendations for additional maintenance, replacement or upgrades to allow for more protective filtration shall be recorded in the HVAC Assessment Report.
2) Economizer.
   For systems with economizers, qualified personnel shall test system economizer dampers per Section B of NRCA-MCH-05-A – Air Economizer Controls and repair any economizer dampers and controls that are not properly functioning. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report.
3) Ventilation and Exhaust.
   A. Assessment.
   Following the assessment of the filtration and economizer, qualified personnel shall assess the ventilation rates in the facility classrooms, auditoriums, gymnasiums, nurses offices, restrooms and other occupied areas to determine whether they meet the minimum ventilation rate requirements forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards. Assessment shall include:
   (i). Calculation of the required minimum outside air ventilation rates for each occupied area based on the anticipated occupancy and the minimum required ventilation rate per occupant set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards. Calculations shall be based on maximum anticipated classroom or other occupied area occupancy rates and determined by the performing technician. Natural Ventilation shall be designed in accordance with Section 402.2 of the 2019 California Mechanical Code and shall include mechanical ventilation systems designed in accordance with Section 403.0, Section 404.0, or both. Additionally, any room relying on Natural Ventilation shall have a continuously operational CO2 monitor as prescribed in section 7a of this document.
   (ii). Measurement of Outside Air per Section B of NRCA-MCH-02-A – Outdoor Air Acceptance and verification of whether the system

1165 Lincoln Avenue #8232
San Jose, CA 95155
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408.482.7027 cell
rosemary.bryan@ea-cx.com
http://www.ea-cx.com

provides the minimum outside air ventilation rates calculated in subsection (i).

(iii). Survey readings of inlets and outlets to verify all ventilation is reaching the served zone and that there is adequate distribution. Verify if inlets and outlets are balanced within tolerance of the system design. Document read values and deficiencies. If the original system design values are not available, document available information and note unavailability of system design values in the HVAC Assessment Report.

(iv). Verification of building pressure relative to the outdoors to ensure positive pressure differential and to ensure building is not over pressurized.

(v). Verification of coil velocities and coil and unit discharge air temperatures required to maintain desired indoor conditions and to avoid moisture carry over from cooling coils.

(vi). Verification that separation between outdoor air intakes and exhaust discharge outlets meet code requirements.

(vii). Confirmation that the air handling unit is bringing in outdoor air and removing exhaust air as intended by the system design.

(viii) Measurement of all exhaust air volume for exhaust fans, including restrooms. Document any discrepancies from system design. Per ASHRAE Guidance for Reopening and Operating Schools exhaust fans operate whenever HVAC systems are in operation.

(ix) Energy Recovery Ventilation (ERV) system operation and leakage concerns should be addressed according to the recommendations of the ASHRAE Building Readiness document.

B. Adjustment.

If the system does not meet the minimum ventilation rate requirements set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards, qualified personnel shall review the system airflow and capacity to determine if additional ventilation can be provided without adversely impacting equipment performance and building Indoor Environmental Quality (IEQ). If additional ventilation can be provided, qualified personnel shall adjust ventilation rates to meet the minimum ventilation rate requirements set forth in the 2019 Title 24 California Building Energy Efficiency Standards to the extent feasible. After adjustment, steps (ii), (iv) and (v) of subsection A shall be repeated.

If minimum ventilation rate requirements set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards cannot be met, the system shall be repaired, upgraded or replaced as necessary to meet these requirements. Such repairs shall be considered a critical repair and shall be eligible for additional funding under this Program per subsection (7).

1165 Lincoln Avenue #8232
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Priority recommendations for additional HVAC system maintenance, replacement or upgrades to improve ventilation outcomes or ventilation efficiency shall be recorded in the HVAC Assessment Report.

4) Demand Control Ventilation.
If installed, demand control ventilation shall be adjusted to a CO2 set point of 800 ppm or less and tested by qualified personnel per Section B of NRCAMCH-06-A Demand Control Ventilation Systems Acceptance. If the demand control ventilation system does not maintain average daily maximum CO2 levels below 1,100 ppm, it shall be disabled until such time as the LEA determines that the COVID-19 crisis has passed, unless disabling the control would adversely affect operation of the overall system. When disabling a demand control ventilation system, the system must be configured to meet the minimum ventilation rate requirements and tested and adjusted in accordance with section3. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report.

5) General Maintenance.
Qualified personnel shall verify coil condition, condensate drainage, heat exchanger operation, and drive assembly and perform critical repairs. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report.

6) Operational Controls.
Qualified personnel shall review control sequences to verify systems will maintain intended ventilation, temperature and humidity conditions during school operation. Previously unoccupied buildings shall perform the recommended practices of reopening a building as covered in the ASHRAE Building Readiness document. Verify a daily flush is scheduled for 2 hours before and after scheduled occupancy or demonstrate calculation of flush times per ASHRAE Guidance for Reopening and Operating Schools and Buildings or otherwise applicable local or state guidance. Verify that HVAC system operational times, exhaust fans operation times, setpoints, and enabled features meet ASHRAE Guidance for Reopening and Operating Schools and Buildings or otherwise applicable local or state guidance.

7) Repairs. If installed HVAC systems or system components are broken, fail to meet minimum ventilation requirements, or are unable to operate to the original design and intent, corrective work must be completed by qualified personnel prior to resumption of school operation. The Office of Public School Construction shall set aside 10% of Program funds to provide supplemental grants for critical repairs. To the extent available, Program funds may also be used to repair, upgrade or replace system components to improve HVAC system efficiency.

1165 Lincoln Avenue #8232
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Phase II Services:

1) Work with the District to obtain proposals for CO2 sensor installation and programming. This would be for applicable units as determined in Phase I.

Phase III Services:

1) Prepare a HVAC Assessment Report that meets the requirements of the Program as follows.
    - (1) Name and address of school facility and person/contractor preparing and certifying Report.
    - (2) Description of assessment, maintenance, adjustment and repair activities and outcomes.
    - (3) Verification that the LEA has complied with all requirements of this Section.
    - (4) Either verification that MERV 13 filters have been installed or verification that the maximum MERV-rated filter that the system is able to effectively handle has been installed and what that MERV-rating is.
    - (5) The verified ventilation rates for facility classrooms, auditoriums, gymnasiums, nurses' offices, restrooms, offices and other occupied areas and whether those rates meet the requirements set forth in the 2019 Title 24 California Building Energy Efficiency Standards. If ventilation rates do not meet applicable guidance, then an explanation for why the current system is unable to meet those rates should be provided.
    - (6) The verified exhaust for facility classrooms, auditoriums, gymnasiums, nurses' offices', restrooms and other occupied areas and whether those rates meet the requirements set forth in the design intent.
    - (7) Clearly define system deficiencies and provide recommendations for additional maintenance, replacement or upgrades, such as upgrading systems to allow for additional ventilation and filtration, adding humidifier systems, or upgrading to more energy efficient systems.
    - (8) Reports shall clearly document initial operating verifications, adjustments, and final operating verifications and document any adjustments or repairs performed.
    - (9) Verification of installation of CO2 Monitors, including make and model of monitors.

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Principal – Cx Authority 9.18.20

Eichler Associates, Inc. proposes the following:

Phase I items as listed below will be performed by Eichler Associates, Inc. based on time and materials on a per diem basis of $6,000 (does not include travel time).

- Items included are (i), (ii), (iv), (vi), (vii), (viii – Nurses Offices Only), and (ix).

Phase I items (iii), (v), and (viii) are not included in the Phase I effort. These items would be Additional Services. A proposal for those services can be presented after Phase I items have been reviewed and evaluated

Additional Services: A proposal for Phase II services can be presented after Phase I items have been reviewed and evaluated.

Additional Services: A proposal for Phase III services can be presented after Phase I items have been reviewed and evaluated.

Proposal is based on the ability to obtain VPN and access to District EMS. District provides access to all equipment.

Filters will be changed to MERV 13 prior to survey scheduling.

All work to be performed Monday-Friday, 6 AM to 3 PM.
If hours are required to be completed outside of this schedule. An additional fee of $1,500 per day for Saturday and $2,100 per day for Sunday will apply. This will be agreed to in writing prior to scheduling. This does not include travel time.

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Eichler Associates, Inc.

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Background
Eichler Associates is a consulting engineering firm with expertise in building commissioning and energy efficiency. Please see our website for more information, staff and project history. http://www.ea-cx.com

Qualifications
Cx Authority tasks will be performed by Rosemary Bryan, P.E., LEED AP (BD+C). Rosemary has more than 30 years of combined experience in mechanical design, building efficiency and operation, project management and commissioning. Please see LinkedIn profile. http://www.linkedin.com/in/rosemarybryan/

Consultant's Fee Basis

Licensed Senior Engineer Senior Technician Principal	CxA	$160/hr
Junior Engineer		$120/hr
Administration Assistant		$70/hr
Travel Time		0 if within 25 Mile radius of San Jose

Rosemary Bryan 9-18-2020

Signature Date

Rosemary Bryan – Principal

Name and Title

1165 Lincoln Avenue #8232
San Jose, CA 95155
408.841.9488
408.482.7027 cell
rosemary.bryan@ea-cx.com
http://www.ea-cx.com



Healthy Schools: Cleaning, Disinfecting, Healthy Air Quality, Scheduling and Social Distancing

A Resource for School Facility and Maintenance Departments

Coalition for Adequate School Housing Maintenance Network

June 2020

HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

PREFACE

COVID-19 has placed significant responsibility on K-12 school maintenance and facility departments to provide learning environments that are clean, safe and healthy as schools contemplate re-opening and operating in an uncertain environment. The CASH Maintenance Network (CMN) has developed this Guidebook to assist maintenance and facility departments with the fundamental elements of re-opening: student and staff safety, cleaning and disinfecting, adequate ventilation and healthy indoor air quality, social distancing and scheduling, and managing fiscal impact.



This Guidebook is intended to provide Best Management Practices (BMP) to assist school maintenance and facility departments to successfully navigate the uncertain COVID-19 environment, though it is designed to outlive the current moment as a stand-alone guide to creating safe and healthy learning environments. Successfully implementing these fundamental elements require coordination between the elements, so out of necessity there is some overlap of information and recommendations.

This Guidebook is NOT intended to provide medical analysis or health advice. All decisions about following these recommendations should be made in collaboration with local health officials and other State and local authorities who can help assess the current level of mitigation needed based on levels of COVID-19 community transmission, and the capacities of the local public health and healthcare systems, among other relevant factors.

As the Centers for Disease Control and Prevention (CDC) states: “As communities consider a gradual scale up of activities toward pre-COVID-19 operating practices in centers for learning, such as K-12 schools and summer day camps, CDC offers recommendations to keep communities safe while resuming peer-to-peer learning and providing crucial support for parents and guardians returning to work.”

The CASH Maintenance Network (CMN) is part of the Coalition for Adequate School Housing (CASH), the premier school facilities and maintenance organization in California. The CMN focuses exclusively on school maintenance issues to assist K-12 districts in providing learning environments that are clean, safe and functional. The CMN brings together experts from throughout the school industry to provide best practices so students have learning environments that support academic achievement.

CASH would like to thank the following for their time, energy, expertise and assistance in developing this guidebook:

Joe Dixon, Co-Chair CMN
Dixon SmartSchoolHouse, LLC

Alex Parslow, Co-Chair CMN
PBK

Denise Berrington
Moorpark Unified School District

Lettie Boggs
Colbi Technologies, Inc.

Jason Duke
Fresno Unified School District

Jema Estrella
Los Angeles County Office of Education

Matt Juchniewicz
Yolo County Office of Education

Andy Perez
Office of the Fresno County Superintendent of Schools

Theresa Pistochini
Western Cooling Efficiency Center Energy and Efficiency Institute, UC Davis

Chris Ruch
National Energy Management Institute

Roger Silveira
East Side Union High School District

Steve Turner
Mendocino County Office of Education

Erik Walukiewicz
Fremont Union High School District

Rex Wang
LEAF Engineers

HOW TO USE THIS GUIDEBOOK

This Guidebook is intended to be both a practical planning and site-level guide for school maintenance and facility departments as they look to re-open and maintain schools in the COVID-19 environment. This guidebook is organized into five sections which focus on the essential elements of re-opening schools: I) Health and Hygiene Guidelines for Staff and Students; II) Cleaning and Disinfecting Standards; III) Ventilation and Filtration to Improve Indoor Air Quality; IV) Calculating Social Distancing and Scheduling for Staff and Students; AND, V) Managing Fiscal Impact, Planning, Risk Management and Communications.

Each section includes Best Management Practices (BMP) guidance as well as additional electronic resources relevant to the section subtopic from key organizations such as: The Centers for Disease Control and Prevention (CDC), Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and the California Department of Education (CDE), Western Cooling Efficiency Center, Energy and Efficiency Institute, UC Davis, etc. Always check to ensure you have the most recent guidance from the appropriate state and local agencies.

These tools can be used to plan, develop, implement, and maintain facilities to help ensure schools are clean, safe and healthy in the COVID-19 era and beyond.

HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

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HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

HEALTH AND HYGIENE GUIDELINES FOR STAFF AND STUDENTS

I: OVERVIEW

This section outlines strategies that schools may consider implementing to encourage behaviors that reduce the spread of COVID-19 and provide healthy learning and working environments. These strategies include staying at home when appropriate, hand hygiene and respiratory etiquette, cloth face coverings, adequate supplies, communication with communities, staff and students, along with signs and messages.

II: BEST MANAGEMENT PRACTICES: PROMOTING BEHAVIORS THAT REDUCE SPREAD

Schools may consider implementing several strategies to encourage behaviors that reduce the spread of COVID-19.

STAYING HOME WHEN APPROPRIATE

1. Educate staff and families about when they/their child(ren) should stay home and when they can return to school.
2. Actively encourage employees and students who are sick or who have recently had close contact with a person with COVID-19 to stay home.
    a. Develop policies that encourage sick employees and students to stay at home without fear of reprisal, and ensure employees, students, and students' families are aware of these policies. Consider not having perfect attendance awards, not assessing schools based on absenteeism, and offering virtual learning and telework options, if feasible.
3. Staff and students should stay home if they have tested positive for, or are showing COVID-19 symptoms.
4. Staff and students who have recently had close contact with a person with COVID-19 should also stay home and monitor their health.
5. Centers for Disease Control and Prevention (CDC) criteria can help inform when employees should return to work. See the resources in this section for more information.

HAND HYGIENE AND RESPIRATORY ETIQUETTE

1. Have a station at the main entry of the school site where staff can take temperatures, hand out masks as appropriate, and have a handwashing station available if possible.
2. Teach and reinforce handwashing with soap and water for at least 20 seconds and increase monitoring to ensure adherence among students and staff.
    a. If soap and water are not readily available, hand sanitizer that contains at least 60% alcohol can be used (for staff and older children who can safely use hand sanitizer).
3. Encourage staff and students to cover coughs and sneezes with a tissue.
4. Used tissues should be thrown in the trash and hands washed immediately with soap and water for at least 20 seconds.

HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

CLOTH FACE COVERINGS

1. Teach and reinforce use of cloth face coverings, which are meant to protect other people in the event the wearer is unknowingly infected but does not have symptoms. Cloth face coverings are not surgical masks, respirators, or other medical personal protective equipment. Wearing a cloth mask may be challenging for students to wear in an all-day school setting. Student age should be carefully considered – a kinetic kindergartener is different than an independent senior.
2. Face coverings should also be worn by staff and students, and are most essential in times when physical distancing is difficult to achieve. Students, staff and students' parents should be frequently reminded not to touch the face covering and to wash their hands frequently, as well as on the on proper use, removal, and washing of cloth face coverings.
3. Note: Per the CDC, cloth face coverings should **not** be placed on:
    a. Children younger than two (2) years old
    b. Anyone who has trouble breathing or is unconscious
    c. Anyone who is incapacitated or otherwise unable to remove the cloth face covering without assistance
4. Cloth face coverings are meant to protect other people in case the wearer is unknowingly infected but does not have symptoms. Cloth face coverings are not surgical masks, respirators, or other medical personal protective equipment.

ADEQUATE SUPPLIES

1. Support healthy hygiene behaviors by providing adequate supplies, including soap, hand sanitizer with at least 60 percent alcohol (for staff and older children who can safely use hand sanitizer), paper towels, tissues, disinfectant wipes, cloth face coverings (as feasible) and no-touch/foot pedal trash cans. The state will be coordinating with the county office of education (COE) designated California Office of Emergency Services (CalOES) logistics contact to provide:

    a. Sixty (60) days' worth of PPE, for the start of the school year, some in bulk and some phased in:
        1. Four (4) masks per child, some single use, some cloth
        2. One (1) face shield for every teacher and child care provider
        3. N-95 masks and surgical masks for school-based health professionals
        4. No touch thermometers for every school and childcare facility
        5. Roughly twelve (12) gallons of hand sanitizer for each school, arriving in gallon jugs

    CalOES will be getting in touch regarding logistics to deliver the PPE. School districts may be responsible, after the sixty days, for purchasing and paying for additional PPE, but the state is going to provide procurement vehicles to purchase PPE.

SIGNS AND MESSAGES

1. Post signs in highly visible locations (e.g., school entrances, restrooms) that promote everyday protective measures and describe how to stop the spread of germs (such as properly washing hands and properly wearing a cloth face covering).
2. Broadcast regular announcements on reducing the spread of COVID-19 on public address systems.
3. Include messages (for example, videos) about behaviors that prevent the spread of COVID-19 when communicating with staff and families (such as on school websites, in emails, and on school social media accounts).
4. Find free CDC print and digital resources on CDC's communications resources main page.

III: RESOURCES

Health and Hygiene Guidelines for Staff and Students

Close Contact with Someone who has COVID-19:

https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html

https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/quarantine-isolation.html

When Staff and Students Should Stay Home:

https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html

COVID-19 Symptoms:

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

Sick with COVID-19?

https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/quarantine-isolation.html

Handwashing:

https://www.cdc.gov/handwashing/when-how-handwashing.html

Cloth Face Coverings:

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html

WHO Mask Guidance – Updated June 5, 2020
https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks

Support Healthy Hygiene:

https://www.cdc.gov/handwashing/when-how-handwashing.html

https://www.cdph.ca.gov/Programs/OPA/Pages/NR20-113.aspx

HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

Signs and Messages

Print Resources:

https://www.cdc.gov/coronavirus/2019-ncov/communication/print-resources.html?Sort=Date%3A%3Adesc

Everyday Protective Measures:

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention-H.pdf

How to Stop the Spread:

https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs-11x17-en.pdf

Posters:

https://www.cdc.gov/handwashing/posters.html

Face Covering Checklist:

https://www.cdc.gov/coronavirus/2019-ncov/images/face-covering-checklist.jpg

Announcements:

Https://Www.Cdc.Gov/Coronavirus/2019-Ncov/Communication/Public-Service-Announcements.Html

Social Media:

https://www.cdc.gov/coronavirus/2019-ncov/communication/social-media-toolkit.html

Communications Resources:

https://www.cdc.gov/coronavirus/2019-ncov/communication/index.html

HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

CLEANING AND SANITIZING STANDARDS

I: OVERVIEW

This section provides cleaning and disinfecting recommendations and Best Management Practices (BMP) to ensure learning environments are properly cleaned and disinfected. While many resources are provided in this section, it is always advisable to check and follow all your local public health, Centers for Disease Control and Prevention (CDC), and Environmental Protection Agency (EPA) guidelines regarding cleaning standards. Useful links for cleaning and sanitizing are included in the resource section.

II: BEST MANAGEMENT PRACTICES

We recommend the following: 1) all staff be trained on proper dilution of any new product (if not ready to use), application, recommended Personal Protective Equipment (PPE), surface rinsing, disinfectant chemical disposal and cleanup as prescribed on the selected disinfectant label; 2) all staff wear recommended PPE (masks, gloves, eyewear, coveralls, etc.); gather all approved cleaning supplies such as disposable towels, microfiber rags, mop heads, buckets, products, trash liners, and cleaning products previously mentioned above. Items should already be stocked on custodial cart; and 3) the district-approved cleaner and disinfectant (see resources for EPA registered disinfectant approved for viral/bacterial pathogens for high touch surfaces).

CLEANING PROCEDURES

In addition to normal cleaning procedures:

1. Wear all PPE.
2. Clean surfaces using general surface cleaner to remove any heavy soils, dirt, organic matter and/or germs prior to disinfecting.
3. Disinfect table tops, desks, sinks, drinking fountains, and other flat surfaces using district approved disinfectant, following all manufacturer recommended instructions to ensure proper usage. If the product is a concentrate, make sure to dilute at the recommended amounts and apply to surfaces as described. It is imperative that the disinfectant remain wet and active on the surface for the prescribed dwell time. Wipe surface with clean cloth to remove any residue.
4. Wipe down all high touch surfaces from floor up to 72” which includes: door knobs/handles, light switches, HVAC controls, phones, pencil sharpeners, door jambs, walls, etc. Use district approved disinfectant.
5. For any soft surfaces using district approved disinfectant: hold bottle six (6) to eight (8) inches from surface, use smooth, zig zag motion and mist across fabric until wet (do NOT saturate). Allow fabric to air dry – bacteria will be killed in 30 seconds.
6. Refill with product and then disinfect all soap, hand sanitizer, and paper product dispensers.
7. After thoroughly cleaning all areas of room, all floors should be vacuumed, swept and mopped as needed.
8. All trash receptacles need to be emptied and replace with new liner.
9. Security check doors and windows.
10. Turn off lights (if no occupancy sensor).

III: RESOURCES

Before Reopening

https://www.mckinsey.com/industries/social-sector/our-insights/safely-back-to-school-after-coronavirus-closures#

CDC

https://www.cdc.gov/coronavirus/2019-ncov/community/office-buildings.html?deliveryName=USCDC_2067-DM29427

https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html

http://pages.thinkhr.com/rs/276-KTW-573/images/Return-to-Work-Checklist-20200421B.pdf

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html?deliveryName=USCDC_2067-DM28938

Cal OSHA

https://www.dir.ca.gov/dosh/Coronavirus/COVID-19-Infection-Prevention-in-Childcare-Programs-Guidance.pdf?mkt_tok=eyJpIjoiTnpaaFlqRXhaakUxWWpkbSIsInQiOiJoYWlNaVQxZm0rbWRNa2ZDOXFkSXpFWlRyXC9BTitYVGxHeFhnZkNHT3JibVV5UVdJSjFIVW43MzM2QUlzdkJZdWxlcThPSkJkNzZvTWVCVUo3cTZtaTY5aHNLcmdCdnd4SktEN1NsaDdydks2dzNUMExubjRcL3FiTHllLT3QyWjNzIn0%3D

American Institute of Architects

https://www.aia.org/press-releases/6299732-architects-health-experts-release-strategi

American Academy Of Pediatrics

https://services.aap.org/en/pages/covid-19-landing-page/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/

How COVID-19 Spreads

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/children/mis-c.html?deliveryName=USCDC_2067-DM28938

Cleaning, Disinfecting and EPE (Essential Protective Equipment) Procurement

https://sites.google.com/marinschools.org/mcoerethinkingschools/essential-protective-equipment

Cleaning Strategies

https://spaces4learning.com/podcasts/2020/04/expert-advice-on-covid19-cleaning.aspx?s=B&oly_enc_id=4458C5076634I0Y

https://www.infectioncontroltoday.com/environmental-hygiene/using-atp-healthcare-settings-0

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

https://www.cdc.gov/coronavirus/2019-ncov/community/reopen-guidance.html

https://www.epa.gov/iaq-schools/forms/master-class-webinar-how-effective-cleaning-and-maintenance-can-improve-health

Disinfectants

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

https://www.epa.gov/pesticide-labels/design-environment-logo-antimicrobial-pesticide-products

PPE

https://smartairfilters.com/en/blog/whats-the-difference-between-n95-and-kn95-masks/

https://www.schealth.com/products/#infrared-thermometers

https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html



VENTILATION AND FILTRATION TO IMPROVE INDOOR AIR QUALITY

I: OVERVIEW

Properly installed and maintained Heating, Ventilation, and Air Conditioning (HVAC) systems are the key to ensuring healthy Indoor Air Quality (IAQ) in K-12 school learning environments, including installation, equipment, adjustment, maintenance, and dynamic monitoring. Healthy IAQ contributes to increased student academic performance, reduces absences due to asthma and other respiratory illnesses, and is critical to ensuring schools are safe environments for students and staff as schools contemplate re-opening and continued operation in an uncertain environment.

Research and lessons learned continue to add to the evolving knowledge and significance of IAQ in schools to ensure healthy learning and working environments, particularly as related to COVID-19. We have included Best Management Practices (BMP) to improve IAQ in schools, which includes the best thinking by schools, government agencies, academic research, and industry experts on practical approaches to IAQ in schools. We have also included in the resource section a link to the University of California, Davis study, which we believe is the most comprehensive resource for understanding the significance of healthy IAQ in K-12 schools, and includes both academic research and practical guidance.

II. BEST MANAGEMENT PRACTICES

TEST, VERIFY, ADJUST AND REPAIR VENTILATION SYSTEM OUTDOOR AIR FLOW RATES

HVAC systems consist of many electrical and mechanical components. Proper maintenance of all components of this intricate system is required for the systems to operate as designed. An assessment of HVAC systems by a certified technician assures the systems are operating as designed, providing adequate ventilation and filtration. Systems can be evaluated for their ability to increase the ventilation and filtration as recommended by the Centers for Disease Control and Prevision (CDC) and American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE). These steps can help reduce the risk of transmission of infectious disease.

Systems with mechanical ventilation are typically designed with a minimum outside air ventilation rate. This value is typically indicated on the design drawings and is used during the Test, Adjust, and Balance (TAB) process to properly configure the HVAC systems. The mechanical system ventilation rate provided should be 15 CFM per person, consistent with California's Title 24 Building Energy Efficiency Standards. Over time it is not uncommon for these configured systems to fall out of "calibration." This is where a Ventilation Verification Assessment (VVA) plays an important role following new system installation, but also on a periodic basis to ensure ongoing adequate ventilation. New systems may also not meet design specifications if they were not acceptance tested, (which includes a verification of mechanical system ventilation rate) at the time of installation. The VVA should include measurement of outdoor air rates per Section B of the California Energy Commission's Outdoor Air Acceptance Test Procedures (NRCA-MCH-02-A)[1], which details the functional testing procedure for outdoor air systems. Additional acceptance test procedures for functional testing of HVAC

[1] State of California. Outdoor Air Acceptance. CEC-NRCA-MCH-02-A. https://energycodeace.com/download/36500/file_path/fieldList/2019-NRCA-MCH-02-A%20Outdoor%20Air.pdf

systems, economizers and demand control ventilation systems are also available[2]. Acceptance test procedures should be completed by trained, qualified and certified personnel. Certified acceptance testing technicians can be located on the California Energy Commission's website[3].

Exhaust fans are a critical component of ventilation systems and need to work in conjunction with the introduction of outside air. All exhaust fans airflow should also be measured by a certified technician to determine if they are meeting the design requirements.

Prior to the addition of any supplementary systems, it is imperative that all systems associated with HVAC are operating in their as-designed condition. If the systems are not able to operate as-designed, or if the design is no longer proper for the usage of the space, please consider an equipment and/or system upgrade for the application. An important consideration when performing a VVA is to compare the actual occupancy to the design occupancy. If the maximum occupancy has increased or the occupant use has changed, the design ventilation and exhaust rate will need to be reevaluated.

Once an adequate ventilation rate has been established and all applicable components have been verified for functionality, upgrades to the ventilation system can be considered. This may include upgrades to increase ventilation, the installation of economizers, and Demand Control Ventilation (DCV) systems which will provide energy savings along with the benefits of IAQ.

HVAC control sequences should be evaluated to ensure all units, including exhaust, are set to operate at a minimum of one hour, and preferably two hours, before being occupied by staff and students. This will "flush" the room air prior to occupancy. Ventilation systems (i.e., ventilation fans) must operate during all occupied hours.

INSTALL HIGH EFFICIENCY FILTERS

Minimum Efficiency Reporting Value (MERV) is a widely accepted method of rating filters. Higher values equate to a filter that is able to capture more airborne particulates. MERV 8 is a very common filter rating for use in mechanical units in schools across California. MERV 13 filters can remove particles in the range of 0.3-1.0 microns, where MERV 8 filters are limited to particles greater than three (3) microns. A trained, skilled and certified technician should evaluate the initial and final recommended pressure drop to determine any effect of increased filtration on the unit's performance and establish a new maintenance schedule. With proper research and testing, most units can be fitted with a MERV 13 or higher, as recommended by ASHRAE. ASHRAE outlines increased filter evaluation steps within the ASHRAE Building Readiness document. Lastly, MERV 13 is also the current 2019 California Mechanical Code minimum requirement.

Filters are biologically active. Therefore, all filters should be treated as a potential health hazard when performing maintenance and replacements. Workers should wear proper Personal Protection Equipment and follow appropriate containment procedures for filter disposal.

High Efficiency Particulate Air Filters (HEPA) are the healthcare industry's standard for critical environments. Retrofitting a HEPA filter into a traditional Single-Zone Roof-Top-Unit type of HVAC system is typically not a

[2] State of California. Nonresidential Certificates of Acceptance (NRCA). https://energycodeace.com/nonresidentialforms

[3] California Energy Commission. Acceptance Test Technician Certification Providers. https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program/acceptance

viable option. If a need has been determined, this option can offer the highest level of filtration, however, should be implemented only in critical environments as budgetary concerns must be considered.

If a more temporary solution is needed, a portable filtration unit can be utilized to assist with the filtration duties of the overall HVAC system. Consideration for this application is the target air change rate desired. This will determine the size of the unit required. Consider the Energy Star rating database for portable air filters; systems with a higher CFM/watt will have lower operational costs for energy consumption[4].

INDOOR AIR QUALITY (IAQ)

IAQ consists of many factors including, but not limited to, temperature, humidity, carbon dioxide, and other airborne contaminants. Temperature and humidity are easy to feel, however, many contaminants are odorless and are not able to be detected by the human senses. The carbon dioxide (CO_2) level in an occupied space has been used as an indicator of effectiveness of a ventilation system. Consider installing CO_2 sensors in classrooms to monitor IAQ and detect potential problems with ventilation systems. In order to be useful, the sensors must log the CO_2 concentrations over the course of the school day. The maximum CO_2 concentration should not exceed 1,100 ppm in well ventilated classrooms. For classrooms without adequate mechanical ventilation, monitoring of CO_2 concentrations can be used to determine if other ventilation techniques (e.g. open doors and windows) are working sufficiently. At a minimum, CO_2 sensors should:

1. Be hard-wired or plugged in and mounted to the wall between three to six feet above the flow, and at least five feet away from the door and operable windows.
2. Display the CO_2 readings to the teacher through a display on the device or other means such as a web-based application or cell phone application.
3. Notify the teacher through visual indicator on the monitor (e.g. indicator light) or other alert such as email, text, or cell phone application, when the CO_2 levels in the classroom have exceeded 1,100 ppm.
4. Maintain a record of previous data which includes at least the maximum CO_2 concentration measured.
5. Have a range of 1-2000 ppm or greater.
6. Be certified by the manufacturer to be accurate with 75 ppm at 1,000 ppm CO_2 concentration and is certified by the manufacturer to require calibration no more frequently than once every five years.

Spaces where HVAC systems have both economizers and DCV offer the most ability to automatically adjust to a dynamic environment.

As indoor contaminants increase (CO_2 levels rise) the HVAC system is able to respond and provide a higher percentage of outdoor air to the space by modulating the economizer to drive the contaminants lower (less CO_2). Where a centralized Building Management System (BMS) is available, the sequence of operations can be adjusted to “purge” the space both after occupancy and prior to occupancy. This “purge” can be based on measured contaminant levels or simply triggered by schedule. Systems that are based around local HVAC controllers are still capable of sequence changes, but should be considered on a case-by-case scenario. Program DCV controllers to maintain CO_2 concentrations of 800 ppm since control algorithms may overshoot their programmed targets.

When using DCV systems, review logged CO_2 data to ensure maximum concentrations during the school day are not exceeding 1,100 ppm. If the DCV does not maintain maximum CO_2 levels below 1,100 ppm, it should be disabled until such time as the local education agency determines that the COVID-19 crisis has passed,

[4] ENERGY STAR Certified Room Air Cleaners. https://www.energystar.gov/productfinder/product/certified-room-air-cleaners/results

unless disabling the control would adversely affect operation of the overall system. When disabling a DCV, the system must be configured to meet the minimum ventilation rate requirements and tested and adjusted.

CONSIDERING COSTS

The activities outlined below have varying fiscal impacts and, depending on your district, you may face difficult decisions. The following is intended to provide options based on your particular district's situation for existing facilities.

BASIC COST	LOW-MEDIUM COST	HIGHER COST
Visually inspect outdoor air dampers to ensure they are opening and that control sequences are operating ventilation systems two hours before and during all occupied hours. For DCV systems, drop CO_2 setpoint to 800 ppm.	Measure outdoor air rates per Section B of the California Energy Commission's Outdoor Air Acceptance Test Procedures (NRCA-MCH-O2-A). Use a certified acceptance test technician.	Replace/add mechanical ventilation systems for classrooms with inadequate mechanical ventilation. Specify economizers.
Ensure all system air filters are fitted with minimum MERV 8 rated filters and replaced at the frequency needed to maintain system airflow.	Install MERV 13 filters in HVAC systems where possible.	Add indoor carbon dioxide monitoring to all classrooms to detect potential ventilation system failures.
Inspect cooling coils and drain pans for cleanliness and drainage of condensate.		Add portable filtration units, particularly when central HVAC systems cannot accommodate MERV 13 filters.

IAQ CHECKLISTS

The following are sample checklist templates for HVAC controls, air conditioning units, and exhaust fans. They should be used to prepare for re-opening, testing and verification of ventilation rates, maintenance of HVAC mechanical systems, and outdoor air acceptance. The CMN recommends that these checklists be integrated into your *Williams* Inspections (see resources for the CASH Facility Inspection Tool (FIT) Guidebook/Section II-HVAC Mechanical Systems-"Beyond the FIT").

HVAC CONTROLS CHECKLIST

Yes	No	
		Does the overall appearance of the thermostat appear to be in good condition (does not show excessive wear, t-stat is not obstructed, etc.)?
		When placed into heating, does the unit respond?
		When placed into cooling, does the unit respond?
		When CO_2 levels are above DCV setpoint, does the unit respond with enabling economizer?
		Does the (standalone) thermostat enable the unit at the scheduled time?
		Does the (standalone) thermostat disable the unit at the scheduled time?
		Does the Building Management System (BMS) front-end properly functioning and configured (icons respond with proper functions, are you able to navigate through the campus to various units without lag, unit enable/disable is clearly distinguishable, are the units all properly tagged on the screen, etc.)?
		Does the BMS main panel appear to be in good condition (wires are neatly organized, board is clean, panel is free from debris, panel is free from excessive rust, no signs of water intrusion, etc.)?
		Does the BMS sub or local panel appear to be in good condition (wires are neatly organized, board is clean, panel is free from debris, panel is free from excessive rust, no signs of water intrusion, etc.)?
		NOTES:

AIR CONDITIONING UNIT CHECKLIST

Yes	No	
		Does the main fan operate properly (free from abnormal noises, visually appears in good condition, etc.)?
		Do the condensing coils appear to be in good condition (free from debris, absence of leaks, fins straight, etc.)?
		Does the compressor appear to be in good operation (free from abnormal noises, visually appears in good condition, etc.)?
		Does the condenser fan operate properly (free from abnormal noises, visually appears in good condition, etc.)?
		Do the unit controls appear to be in good operating condition (no leaks in the cabinet, wiring is neat, free from debris, etc.)?
		Does the economizer appear to be in good operating condition (no leaks in the cabinet, wiring is neat, free from debris, dampers operate smoothly, damper is not obstructed, etc.)?
		Does the electrical disconnect appear to be in good condition (panel is does not show excessive wear, operates smoothly, etc.)?
		Does the filter show normal signs of usage and up to date with replacement?
		Does the overall exterior of the unit appear to be in good condition (does not show excessive wear, seals are operating properly, no sign of water intrusion, roof flashing appears to be in good condition, etc.)?
		NOTES:

EXHAUST FANS CHECKLIST

Yes	No	
		Does the main fan operate properly (free from abnormal noises, visually appears in good condition, etc.)?
		Do the unit speed controls appear to be in good operating condition (no leaks in the cabinet, wiring is neat, free from debris, etc.)?
		Do the unit belts/pulleys appear to be in good operating condition (no cracks, belt should be taut, belt should not be slipping, pulleys are properly lubricated, etc.)?
		Does the electrical disconnect appear to be in good condition (panel does not show excessive wear, operates smoothly, etc.)?
		Does the overall exterior of the unit appear to be in good condition (does not show excessive wear, seals are operating properly, no sign of water intrusion, roof flashing appears to be in good condition, etc.)?
		NOTES:

STATE OF CALIFORNIA OUTDOOR AIR ACCEPTANCE FORM

STATE OF CALIFORNIA
OUTDOOR AIR ACCEPTANCE
CEC-NRCA-MCH-02-A (Revised 01/20) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE		NRCA-MCH-02-A
Outdoor Air Acceptance		(Page 2 of 3)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:
System Name or Identification/Tag:	System Location or Area Served:	

B. Functional Testing

Building:	Floor:	Room/Area/Zone:	Control/System:

Steps:			CAV	VAV
1	Disable demand control ventilation (if applicable)	☐ Check if NA	☐	☐
2	Verify unit is not in economizer mode during test (economizer disabled) (VAV - NA 7.5.1.1.2 Step 1, CAV – NA 7.5.1.2.2 Step 1)	☐ Check if NA	☐	☐
3	CAV and VAV testing at full supply airflow			
a.	Adjust supply air to achieve design airflow or maximum airflow at full cooling. (NA 7.5.1.1.2 Step 2)			☐
b.	Measured outdoor airflow reading (cfm) (VAV - NA 7.5.1.1.2 Step 2a, CAV – NA 7.5.1.2.2 Step 2a)		cfm	cfm
c.	Required outdoor airflow (cfm) (refer to NRCC-MCH-E, Section J).		cfm	cfm
d.	Time for outside air damper to stabilize after full supply airflow is achieved (minutes): (NA 7.5.1.1.2 Step 2b)			min
4	VAV testing at reduced supply airflow			
a.	Adjust supply airflow to either the sum of the minimum zone airflows, full heating, or 30% of the total design airflow. (NA 7.5.1.1.2 Step 3)			☐
b.	Measured outdoor airflow reading (cfm). [NA 7.5.1.1.2 Step 3a]			cfm
c.	Required outdoor airflow (cfm) (refer to NRCC-MCH-E, Section J).			cfm
d.	Time for outside air damper to stabilize after reduced supply airflow is achieved (minutes): (NA 7.5.1.1.2 Step 3b)			min
5	Return to initial conditions (NA 7.5.1.1.2 Step 4)		☐	☐
6	Calculations			
Determine Percent Outside Air at full supply airflow ($\%OA_{FA}$) for Step 3. (§120.1(f)1)				
a.	$\%OA_{FA}$ = Measured outdoor airflow reading /Required outdoor airflow. 100 x (Step3b/Step3c)		%	%
b.	$\%OA_{FA}$ is within 10% of design Outside Air. ($90\% \le \%OA_{FA} \le 110\%$)		P / F	P / F
c.	Outside air damper position stabilizes within 5 minutes. (Step 3d < 5 minutes)			P / F
VAV only: Determine Percent Outside Air at reduced supply airflow ($\%OA_{RA}$) for Step 4. (§120.1(f)2)				
a.	$\%OA_{RA}$ = Measured outdoor airflow reading /Required outdoor airflow reading. 100 x (Step4b/Step4c)			%
b.	$\%OA_{RA}$ is within 10% of design Outside Air. ($90\% \le \%OA_{RA} \le 110\%$)			P / F
c.	Outside air damper position stabilizes within 5 minutes. (Step 4d < 5 minutes)			P / F
Functional Testing Compliance Results: ☐ Complies ☐ Does NOT Comply				

III: RESOURCES

University of California, Davis Study:
https://wcec.ucdavis.edu/wp-content/uploads/White-Paper-on-Proposed-School-Ventilation-and-Efficiency-Verification-and-Repair-Program_06_04_2020.pdf

University of California, Davis presentation:
https://ucdavis.app.box.com/s/xouzsdn6jgqx71ulbzou1g8lhqggdi3i

California Energy Commission. "2019 Building Energy Efficiency Standards."
www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

California Energy Commission. Acceptance Test Technician Certification Providers:
https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program/acceptance

ASHRAE Epidemic Task Force: Building Readiness (updated May 22, 2020)
https://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-building-readiness.pdf

ASHRAE Guidance for Building Operations During the COVID-19 Pandemic
https://www.ashrae.org/file%20library/technical%20resources/ashrae%20journal/2020journaldocuments/72-74_ieq_schoen.pdf

ASHRAE Resources:
https://www.ashrae.org/technical-resources/resources

ASHRAE Infectious Aerosols:
https://www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf

Outdoor Air Acceptance NRCA-MCH-02-A:
https://energycodeace.com/download/36500/file_path/fieldList/2019-NRCA-MCH-02-A%20Outdoor%20Air.pdf

Constant Volume, Single Zone, Unitary Air Conditioner and Heat Pump Systems NRCA-MCH-03-A:
https://energycodeace.com/download/36501/file_path/fieldList/2019-NRCA-MCH-03-A-ConstantVolumeSingleZoneHvac.pdf

Air Economizer Controls Acceptance NRCA-MCH-05-A
https://energycodeace.com/download/36500/file_path/fieldList/2019-NRCA-MCH-02-A%20Outdoor%20Air.pdf

Demand Control Ventilation Systems Acceptance NRCA-MCH-06-A
https://energycodeace.com/download/36505/file_path/fieldList/2019-NRCA-MCH-06-A-DemandControlVentilation.pdf

CASH Facility Inspection Tool (FIT) Guidebook/Section II-HVAC Mechanical Systems-"Beyond the FIT").
http://www.cashnet.org/wp-content/uploads/2020/05/CASH-FIT-Guidebook-Oct-2017-final.pdf

Environmental Protection Agency: Creating Healthy Indoor Air Quality in Schools:
https://www.epa.gov/iaq-schools

EPA IAQ Problem Solving Tool:
https://www.epa.gov/iaq-schools/indoor-air-quality-problem-solving-tool

EPA Preventive Maintenance Guidance:
https://www.epa.gov/iaq-schools/indoor-air-quality-tools-schools-preventive-maintenance-guidance-documents

EPA Framework for Effective School IAQ Management:
https://www.epa.gov/iaq-schools/framework-effective-school-indoor-air-quality-management-key-drivers

Risk Higher in Tight Indoor Spaces:
https://www.businessinsider.com/coronavirus-risk-higher-tight-indoor-spaces-with-little-air-flow-2020-5

Theodore, 2003:
https://www.atsjournals.org/doi/full/10.1164/rccm.200306-760OC

Jerusalem Post, China 2020:
https://www.jpost.com/international/chinese-researchers-find-airborne-coronavirus-in-wuhan-hospitals-626361

Jianyun, 2020:
https://wwwnc.cdc.gov/eid/article/26/7/20-0764_article

Fanning Howley, 2020:
https://fhai.com/insights/maintaining-school-hvac-systems-to-address-covid-19/

CALCULATING SOCIAL DISTANCING AND SCHEDULING FOR STAFF AND STUDENTS

I: OVERVIEW



Social distancing and scheduling are key concepts and challenges to re-opening and operating schools in the COVID-19 environment and require careful consideration. The more people a student or staff member interact with, and the longer that interaction, the higher the risk of COVID-19 spread. The risk of COVID-19 spread increases in school settings as follows:

- **Lowest Risk:** Students and teachers engage in virtual-only classes, activities, and events
- **More Risk:** Small, in-person classes, activities, and events. Groups of students stay together and with the same teacher throughout/across school days and groups do not mix. Students remain at least six (6) feet apart and do not share objects (e.g., hybrid virtual and in-person class structures, or staggered/rotated scheduling to accommodate smaller class sizes)
- **Highest Risk:** Full sized, in-person classes, activities, and events. Students are not spaced apart, share classroom materials or supplies, and mix between classes and activities

The following Best Management Practices (BMP) are intended to assist in implementing social distancing and scheduling for students and staff.

II: BEST MANAGEMENT PRACTICES

All schools should be evaluated individually to identify maximum capacity, challenges and opportunities.

Following are suggested steps to take:

1. Inspect:
    a. Walk the school with the principal.
    b. Evaluate student drop-off and pick-up.
    c. Consider students ingress and exit from the campus perimeter.
    d. Visit typical classroom and identify maximum occupancy per room based on social/physical distancing guideline.
    e. Visit specialty rooms like art and weight room or career technical education and identify opportunities for use and transformation.
    f. Visit and determine future use of multi-purpose room, gym, theater, locker room, etc., as either classroom or storage.
    g. Visit cafeteria and determine how school meals will be provided.
    h. As you walk, envision how to minimize encounters among staff and students thru one-way hallways and stairs.
    i. Visit restrooms and assign schedules for use.
    j. Determine how to secure playground structures.

k. Identify if athletic facilities will be used (bleachers might be used as marked exercise stations and jogging with social distancing).
l. Plan how grounds and blacktops will be used (physical education, emergency evacuations and drills only).

2. Evaluate:
   a. Identify the number of staff and students that can occupy each campus.
   b. Determine district philosophy and approach about de-densifying classrooms.
   c. Identify spaces that will not be used for people and assign them to storage of extra materials from classrooms.
   d. Identify possible outdoor classrooms (for example, on the north side of a building, a class may be held outside in the morning before the day is too hot).

3. Implement:
   a. Move furniture, fixtures, equipment and classroom materials into storage.
   b. Purchase additional furniture or equipment.
   c. Install signage to support your efforts.
   d. Update your community on social distancing, de-densifying classrooms, and all district efforts.

4. Plan for the Future:
   a. Plant more deciduous trees appropriate to your region and use them as outdoor classrooms.
   b. Consider installation of pre-approved shade structures for outdoor classrooms, student lunch, etc.

WORKING WITH PUBLIC HEALTH AGENCIES

Relationships are the building blocks of any community partnership. During this pandemic, your relationships will be a key asset in responding to the various challenges you will be tasked with. One of the key relationships you will have to tap into is your relationship with public health agencies. The dynamics will look different in regard to every school district and county office of education. Key points are to: 1) identify your communication bridge to public health; 2) identify clear and defined needs; 3) proactively plan as feasible as possible; and 4) try to determine the safest way to reopen your schools.

If you have not worked with public health agencies, start inside your organization to see if anyone has developed a relationship with your local public health agencies. If no one has an active relationship, reach out to your Superintendent to seek guidance on how to proceed in bridging this gap. You may be directed to your County Office of Education (COE). Whatever path is followed, a crucial step is to develop a single point of contact between the district or COE and public health. This will help facilitate clear and concise communications. Once your contacts have been designated, establish the lines of communications and frequency (will it be via ZOOM, or other virtual platform, weekly, monthly meetings, etc.).

When working with public health agencies, or any organization that may be assisting your district, it is important to have clearly defined goals and roles, so each party can develop a better understanding of each other's situation. When it comes to public health agencies, they may not be experts in school dynamics, as you may not be the expert in public health. It is important to lay out the dynamics of how your schools operate to bridge the knowledge gap to facilitate effective solutions. When communicating, make it clear and visible to public health agencies. Think of what populations you are serving (high school, middle school,

elementary, special needs, etc.), the different populations could have different responses or cleaning tactics based on their age range or developmental needs.

Public health agencies will be able to help guide you in proactively trying to protect public health, as well as assist if you should have a breakout. When developing protocols and procedures for responding to this pandemic, you will have to think in the immediate, near, and long-term time periods. What can be preventatively and proactively implemented? What is the response in regard to a breakout? How can we open school safely in terms of local health needs? These are all questions to work through with public health agencies. One of the key points is to determine a breakout response and run through a scenario of a breakout. This will help better prepare everyone in the event of a breakout or an identified positive case scenario.

One of the hardest questions to answer right now is how we are going to collectively return to school in light of this pandemic? There is a myriad of issues to consider such as social distancing, PPE needs, Indoor Air Quality, scheduling classes, supply shortages, and a potential looming budget crisis to name a few. A suggestion to overcome this would be to develop a "return to school" task force. This could essentially be a group of stakeholders with a goal of figuring out how to best return our students to school safely. It could collectively involve any stakeholders deemed essential such as public health agencies, school district representatives, community organizations, office of emergency services, community colleges to name a few. This approach could assist in unifying breakout responses and brainstorm solutions.

The need to keep our schools clean, safe, and functional during a pandemic is a huge burden to carry on any one person's shoulders. It is paramount to utilize your resources to the best of your abilities and to leverage those relationships when needed to provide the best for staff, students, and the community.

Factors to consider:

1. Identify your single point of contact to public health. If you don't have one, take the correct steps to develop that relationship.
2. Identify or create your line of communications to public health.
3. Clearly communicate your needs and identify your situation.
4. Determine with public health guidance, the immediate, near term, and long-term challenges, solutions, and responses.
5. Develop, facilitate, or contribute toward the conversation.



HEALTHY SCHOOLS: CLEANING, DISINFECTING, HEALTHY AIR QUALITY, SCHEDULING AND SOCIAL DISTANCING

IMPORTANT CONSIDERATIONS

FURNITURE/EQUIPMENT

1. Create a plan to temporarily remove furniture and equipment out of the classroom that will not be used during the immediate school year.
    a. Work with union representatives and openly have a conversation on why this is important.
    b. Items that can be removed could include bulky teacher/paraeducator's desks, student desks, specialized equipment that students will not be using, toys, and personal items.
    c. Create a classroom guideline on what items can be in the classroom.
    d. What items can be permanently removed?
    e. Work with legal to auction items no longer needed.
2. Now is the time to reevaluate the classroom for items that:
    a. Obscure building signage, electrical outlets, electrical panels or fire extinguishers.
3. Plan for storage
    a. Is it in the budget to rent a local storage unit (C-train)?
    b. Evaluate site for what areas on campus can't be used due to social distancing. Can this area be used for storing items (locker rooms, stages, multipurpose rooms)?

PERSONAL PROTECTIVE EQUIPMENT (PPE) PROCUREMENT

Given the current logistical and supply chain issues, it can be challenging to procure the necessary PPE for your school operations. If you are having issues procuring PPE, tap into your resources at your local COE. They will be able to either help procure items or provide options to investigate. This may be working with your COE directly or they may direct you to your local city jurisdiction, your local office of emergency services, or the California Office of Emergency Services.

Be sure to contact your COE to determine the best means or methods of procuring PPE you are having challenges with; and communicate your organization's readiness (identify actions you've already taken, and add a checklist for things your staff should be doing right now).

ITEMS TO PREPARE FOR RE-OPENING

1. Create a back-up staffing plan/cross training based on different re-opening scenarios.
2. Procurement of PPE, cleaning and disinfecting supplies.
3. Staff training on safety protocols and proper use of disinfection products.
4. Communication plan if someone becomes sick.
5. Clean and disinfect frequently touched surfaces (e.g., playground equipment, door handles, sink handles, drinking fountains) within the school and on school buses at least daily or between use as much as possible. Use of shared objects (e.g., gym or physical education equipment, art supplies, toys, games) should be limited when possible, or cleaned between use.
6. If transport vehicles (e.g., buses) are used by the school, drivers should practice all safety actions and protocols as indicated for other staff (e.g., hand hygiene, cloth face coverings). To clean and disinfect school buses or other transport vehicles - see guidance for bus transit operators.

7. Develop a schedule for increased, routine cleaning and disinfection. Ensure safe and correct use and storage of cleaning and disinfection products, including storing products securely away from children. Use products that meet EPA disinfection criteria.
8. Cleaning products should not be used near children, and staff should ensure that there is adequate ventilation when using these products to prevent children or themselves from inhaling toxic fumes.
9. Ensure ventilation as much as possible, for example by opening windows and doors. Do not open windows and doors if doing so poses a safety or health risk (e.g., risk of falling, triggering asthma symptoms) to children using the facility.
10. To minimize the risk of Legionnaire's disease and other diseases associated with water, take steps to ensure that all water systems and features (e.g., sink faucets, drinking fountains, decorative fountains) are safe to use after a prolonged facility shutdown. Drinking fountains should be cleaned and sanitized, but encourage staff and students to bring their own water to minimize use and touching of water fountains.
11. Routine summer cleaning.
12. Update Emergency Operations Plans.
13. Posting signs in highly visible locations (use of masks, social distancing).
14. Modified layouts flexibility.
15. Physical barriers and guides (tape for social distancing on area for lunch lines, physical barriers in bathrooms between sinks, urinals).
16. Food services extra support for custodial and maintenance staff.
17. Social distancing plan in hallways and common areas.
18. Controlling access by outside visitors, contractors, deliveries.

Evaluate stakeholder readiness to return to school, to include staff, students, parents, bargaining units, community partners, etc. (survey).

1. Consider developing surveys for different stakeholders. Each survey that is created should be unique to the audience it is being sent to.
    a. Staff
    b. Parents and students
    c. Community partners

2. Consider creating a newsletter or email letting stakeholders know what has been happening in the schools while students have been distance learning and while staff have been teleworking.
    a. Highlight the work maintenance and custodial teams have been conducting.
    b. Show off the new standards of cleaning and disinfecting.
    c. Empower the staff to assist the custodial crew in disinfecting areas such as teachers' and paraprofessionals' desks every day.

3. Provide a checklist for teachers and parents that will assist in protecting and promoting healthy habits.

CLASSROOMS

Following are things to consider when implementing socially distanced classrooms.

WALLS

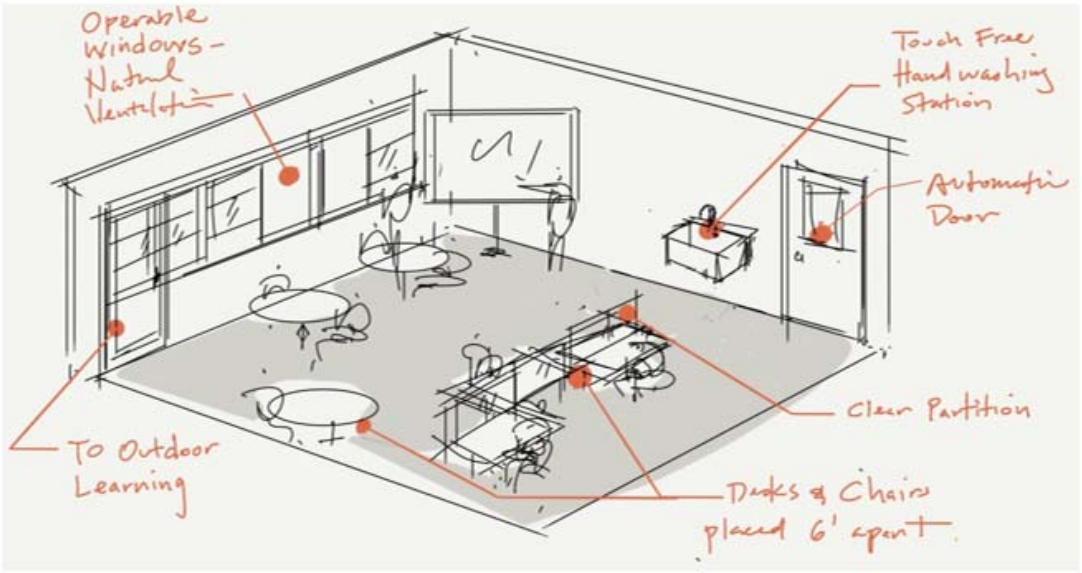
DOORS

WINDOWS

FLOORS

TECHNOLOGY

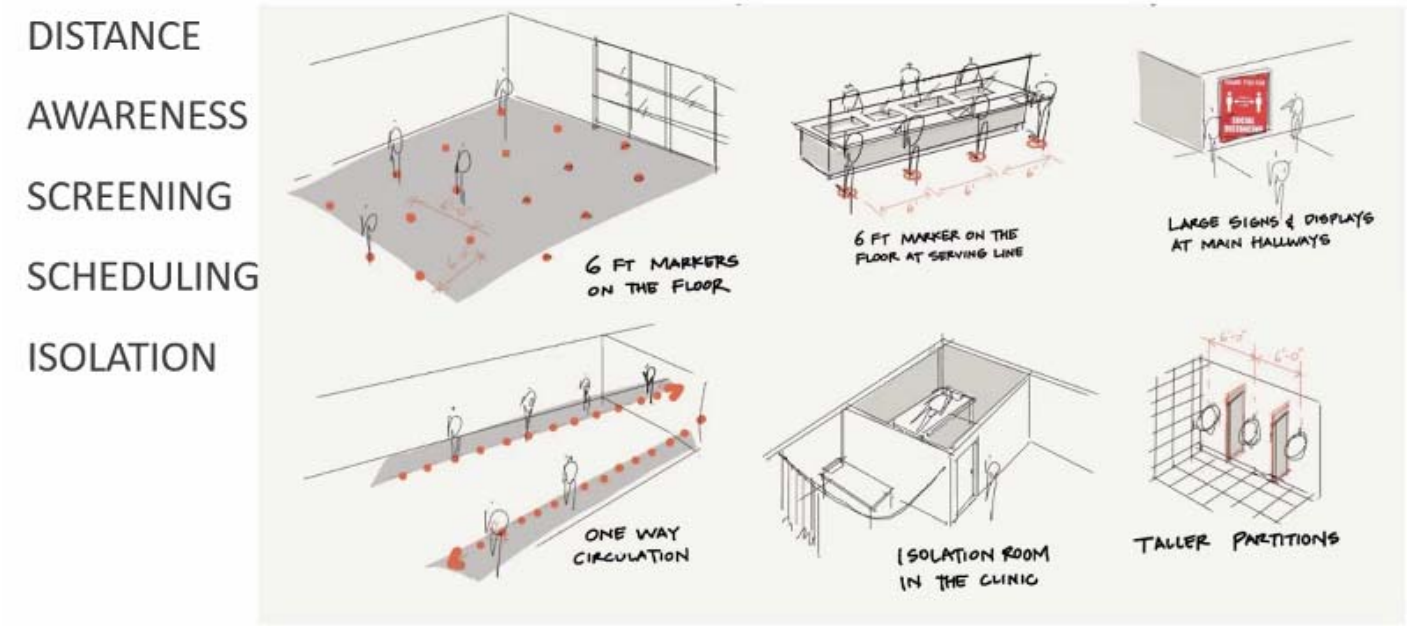
FURNITURE



1. Social distancing at six (6) feet apart can be used as a tool to work together.
2. Use visual marks on floor as a first step and designation through carpet color or pattern changes as a second step.
3. Classroom instruction will likely be in-person and online (split classes), thus an increase in opportunities to support both methods of instruction.
4. Prepare a space or part of the room for online recording and communication.
5. Install touch-free devices including door hardware, handwashing stations, and faucet and soap dispensers.
6. Increase natural ventilation whenever possible.
7. Select furniture that is easy to clean and less porous than fabric (explore solid plastic).
8. Consider sneeze guards or plexiglass panels at high traffic areas like the main office, reception or attendance desk.

BEHAVIOR-DRIVEN SOCIAL DISTANCING

Following are things to consider when implementing social distancing throughout the school site.



1. Partner with other behavior-driven programs to create a reward system for social responsibility in wearing masks and maintaining six (6) foot distance from each other.
2. Circulate in opposite sides of the hallway or create one-way hallways and stairs.
3. Consider six (6) foot markers on the floor for nutrition lines or serving cafeteria.
4. Screening and testing in schools can become a structured method of the future, thus install an isolation room near the nurse's office.
5. Install handwashing stations in middle of campus ideally outdoor that are easily accessible with high visibility.
6. Install signage to communicate all efforts and remind staff and students.
7. Consider taller urinal partitions in restrooms.

TECHNOLOGY

Use technology when possible to minimize transmission.

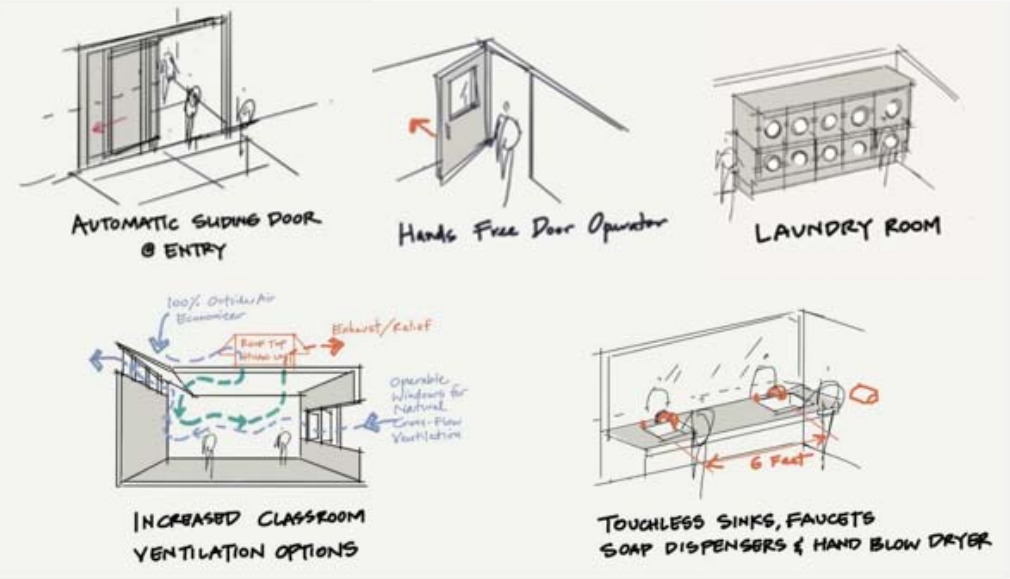
HANDS-FREE DOORS

FIXTURES

WASHING

HVAC

FILTRATION



1. Use automatic sliding doors at entry and equip them with automatic locking mechanism for emergencies.
2. Use building systems in the way they were designed.

III: RESOURCES

CDC COVID-19 Guidance:

https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Guidance.aspx

LA County Guidance for Social Distancing:
http://publichealth.lacounty.gov/media/Coronavirus/GuidanceSocialDistancing.pdf

CDC Guidance on Schools/Day Camps:

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-day-camps.html

CDC Clean Disinfect:

https://www.cdc.gov/coronavirus/2019-ncov/community/clean-disinfect/index.html

CDC Clean/Disinfect Facility:

https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html

EPA Products:

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19

Bus and Transit:

https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/bus-transit-operator.html

Legionnaire's Disease:

https://www.cdc.gov/legionella/about/index.html

CDC Building Water System:

https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html

AIA Reopening Assessment Tool:

https://www.aia.org/resources/6292441-re-occupancy-assessment-tool

Workplace readiness essentials:

https://cushwk.co/3at0Ldg

LACOE's Planning Framework for the 2020-21 School Year:

https://www.lacoe.edu/Home/School-Reopening

Cal OSHA Guidance on Preparing Workplaces for COVID-19:

https://www.osha.gov/Publications/OSHA3990.pdf

Teachers and Parent Checklist:

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/checklist.html

MANAGING FISCAL IMPACT: PLANNING, RISK MANAGEMENT AND COMMUNICATIONS

I: OVERVIEW

This section outlines key resources and ways to think about funding COVID-19 impacts, as well as recommendations related to managing risk and advocating for your needs. COVID-19 has challenged school maintenance and facility leaders to speak up about what will be needed to do the job they are being asked to do. Be ready with the costs and important related data about why it is important. Buildings can't speak - be their voice and make the case.



MAKE M&O'S VOICE HEARD IN THE DISTRICT'S LCAP PROCESS

Local Control Accountability Plan (LCAP) is a team sport, and those at the LCAP table – with the right case being made that a specific initiative or expenditure will help students stay in school (attendance), and learn (outcomes of attendance) – win the funding.

1. Make the case that the maintenance of the place where students go to learn affect both attendance and learning, and that maintained buildings are the backbone to functioning and highly successful student outcomes, as well as maximizing district funding.
2. Have a robust maintenance plan that conducts a site-by-site analysis, and ends in grouping like items together, such as roofing, by priority-based condition.
3. Have a plan that includes everything, at least five years out.

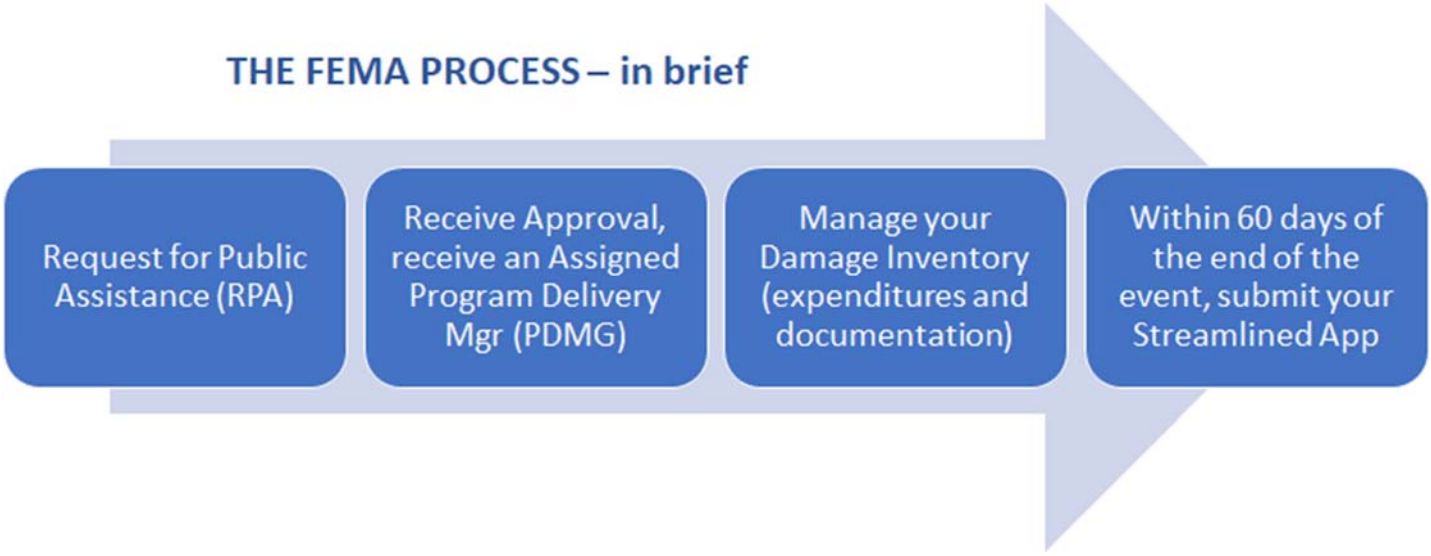
If there must be a delay with some of the planned maintenance to respond to the current crisis, be sure to communicate the urgency with which the district will need to get back on track. There is a significant impact to delaying needed maintenance and you need to make that case as dollars become scarce. See the resources section for the CASH Facility Inspection Tool (FIT) Guidebook - "Beyond the FIT" for more information.

FUNDING COVID-19 EXPENDITURES

During the current pandemic, planning and focus on getting ready to return to school, be sure to document the additional expenses due to this moment so that they can be claimed from additional funds from Congress or from Federal Emergency Management Agency (FEMA). Extra documentation will be required for the FEMA funds.

The CARES Act funds are coming through the California Department of Education (CDE). Each Chief Business Official (CBO) will provide very specific coding if M&O is authorized to expense those funds. CARES Act covers allowable expenses to a district maximum, coordination with the other departments ensures that the funding will cover what needs to be purchased. This is the funding that is also covering the costs of at-home teaching and learning, the devices and software get funded from here. Personal Protective Equipment (PPE) can also be funded from this source. See the resources section for assistance in using these funds.

FEMA will also be funding claims, they reimburse at 75 percent of cost for expenses directly due to this pandemic.



The FEMA funding is being administered by the Governor's Office of Emergency Services (Cal OES). They have a very detailed process which is provided in brief format in the graphic above. One significant piece of information is that as soon as the Request for Public Assistance (RPA) is approved, a manager will be assigned. Amendments to your application estimates can be made throughout the process and even at final submittal. It is important to request assistance during the disaster or the window of opportunity may close.

Some tips on coding and passing the audits for these programs would be:

1. Designate a unique project identifier in the coding, this is required for federal funding and is like what we do for state facilities funding. Number project(s) in the goal code, management code, or where the CBO says to put it. It just has to be in the string and used whenever funds are being spent.
2. The FEMA grant has a very granular audit. They will want more than just a purchase order and a payment to justify receiving the funds. FEMA will want to know who used the equipment and when. Would the district have purchased it anyway? FEMA will want daily logs showing which staff worked the event and what they were doing, etc.
3. Because the audits are rigorous, break your district down into several projects. For instance, each school site could be a project and then one for the district office. If one audit hits a snag, the money could still come through from the others and it would not all be held up.
4. Make sure documents are kept and filed. If electronically filed, make sure it is not in a system that purges in two years. Auditing may not be complete by then.
5. CARES Act and FEMA do not cover the same things, although there is some duplication. Strategize which funding source is covering which expenses, then code and store documents accordingly. (See OES Q&A for explanation of the differences).

MANAGING RISK AND ADVOCACY



All agencies and businesses assume a certain level of risk and find ways to manage such risk. Strategies vary, but all have the common goal of minimizing exposure while maximizing the benefits for the community it serves.

One proven strategy is to comply with federal, state, and local laws including Americans with Disability Act (ADA), Occupational Safety and Health Administration (OSHA), Department of Pesticide Regulation (DPR), and more recently with Department of Public Health (DPH) regulations and requirements.

Another strategy is to implement:

- Social/physical distancing between occupants,
- Practice healthy hygiene,
- Consistent use of face coverings for staff and students,
- Post reminders in the form of signs and alerts, and
- Minimize transmission of pathogens including COVID-19.

Workplace controls can serve as a strategy, especially when balanced with building system management, staff education, and policy/procedure updates. Remain vigilant on the evolution of guidance for schools and day care centers in the state and your local jurisdiction and stay connected with colleagues for consistency in your area.

Risk assessment looks different today. Staff and students spend more time communicating online, thus increasing security risk around privacy and data security, placing cybersecurity vulnerabilities as the new risk. Closed schools save money as utility bills are lower, but cost money as we plan to reopen schools with multiple instruction methods, new additional cleaning requirements, and many variables education agencies had not faced in the past.

Academic instruction, tests, and grades have evolved, even graduations are now virtual, paving the way to questions about academic integrity and enrollment verification. Student life has temporarily moved away from campus settings and it's time to build trust and encourage a return to campus. Student life has evolved and so have the priorities of maintenance and operations professionals. It is important to find new ways to connect with our leaders, to advocate for staff and funding for increased cleaning and disinfecting, de-densifying classrooms, moving of furniture, fixtures and materials, evaluating building systems like HVAC and even upgrading features to prevent transmission.

We must continue to manage the physical environment and building systems that support student success while supporting everyone's health and safety.

III: RESOURCES

New to the LCAP Process?

https://www.cde.ca.gov/re/lc/#:~:text=Local%20Control%20and%20Accountability%20Plan%20(LCAP),and%20evaluation%20of%20an%20LCAP.

https://www.cde.ca.gov/ls/fa/re/

CASH Facility Inspection Tool (FIT) Guidebook:
http://www.cashnet.org/wp-content/uploads/2020/05/CASH-FIT-Guidebook-Oct-2017-final.pdf

LCAP FAQ:
See https://www.cde.ca.gov/re/lc/lcapfaq.asp

CARES Act:
https://www.cde.ca.gov/fg/aa/ca/caresact.asp

Elementary and Secondary School Emergency Relief Fund:
https://oese.ed.gov/files/2020/05/ESSER-Fund-Frequently-Asked-Questions.pdf

International Facility Management Association:
https://www.ifma.org/

ADDITIONAL RESOURCES

California Department of Public Health Guidance for Schools:
https://covid19.ca.gov/pdf/guidance-schools.pdf

CDE Guidelines:
https://www.cde.ca.gov/ls/he/hn/coronavirus.asp

San Diego County Office of Education COVID-19 Planning Assumptions:
https://covid-19.sdcoe.net/Portals/covid-19/Documents/Pandemic%20Plan%20Resources/20-04-14_Recovery_Plan_Assumptions_and_Recommendations.pdf

CDC School Re-Opening Guidelines:
https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/CDC-Activities-Initiatives-for-COVID-19-Response.pdf

Santa Clara School Pandemic Toolkit
https://files.nwesd.org/website/School_Nurse/Resource%20Guide/Section_8/Santa_Clara_School_Pandemic_Toolkit.pdf

EdWeek Re-Opening Schools Series:

https://www.edweek.org/ew/issues/reopening-schools/the-socially-distanced-school-day.html

CALIFORNIA'S COALITION for ADEQUATE SCHOOL HOUSING℠

School Ventilation for COVID-19

Protect Health and
Improve Learning
Through Indoor Air Quality



version 1.0 June 2020

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Introduction

The COVID-19 pandemic that has affected every corner of the globe in 2020 will have profound, long-lasting impacts on the design of schools and other physical environments. This has often been the case throughout history as the response to disease and building occupant safety have shaped the way we live. Staples of our modern environment as diverse as city parks and the clean lines and smooth surfaces of modern architecture were in part a response to epidemics of cholera, typhoid fever and other diseases in the late 19th and early 20th centuries. In many cases the response to disease gave increased importance, support and visibility to movements that were already underway.[1] As we begin to look toward recovery from this epidemic and the prospect of living with it for a prolonged period, the Collaborative for High Performance Schools (CHPS) hopes there will be a similar outcome. We hope to bring renewed focus to the role that the quality of learning environments, particularly IAQ, plays in student and teacher health, achievement and wellness. The goal of this paper is to outline the learning and wellness benefits of improved IAQ in schools and to provide actionable design strategies to achieve those benefits as well as connections to further resources.

About CHPS

Founded nearly 20 years ago, the Collaborative for High Performance Schools (CHPS) has a mission to improve student health and achievement, conserve resources, and protect the environment through better school buildings. To help school districts and designers implement strategies proven to benefit student health, learning and the environment, CHPS has created a set of research-based standards and guidelines called *The CHPS Criteria*. *The CHPS Criteria* is organized into seven important categories — with the largest weight dedicated to Indoor Environmental Quality (IEQ). Within each category there are individual credits and prerequisites, such as daylighting, low volatile organic compounds and increased ventilation. Each one includes specific metrics for guiding and evaluating school designs to determine whether they can achieve the performance that research has shown to benefit students and teachers. All 101 prerequisites and credits work together to ensure that every CHPS project meets minimum standards for sustainability and performance in key areas such as acoustics and water use reduction while also allowing the flexibility to accommodate each project's constraints. This balance creates a rigorous and usable tool to guide and evaluate the design of high-performance schools. *The CHPS Criteria* makes it easy for school districts to set clear, research-based standards for the design of their facilities and to set requirements for their designers to ensure their school buildings meet these standards.

[1] Campbell, Margaret. "What tuberculosis did for modernism: the influence of a curative environment on modernist design and architecture." *Medical history* vol. 49,4 (2005): 463-88. doi:10.1017/s0025727300009169

Background Science

Connection between Indoor Air Quality and Learning

There is a broad and growing body of research establishing a strong link between the quality of a school's learning environment and the performance of its students. Although it is not often thought of this way, the learning environment — along with more widely recognized factors such as the teacher, family situation and socioeconomic status — is a significant factor in explaining the achievement gap between different students. A recent report by the World Bank, "The Impact of School Infrastructure on Learning," concluded that "Recent studies have shown that students' performance is enhanced in schools with better physical learning environments. As this report will show, the empirical argument for investing in learning environment is strong."[2]

An important study demonstrating a strong connection between the quality of the learning environment and student achievement was conducted by the University of Salford in the UK. This peer-reviewed study conducted detailed surveys of 153 classrooms in 27 diverse schools and collected academic performance data for their students. Using multilevel statistical analysis, the authors determined that "Differences in the physical characteristics of classrooms explain 16% of the variation in learning progress over a year for the 3766 pupils included in the study."[3] This shows that the quality of the environment is a significant factor in how students learn. The study further assessed the level of impact from seven different environmental characteristics: light, temperature, air quality, ownership, flexibility, visual complexity and color. The research team produced a user-friendly report that provides actionable strategies for teachers and designers.

In 2019 the Harvard T.H. Chan School for Public Health published a comprehensive report on how school buildings influence student thinking, health and performance called Schools for Health: Foundations for Student Success. The report "..reviews findings from more than 200 scientific studies and identifies more than 70 Health Performance Indicators."4 The report discusses the unique needs of children and how facilities can help meet them. The authors conclude that, "The evidence is unambiguous. The school building impacts student health, thinking and performance. Investing in school buildings is an investment in our future."

One of the most impactful areas identified in the University of Salford and Harvard reports is Air Quality. There have been numerous additional studies linking indoor air quality, specifically

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[2] Barrett, Peter; Treves, Alberto; Shmis, Tigran; Ambasz, Diego; Ustinova, Maria. 2019. "The Impact of School Infrastructure on Learning : A Synthesis of the Evidence." *International Development in Focus*;. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/30920 License: CC BY 3.0 IGO."

[3] Barrett, Peter, et al. "The Holistic Impact of Classroom Spaces on Learning in Specific Subjects." Environment and Behavior, vol. 49, no. 4, May 2017, pp. 425–451, http://doi:10.1177/0013916516648735

[4] Eitland, Erika, et al. "Schools for Health: Foundations for Student Success." *For Health*, Harvard University T.H. Chan School of Public Health, 2019, schools.forhealth.org/.

carbon dioxide (CO2) levels, to learning and cognition. One of the most widely cited was completed by Harvard, Syracuse and SUNY universities in 2016.[5] This study used a laboratory-simulated office environment to test the cognitive performance of office workers under different levels of CO2 and volatile organic compounds (VOCs). The CO2 and VOC levels were adjusted to simulate a typical office environment, a "Green" indoor environment with lower CO2 and VOC levels and a "Green+" environment with even lower levels. The study concluded that, "On average, cognitive scores were 61% higher on the Green building day and 101% higher on the two Green+ building days than on the Conventional building day."[6] This shows the major impact that indoor air quality has on our ability to understand and process learning. Although this study was conducted on adults, the impact on children is likely bigger, since they breathe a larger volume of air relative to body size.

Another study in 2014 looked at changes in student test scores in one Texas school district where all the classrooms were renovated specifically to improve indoor air quality over a five-year period.[7] The renovations were specifically authorized to address indoor air quality problems such as mold, high VOC levels and poor ventilation at 66 elementary schools across the district. Although the scale of the improvements at each school was not large, typically $300,000 to $500,000, they produced measurable improvements in student achievement. By correlating test data with the timing of the renovations at each school, the researchers were able to demonstrate an improvement in standardized testing pass rates of 2-4%, depending on the scope of the renovations with more extensive projects typically producing a larger improvement. "Results indicate that performance on standardized tests significantly improves.... Rough calculations suggest that IAQ-renovations may be a more cost-effective way to improve standardized test scores than class size reductions." Another study of schools in California showed a similar link between improved indoor air quality and ventilation and improved academic performance.[8]

In addition to improving academic performance, research has also shown that improving classroom IAQ also improves student and teacher attendance. A study of 162 elementary school classrooms from different regions of California showed a significant link between improving ventilation rates and indoor air quality and a decrease in illness-related absence.[9] This study noted that average ventilation rates in the classrooms studied were far below state-required levels and if they were raised to the required minimum they "...would decrease IA [illness absence] by 3.4%, increase attendance- linked funding to schools by $33 million annually, and increase costs by only $4 million.

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[5] Allen JG, MacNaughton P, Satish U, Santanam S, Vallarino J, Spengler JD. 2016. Associations of cognitive function scores with carbon dioxide, ventilation, and volatile organic compound exposures in office workers: a controlled exposure study of green and conventional office environments. Environ Health Perspect 124:805–812; http://dx.doi.org/10.1289/ehp.1510037

[6] Allen and MacNaughton 805.

[7] Isabella Annesi-Maesano, Nour Baiz, Soutrik Banerjee, Peter Rudnai, Solenne Rive & on behalf of the SINPHONIE Group (2013) Indoor Air Quality and Sources in Schools and Related Health Effects, Journal of Toxicology and Environmental Health, Part B, 16:8, 491-550, DOI: 10.1080/10937404.2013.853609

[8] Haverinen- Shaughnessy, U., Moschandreas, D.J. and Shaughnessy, R.J. (2011), Association between substandard classroom ventilation rates and students' academic achievement. Indoor Air, 21: 121-131. https://doi:10.1111/j.1600-0668.2010.00686.x

[9] Mendell, M.J., Eliseeva, E.A., Davies, M.M., Spears, M., Lobscheid, A., Fisk, W.J. and Apte, M.G. (2013), Association of classroom ventilation with reduced illness absence: a prospective study in California elementary schools. Indoor Air, 23: 515-528. https://doi:10.1111/ina.12042

Further increasing VRs [ventilation rates] would provide additional benefits." Reducing student absence improves academic achievement and provides additional funding to many school districts whose funding is tied to average daily attendance. Studies of schools in Washington, Idaho and Scotland have shown similar results. Additionally, a literature review published in 2017 looked at 26 studies from around the world and presented evidence of a strong association between ventilation rates, student performance and attendance.[10] Increasing student attendance not only boosts learning, but in 7 states, including California, Texas and New York, where a significant portion of funding is distributed based on average daily attendance this translates to an increase in funding.

These studies are examples of the growing body of research that demonstrates a strong connection between the quality of the learning environment and what happens within those spaces. They specifically show that significant benefits to student achievement and learning and to student attendance are correlated to improvements in indoor air quality and ventilation. At a time when schools are facing unprecedented COVID-19-related funding challenges, improving ventilation in classrooms and other learning spaces is an important and often overlooked strategy to improve student learning and, in many cases, even increase school funding in some states.

Connection between Indoor Air Quality and Disease Transmission

There is a very active research effort into how the coronavirus is transmitted and what can be done to reduce its transmission. Much of this research is ongoing and not yet conclusive. However, the evidence collected so far seems sufficient — and similar enough to diseases that have already been studied — to allow some conclusions and recommendations for best practices for schools.

The first thing we know is that one of the primary ways the virus is transmitted is through airborne respiratory droplets. The American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE) has stated, "Transmission of SARS-CoV-2 through the air is sufficiently likely that airborne exposure to the virus should be controlled. Changes to building operations, including the operation of heating, ventilating, and air conditioning systems, can reduce airborne exposures."[11] A 2003 literature review following previous epidemics of similar viruses concluded that, "There is strong and sufficient evidence to demonstrate the association between ventilation, air movements in buildings, and the spread of infectious disease."[12]

Although researchers do not have sufficient data to specify ventilation requirements that will prevent disease transmission, it is clear that proper ventilation is an extremely important

[10] Fisk, WJ. The ventilation problem in schools: literature review. Indoor Air. 2017; 27: 1039– 1051. https://doi.org/10.1111/ina.12403

[11] "COVID-19 (Coronavirus) Preparedness Resources." *COVID-19: Resources Available to Address Concerns*, American Society of Heating Refrigeration and Air Conditioning Engineers, 2020, www.ashrae.org/technical-resources/resources.

[12] Li, Y., Leung, G.M., Tang, J.W., Yang, X., Chao, C.Y.H., Lin, J.Z., Lu, J.W., Nielsen, P.V., Niu, J., Qian, H., Sleigh, A.C., Su, H.- J.J., Sundell, J., Wong, T.W. and Yuen, P.L. (2007), Role of ventilation in airborne transmission of infectious agents in the built environment – a multidisciplinary systematic review. Indoor Air, 17: 2-18. doi:10.1111/j.1600-0668.2006.00445.x

strategy for reducing that risk. The CDC recommends that schools "Ensure [that] ventilation systems operate properly and increase circulation of outdoor air as much as possible, for example by opening windows and doors."[13] Increasing ventilation rates means exchanging the air inside the space for fresh outside air more often. This removes airborne respiratory droplets from an infected person from the space more quickly and lessens the risk they will infect someone else.

A recent study that got a lot of media attention was a case study of transmission of COVID-19 in a restaurant in Guangzhou, China. Although most of the media attention focused on how the direction of airflow within the space affected the virus transmission, another important consideration was the lack of ventilation in the space. The exhaust fans had been turned off so there was no outside air ventilation as part of the HVAC system, which led to very low ventilation rates. This led to the authors' conclusion that, "Aerosol transmission of SARS-CoV-2 due to poor ventilation may explain the community spread of COVID-19."[14] Based on past and emerging research it is clear that the performance of a building's ventilation system has a significant effect on indoor airborne virus transmission.

For a more detailed discussion of the science behind ventilation and disease transmission please refer to a recent detailed whitepaper from Taylor Engineering which provides more detailed discussion of these topics.[15]

State of Indoor Air Quality in Schools

As we have established above, a healthy IAQ is important for student and teacher performance and wellness. Unfortunately, many classrooms are not providing healthy or even adequate IAQ to students and teachers. The 2017 literature review by WJ Fisk noted that in all 20 of the studies that provided CO2 data from 20 or more classrooms "...the reported average and median values of the peak CO2 concentration exceeded 1000 ppm, and in many instances 2000 ppm was exceeded. … These CO2 data indicate a widespread failure to provide the minimum amount of ventilation specified in standards for classrooms."[16] (CO2 concentration levels are often used as an effective proxy for overall indoor air quality which includes CO2 and other particulates and pollutants. 1000 ppm is approximately equal to the ASHRAE-recommended ventilation rate and the code-required rate in California and many other jurisdictions of 15 cubic feet per minute). The 2013 study by Mendell et al. evaluated 152 classrooms in California and found that more than half did not meet the minimum requirements, including 95% of those in an all-air-conditioned district in the Central Valley.[17] This means that in

[13] "Considerations for Schools." *Centers for Disease Control and Prevention*, 19 May 2020, www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html.

[14] Lu J, Gu J, Li K, Xu C, Su W, Lai Z, et al. COVID-19 outbreak associated with air conditioning in restaurant, Guangzhou, China, 2020. Emerg Infect Dis. 2020 Jul [date cited]. https://doi.org/10.3201/eid2607.200764

[15] https://taylorengineers.com/taylor-engineering-covid-19-whitepaper

[16] Fisk, WJ. 1041

[17] Medall, M.J. 523

many if not most classrooms children are not getting the required minimum amount of fresh air and their academic performance is negatively affected.

This problem is not limited to older classrooms with out-of-date mechanical systems in need of replacement or repair. A 2019 study conducted by Lawrence Berkeley National Laboratory evaluated the CO2 levels in 104 classrooms in 11 schools across the state with recently retrofitted or installed HVAC systems.[18] The study found that “Only around 15% of the classrooms had a median of daily VR [Ventilation Rate] estimates that met the 7 L/s-person code requirement.” The study also included a detailed inspection of the mechanical equipment of the classrooms and documented a wide variety of issues that caused these new HVAC systems to underperform. These included “Improperly selected equipment, lack of commissioning, incorrect fan control settings and maintenance issues (heavily loaded filters)...”

These and other studies have shown that in many cases our students and teachers are learning and working in facilities that do not provide even the recommended levels of fresh air and as a result have high levels of CO2 and VOCs, making it more difficult to teach and learn. This is especially troubling in the context of the study referenced earlier by Allen JG et al. on the cognitive function of office workers. That study showed that improving indoor air quality above the code-required minimum levels improved cognitive function by up to 100%. Most of our school classrooms are significantly below the baseline level of this study. There is a great opportunity to benefit teachers, students and the education system at large by making targeted investments in improved indoor air quality.

Research like this has informed the creation and continued updating of the CHPS Criteria for more than twenty years. Indoor Environmental Quality and especially Indoor Air Quality have been a particular focus for CHPS because of their impact on learning. This is reflected in the CHPS Criteria as further discussed below.

Benefits of Improved IAQ in Schools

- Improved student learning and achievement on test scores
- Reduction in illness-related absences by students and teachers
- Increased school funding based on increased average daily attendance (ADA) *(in states using ADA to determine state funding)*
- Reduced teacher absenteeism and substitute teacher costs
- Improved working environment helping teachers better do their job
- Reduced liability from mold and other contaminant-based health issues
- Improved student disciplinary rates

[18] Wanyu R. Chan, Xiwang Li, Brett C. Singer, Theresa Pistochini, David Vernon, Sarah Outcault, Angela Sanguinetti, Mark Modera, Ventilation rates in California classrooms: Why many recent HVAC retrofits are not delivering sufficient ventilation, Building and Environment, Volume 167, 2020, 106426, ISSN 0360-1323, https://doi.org/10.1016/j.buildenv.2019.106426

Evidence-Based Strategies for Operations

As we saw above, many classrooms are not adequately ventilated. Many of these will need to be addressed quickly to prepare for fall classes during the ongoing COVID-19 epidemic. Existing buildings require a unique strategy as most institutions cannot afford to replace all their HVAC units mid life cycle. ASHRAE has published detailed guidelines for schools, including checklists for reopening and recommended practices during the year.[19] The following recommended strategies have been shown to help remediate indoor air quality in schools. We know that schools have limited resources, staff and time to address these issues. For that reason, we are presenting recommended measures prioritized with those that we have found to be most effective first.

Filter Changes - MERV 13

Filtration is an effective tool in removing respiratory droplets from the air, a critical aspect part of healthy classrooms. It is recommended that all filters in HVAC systems be changed to a minimum MERV 13 filter of the greatest depth allowed by the equipment, typically 2". When selecting the filter, review the pressure drop data and select a new filter that is similar to the old filter so that system performance won't be affected. This is often a concern with switching existing systems to MERV 13 filters, but commonly available filters have different pressure drop ratings and they can be very similar to the values for MERV 7 filters. Narrow filters will have less particle holding capability and need to be changed more frequently. Review your maintenance practices and stock filters for prompt change out. It is important to make sure the filters are sealed as leaks allow a significant amount of air to bypass the filter. through leaks. Also, make sure that maintenance staff wear PPE and take appropriate caution when replacing filters that may be contaminated.

Daily Air Flush Out

One simple change that facilities departments can do is to change the controls settings and schedules to increase the times that the ventilation systems and fans are running. With the improved filtration mentioned above it is important to make sure that air is moving through the system and being filtered. ASHRAE has recommended running ventilation systems for a minimum of 2 hours in occupied mode, with the peak outside air rate, before teachers arrive each day. Increased HVAC operation will result in higher energy costs. For this reason we are recommending extender operations rather than continuous system operation.

Retro-Commissioning

Establish a proper baseline of the ventilation, operation, and condition of your unit by having your sites retroactively commissioned. Almost all schools are designed for adequate ventilation

[19] ASHRAE Epidemic Task Force - Schools and Universities, 06 May 2020, https://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-reopening-schools.pdf

levels, but studies have repeatedly shown that many HVAC systems, even new ones, are not delivering the intended amount of ventilation. A qualified and certified Commissioning Agent or Testing and Balancing professional can evaluate your existing equipment, ductwork and controls to make sure it is delivering the intended ventilation rate and correct any issues. With schools likely at reduced student counts in classrooms this fall, making sure that ventilation rates meet standards will effectively increase ventilation per person beyond recommended levels. This increase in ventilation will help provide healthier indoor environments.

Measure and Monitor CO2

Measuring CO2 levels in classrooms is an inexpensive yet important way to determine in real time if adequate ventilation is being provided and identify any problems that may develop throughout the year. This can be accomplished by installing “smart” thermostats to monitor CO2 levels or by using portable CO2 monitors. Smart thermostats and monitors connected to building management systems can have the added benefit of being able to automatically adjust the operation of the unit and allow maintenance staff to remotely monitor and control the unit’s operations where compatible equipment is installed.

Open Doors and Windows

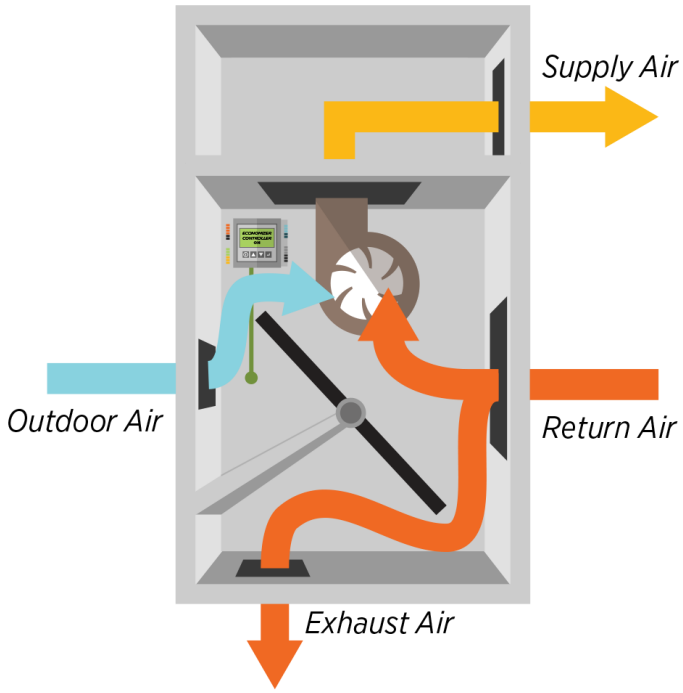
One critical and simple strategy that schools can use is to open classroom doors and windows more often. Where opening doors and windows can be done safely and without introducing outdoor air pollution, this action can significantly improve ventilation rates. It is important for teachers and students to know that fresh air is always important — but especially now — and that opening doors and windows can help. CO2 monitors can help determine the right time to open them. It is recommended that the open window and/or door area be at least 40 square feet for a standard classroom (4% of floor area) to provide ventilation without an HVAC system. It is also recommended that windows be opened two hours before occupancy. Opening doors and windows should never be done without considering important local factors such as security, air pollution, pollen and other allergen counts, outdoor temperature, and outdoor humidity.

Economizers

Economizers increase outdoor air amounts when cooling is needed and outside temperatures are favorable. This measure increases ventilation and often saves electricity too. For older HVAC systems that do not have economizers, installing aftermarket economizers can be a very cost effective way to increase ventilation and save energy. Aftermarket economizers are available for many types of units and can often be installed relatively easily and inexpensively.

Retrofit controls can also be installed by most controls manufacturers to ensure that economizers are opening when conditions allow.

For systems with economizers it is important to make sure they are operating correctly. Economizer failures are common enough that California introduced reliability requirements in its 2013 energy code, followed by 2015 IECC and ASHRAE 90.1 2016. Economizers installed prior to these codes are prime candidates for inspection and possible upgrade.



Source: UC Davis Western Cooling Efficiency Center

When working, existing economizer settings can be reconfigured to increase ventilation rates during mild weather. The “upper lockout” temperature of the economizer can be raised to expand the operation of economizers. 75F is the setting currently recommended by most codes. For units with Demand Control Ventilation the CO2 setpoint can be reduced to 400 ppm. This lower setting will bypass the energy saving sequence of DCV and provide more ventilation during operating hours for these systems..

Preventive Maintenance Inspections

Conduct quarterly seasonally appropriate HVAC preventive maintenance inspections to ensure units are operating properly. These will ensure that filters are changed regularly and systems continue to function as intended throughout the year to provide adequate ventilation.

Evidence-Based Design Strategies for Renovations and New Buildings

There are many opportunities in the design of new and renovated buildings to provide better indoor air quality than in the facilities they replace. The following strategies can be employed on most projects to improve indoor air quality. References to relevant CHPS Criteria and resources are provided for further information.

Focus on Health of the Occupants

One of the primary strategies that school designers need to employ for a post-COVID-19 world is to focus on the health and wellness of the teachers and students who will be using them. Careful focus on the ventilation, VOC levels and comfort in the indoor environment will significantly improve occupant comfort, student success, health and even the district's financial bottom line. The truth is that building high-performance learning environments is critical to the success of our schools and districts. *The CHPS Criteria*[20] *and the Best Practices Manual*[21] *provide a guide to approaching school design from this perspective.*

CO2 Monitoring and Display



One of the most important strategies we can use to improve indoor air quality is to directly monitor and display the CO2 levels in classrooms. With advances in sensor technology this can be done relatively easily within the building energy management system. Most manufacturers offer options to monitor and display CO2 levels in thermostats. This also allows the sensor data to be used to control the amount of outside air provided to classrooms and ensure levels remain at or below the recommended level of 1000 ppm utilizing a demand-controlled ventilation approach. This data can also be used by teachers and students to take more direct action like going outside or opening exterior windows or doors to increase ventilation. *All editions of the CHPS Criteria address the benefits of having individual temperature control and thermostat in each classroom while a proposed credit for the upcoming CA-CHPS 2020 Criteria will give additional points for displaying the CO2 level and for using that data to control the amount of fresh air delivered to classrooms (see Core Criteria v3 EQ C11.1.1).*

Operable Windows and Connection to Outdoors

Two of the simplest and most effective strategies for improving air quality for students and teachers are to go outside and let the outside in. As designers, we can't control how buildings are used, but we do provide opportunities. By including operable windows in classrooms and providing connections between inside and outdoors we make it easier to let fresh air in and get children and teachers outside. In both cases it is also important to consider the quality of the exterior environment. If the surrounding neighborhood is noisy or has high levels of air pollution, these strategies may not be appropriate.

Providing operable windows in each classroom can provide a significant additional source of outside air and give the teacher and students direct control over their ventilation which can

[20] CHPS Core Criteria: https://chps.net/criteria/chps-core-criteria-template-local-adaptation
[21] CHPS Best Practices Manual: https://chps.net/best-practices-manual

increase comfort. When providing operable windows in a classroom it is important to provide occupant training and/or controls to make sure that window use does not counteract the HVAC system during heating and cooling times and increase energy use. *The CHPS Criteria addresses operable windows including occupant training (see Core Criteria v3 EQ C11.1.2).*

Providing views to the exterior from classrooms may not seem like a strategy to improve air quality, but it can make a real difference. A visual connection to the outdoors lets the teacher supervise the indoor and outdoor spaces at the same time allowing more students to go outside throughout the day. Moreover, views of nature have been shown to have positive effects on student learning. *The CHPS Criteria provides guidelines for the amount and location of windows to provide views to students and teachers (see Core Criteria v3 EQ C13.1).*

Filtration

Providing adequate filtration of both outside air and recirculated air within the HVAC systems is critical to maintaining a healthy indoor environment. HVAC systems should be designed with a minimum MERV 13 filtration system as required by *CHPS Prerequisite EQ P1.0.* Furthermore schools should consider increasing filtration to MERV 15 systems to further reduce indoor air pollution and the potential for disease transmission as required by *CHPS Credit EQ C1.1.1.*

Increase Ventilation Rates

Increasing the amount of outside air provided to classrooms and other learning spaces will decrease the amount of CO2 in these spaces and increase the frequency that air is changed and filtered. This will improve student learning and wellness.

ASHRAE Standard 62.1, the national benchmark for the design of HVAC systems, is required by *CHPS Prerequisite EQ P1.0*. This should be the minimum standard for ventilation rates and should also be referred to for its many other guidelines and requirements for mechanical ventilation systems. All schools should be designed to meet or exceed these standards.

All mechanical systems should be equipped with economizers, whether required by local code or not, to maximize outdoor air supply and increase energy efficiency. For existing mechanical systems that have not reached the end of their useful life, consider adding economizers to the equipment and controls system.

It is further recommended that schools consider increasing ventilation rates beyond what is required in ASHRAE 62.1. Schools should consider increasing the ventilation rates by 130% as required for *CHPS Criteria EQ C1.1.2.*

Depending on the location of the school and the type of system, other considerations may be needed to maintain a properly designed system that provides ventilation along with properly controlled temperature and humidity. Also, it is important to consider the local environment and

take alternative measures if exterior air pollution is a significant issue. Increasing ventilation rates can have unintended negative consequences

Dedicated Outdoor Air Systems

To further increase ventilation and reduce CO2 and disease transmission, schools can also consider designing Dedicated Outdoor Air Systems (DOAS). DOAS can take multiple forms but must be able to independently deliver heating, cooling, and ventilation where, and only when, it is needed and avoid the use of recirculated air. DOAS can be paired with appropriately designed controls systems, including CO2 monitors, to deliver the precise amount of fresh outdoor air directly to each space without recirculating contaminants or pathogens generated in other spaces. DOAS need to utilize energy recovery systems to reduce energy use and meet efficiency standards. *For more information about DOAS see CHPS Credit EQ C1.1.3.*

Demand Controlled Ventilation

Demand Controlled Ventilation (DCV) is the strategy of adjusting the amount of outdoor air supplied to a space based on the CO2 level in the space. Traditionally, DCV has been employed as a strategy to reduce energy use by decreasing the amount of fresh air supplied to a space to below the design level when it is not occupied or when the CO2 level is below the recommended threshold. However, DCV can also be used to ensure that adequate ventilation is always provided to meet the target CO2 levels regardless of occupancy conditions. DCV settings can also be changed to lower the CO2 threshold to below the recommended level of 1000 ppm to a lower target such as 700-800 ppm which has been shown to increase performance on cognitive tests.[22] *The CA-CHPS 2020 update underway as of publication will include criteria to encourage the use of DCV systems and lower the CO2 set point in classrooms.*

Reduce Volatile Organic Compounds

In addition to reducing the amount of CO2 and increasing ventilation, it is also important to reduce the amount of pollutants created within learning spaces. Volatile Organic Compounds (VOCs) are one of the primary indoor air contaminants. VOCs are generated primarily by off-gassing from building products and materials.

VOCs can be reduced by specifying materials and products that have a low VOC content based on their materials and manufacturing processes and that are tested for VOC emissions during application. VOCs can be released both during and after construction. Even products with no VOC content can emit VOCs after application due to chemical reactions. VOCs come from many types of materials including paints, sealants, flooring, drywall, ceiling tiles, composite wood and furniture. *CHPS Prerequisite EQ P6.0 and Credit EQ C6.1 contain detailed requirements and recommendations for low-VOC materials in different categories.*

[22] Allen and MacNaughton.

It is also important to adequately clean and flush out the building and its HVAC system prior to occupancy. This removes any VOCs and other contaminants left behind during construction before teachers and students use the space. *CHPS Credit EQ C4.1 has detailed requirements for Construction Indoor Air Quality Management.*

Commissioning and Functional Checklists

All the preceding recommendations will deliver the required results only if spaces are designed and built correctly and function as intended. Unfortunately, in the construction of these complicated interconnected systems, that doesn't always happen. This is where Commissioning comes in. The role of the Commissioning Agent is to be the unbiased technical adviser to the Owner to make sure the Owner's requirements for the project are clearly articulated, addressed in the design and that the design is properly constructed and functions as intended. A Commissioning Agent should be involved throughout the design and construction process as part of the integrated design team. A critical part of the Commissioning Agent's scope of work is to complete functional checklists at the end of construction to ensure that the building HVAC, controls and lighting systems are all working together as intended and delivering the desired results. *CHPS Criteria EE P2.0 and EE C2.1 provide detailed requirements for Commissioning at basic and enhanced levels.*

Recommended Owner's Project Requirements

One of the most important tools that schools and districts pursuing renovation or new construction projects can use to ensure that projects address ventilation issues is the Owner's Project Requirements (OPR). A requirement of the Commissioning process, the OPR is a detailed statement of the project's technical and performance requirements. The OPR is used by the design team to guide design decisions and by the Owner and Commissioning Agent to evaluate the design and construction throughout the project. Below is a cheat sheet for items to address in the OPR related to ventilation and indoor air quality:

Requirement	Description	References
Ventilation Rates	Require calculations proving that systems meet ventilation requirements Increase ventilation to 130% of minimum requirements	ASHRAE Standard 62.1, CHPS Prerequisite EQ P1.0, CHPS Criteria EQ 1.1.2
Demand Controlled Ventilation	Each Classroom has a CO2 sensor integrated into the thermostat and controls system Ventilation is controlled to maintain maximum	

	CO2 levels of 1000 ppm or 800 ppm	
Filtration	Provide minimum MERV 13 filters in all systems and consider MERV 15	CHPS Criteria EQ 1.1.1
Commissioning	Require Advanced Commissioning of mechanical, controls and lighting systems	CHPS Criteria EE P2.0 and EE 2.1
Low-VOC Materials	Specify low-VOC materials for flooring, paint, sealants, ceiling tiles, drywall and furniture	HPS Criteria EQ P6.0 and EQ 6.1
Building flush out	Require construction indoor air quality plan including building flush out prior to occupancy	CHPS Criteria EQ 4.1
Windows	Provide operable windows in each classroom with views to nature where possible	CHPS Criteria EQ 11.1.2 and EQ 13.1

Funding Opportunities

With schools and Districts facing unprecedented funding challenges in the coming years, finding ways to pay for upgrades to existing buildings and new facilities projects will likely prove difficult. However, there are many opportunities to fund these upgrades with little impact on the district's general maintenance budgets. At a time when many programs aimed at improving student outcomes are likely to be cut, utilizing these funding sources to improve indoor air quality can make a positive impact on students.

Energy Efficiency Funding

Many of the solutions proposed to improve indoor air quality are also useful in reducing energy use. These include economizers, retro-commissioning, replacing aging package units, smart thermostats with CO2 monitoring and Demand Controlled Ventilation. Almost every U.S. jurisdiction has incentives and financing programs available from utilities and government agencies to help pay for energy efficiency upgrades to facilities. These can come in the form of on-bill financing programs and loans where the energy efficiency savings are used to pay over time for construction costs. In many jurisdictions direct grants are also available. The North Carolina Clean Energy Technology Center maintains a Database of State Incentives for Renewables & Efficiency (DSIRE — https://www.dsireusa.org), an easy-to-use interactive database of energy efficiency programs in every state.

Facilities Funds

Many Districts also have facilities-restricted funding, whether from state facilities funding programs, required maintenance funds, local developer fees or other sources. Dedicating these funds to improving indoor air quality can offer direct benefits to students and teachers as well as benefits to the general fund resulting from increased attendance and reduced substitute pay.

Local Bonds

Local school bonds can also be a great source of funding for IAQ upgrades. These funds are usually separate from a district's General Fund. Improving student and teacher health and wellness is likely to be a compelling message to voters in bond campaigns. Many of these upgrades also can be implemented fairly quickly and can demonstrate a district's ability to put local funding to work in improving schools and stimulating the local economy. The long-term energy cost savings from many of these improvements can also be an effective incentive to proceed with the initiative.

Conclusion and Hopes for the Future

The COVID-19 pandemic is greatly disrupting many parts of our society, but perhaps none more than our education system. As we rethink the way schools educate students using digital methods along with traditional instructional strategies, we are inventing a new educational system. As part of that transformation there is a unique opportunity to consider the significant but often overlooked impact the physical learning environment has on student learning and wellness. Improvements to indoor air quality can make a significant impact on disease transmission, illness-related absence and student cognition. These improvements have real and significant benefits for students, teachers and communities. Strategies to make these changes can readily be implemented in existing classrooms, renovation projects and new buildings. CHPS has been advocating the design of high-performance schools that address these concerns for more than twenty years with research-based and real-world-tested best practices and design criteria. In this difficult time, we look forward to the opportunity to create a better future for school facilities.

For additional information please see the CHPS website at www.chps.net or contact CHPS Board Member and lead author Aaron Jobson at aaronj@qka.com

Contributors:
Aaron Jobson, Quattrocchi Kwok Architects, aaronj@qka.com
Roger Silveria, Eastside Union High School District, silveirar@esuhsd.org
Tav Cummins, CA Division of the State Architect, Tav.Commins@dgs.ca.gov
Aaron Wintersmith, Capital Engineering, awintersmith@capital-engineering.com
Ted Tiffany, Guttmann and Blaevoet Consulting Engineers, TTiffany@gb-eng.com

WHITE PAPER

Proposed Ventilation and Energy Efficiency Verification/Repair Program for School Reopening

Prepared by
Christopher Ruch, NEMI – Director of Training
Theresa Pistochini, UC Davis Energy and Efficiency Institute – Engineering Manager

June 4, 2020

This paper presents a proposal for a Ventilation and Energy Efficiency Verification/Repair Program that would prepare schools for reopening during the COVID-19 crisis. This program includes certifying school facilities as having functioning air ventilation and filtration systems that meet or exceed OSHA and California Energy Commission requirements, and, to the extent feasible, that meet ventilation and filtration recommendations for reopening schools set forth by the World Health Organization, the Centers for Disease Control and Prevention, and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), as well as any applicable local and state agency school reopening guidance. The program would also ensure that systems are operating energy efficiently and will identify recommendations for future efficiency and safety upgrades.

This program would require recipients to (1) assess, maintain, adjust, and, if necessary, repair existing heating, ventilation and air conditioning (HVAC) systems to verify proper and efficient operation, as well as compliance with health and safety standards; (2) install carbon dioxide (CO_2) sensors in classrooms to verify that proper ventilation is maintained throughout the school year; and (3) prepare an HVAC Assessment Report documenting the work performed and identifying any additional system balancing, upgrades, replacements or other measures recommended to improve the health, safety, and/or efficiency of the HVAC system. School Facilities that comply with these requirements would be provided a COVID-19 Reopening Ventilation Verification Certificate for posting in the building.

Research has shown that underventilation of classrooms is common and negatively impacts student health and learning. A 2003 report to the Legislature by the California Air Resources Board and the State Department of Health Services found significant indoor air quality problems in California schools, including problems with ventilation, temperature and humidity, air pollutants, floor dust contaminants, moisture, mold, noise, and lighting. The report found that ventilation with outdoor air was inadequate during 40% of classroom hours and seriously deficient during 10% of classroom hours, in both portable classrooms and traditional classrooms.[1]

[1] Whitmore, et al., California Portable Classrooms Study, Phase II: Main Study, Final Report, Volume II., Report to the California Air Resources Board and California Department of Health Services (2003) at pp. xxii & xxiii (https://ww2.arb.ca.gov/sites/default/files/classic//research/apr/past/00-317_v2.pdf).

The California Building Energy Efficiency Standards has set minimum ventilation rates for classrooms.[2] The California Education Code requires school districts to maintain schools in good repair, including HVAC systems that are functional, supply adequate ventilation to classrooms, and maintain interior temperatures within acceptable ranges.[3] Despite these requirements, poor performing HVAC systems and underventilation of classrooms continues to be a persistent problem in California.

A 2020 report by the University of California-Davis Western Cooling Efficiency Center and the Indoor Environment Group of Lawrence Berkeley National Laboratory found over half of new HVAC systems in schools had significant problems within three years of installation, and that the vast majority of classrooms in California continue to fail to meet minimum ventilation rates.[4] Nearly 20% of classrooms had average daily maximum CO_2 concentrations above 2,000 ppm, where an adequately ventilated classroom should not exceed a concentration of 1,100 ppm. The researchers recommended periodic testing of HVAC systems and continuous real-time CO_2 monitoring to detect and correct these problems.

The persistence of underperforming HVAC systems and inadequate ventilation rates in the classroom is of particular concern as California looks to reopen schools during the COVID-19 pandemic. An April 2020 paper by ASHRAE found that viruses such as COVID-19 can spread through the air in two ways. Larger droplets travel between 6 and 7 feet before dropping to the ground, but smaller droplets can evaporate and become aerosolized, remaining airborne for extended periods.[5] Increasing filtration levels and ventilation rates removes and dilutes these aerosolized viruses, reducing the risk of infection for occupants. For that reason, the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC) and ASHRAE recommend ensuring ventilation systems operate properly, increasing ventilation rates, and installing MERV 13 or better filters where possible in order to reduce the spread of COVID-

[2] See Cal. Code Regs, tit. 24, Part 6, Section 120.1 and Table 120.1-A (Minimum Ventilation Rates).
[3] Cal. Education Code §§ 17070.75 & 17002.
[4] Chan, et al, Ventilation rates in California classrooms: Why many recent HVAC retrofits are not delivering sufficient ventilation, Building and Environment Journal 167 (2020) (https://www.sciencedirect.com/science/article/pii/S0360132319306365).
[5] ASHRAE, ASHRAE Position Document on Infectious Aerosols. ASHRAE (April 2020), (https://www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf); see also Neeltje van Doremalen, et al, Aerosol and surface stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-1, medRxiv preprint doi (March 13, 2020) (finding that viable COVID-19 viruses could be detected in aerosols up to 3 hours post aerosolization) (https://www.medrxiv.org/content/10.1101/2020.03.09.20033217v2).

19.[6] A May 2020 report by Dr. Jovan Pantelic at UC Berkeley further recommends continuous CO_2 monitoring and maintaining relative humidity in the range of 40%-60%.[7]

These steps can however increase energy consumption, particularly in systems that are not installed correctly. Studies have shown that the efficiency of an HVAC system is highly dependent on the quality of its installation. Poor quality installation of HVAC systems results in a 20% to 30% increase in energy use.[8] Moreover, poor quality installation is pervasive. A study by the California Energy Commission found that over 50% of new HVAC systems and 85% of replacement HVAC systems that they evaluated were not performing correctly due to poor quality installation.[8] Utility-funded studies have found the vast majority of HVAC installers don't have the technical training, knowledge, skills, or abilities to properly install systems, resulting in high failure rates for job performance on even routine tasks.[9]

The program would prepare schools to reopen with functional ventilation systems that are verified as having been tested, adjusted, and if necessary repaired or replaced, by qualified personnel in order to provide recommended ventilation rates as reliably and energy efficiently as possible. Ventilation rates will be documented in an HVAC assessment report submitted to the program administrator and available to the public upon request.

Improving the performance of school HVAC systems not only saves energy and provides a safer and healthier building environment, it also has a significant correlation to student performance. In a 2017 literature review, W. J. Fisk summarized that 8 studies reported statistically significant improvements in some measures of student performance associated with increased ventilation rates or lower CO_2 concentrations, with performance increases up to 15%.[10]

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[6] Centers For Disease Control and Prevention, Interim Guidance For Businesses and Employers Responding To Coronavirus Disease 2019 (COVID-19) (May 2020) (https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html); ASHRAE, ASHRAE Epidemic Task Force: Building Readiness (updated May 22, 2020) (https://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-building-readiness.pdf) ASHRAE, ASHRAE Epidemic Task Force: Schools & Universities (updated May 5, 2020) (https://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-reopening-schools.pdf); AHRAE, ASHRAE Position Document on Infectious Aerosols (April 14, 2020) (https://www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf); World Health Organization, Considerations for school-related public health measures in the context of COVID-19 (May 10, 2020) (https://www.who.int/publications-detail/considerations-for-school-related-public-health-measures-in-the-context-of-covid-19); World Health Organization, Considerations for public health and social measures in the workplace in the context of COVID-19 (May 10, 2020) (https://www.who.int/publications-detail/considerations-for-public-health-and-social-measures-in-the-workplace-in-the-context-of-covid-19).

[7] Pantelic, Using IoT Environmental Sensing to Reopen Spaces, SenseWare (May 2020) (https://cdn2.hubspot.net/hubfs/5238584/White%20Paper%20Senseware%20Covid.pdf).

[8] California Energy Commission, *Strategic Plan to Reduce the Energy Impact of Air Conditioners* (June 2008), CEC-400-2008-010, at p. (v) (http://www.energy.ca.gov/2008publications/CEC-400-2008-010/CEC-400-2008-010.PDF); see also Zabin, et. al, *Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities*, Don Vial Center for Employment in the Green Economy (2014), at pp. 32-34 and Appendix 2B (http://laborcenter.berkeley.edu/workforce-issues-and-energy-efficiency-programs-a-plan-for-californias-utilities/).

[9] SCE Energy Efficiency Business Plan 2018-2025 at p. 63; SDG&E Energy Efficiency Business Plan 2018-2025 at p. 216; PG&E Energy Efficiency Business Plan (2018-2025), Residential Appendix at p. 30; see also C. Zabin, et. al, *Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities*, Don Vial Center for Employment in the Green Economy (2014), at p. 34 (http://laborcenter.berkeley.edu/workforce-issues-and-energy-efficiency-programs-a-plan-for-californias-utilities/).

[10] Fisk, W. J., The ventilation problem in schools: literature review, Indoor Air. 2017;27:1039–1051 (https://onlinelibrary.wiley.com/doi/epdf/10.1111/ina.12403)

A 2018 report in the Environment International Journal found that short-term CO_2 exposure beginning at 1000 ppm affects cognitive performance, including decision making and problem resolution.[11] The Wisconsin Department of Health states that CO_2 levels between 1000 and 2000 ppm are associated with drowsiness and attention issues. CO_2 levels above 2000 ppm affect concentration and can cause headaches, increased heart rate, and nausea.[12]

This program will thus also provide the additional benefit of addressing the numerous studies finding that the widespread underventilation of classrooms in California is negatively impacting student health and learning.

[11] Azuma, et al, Effects of low-level inhalation exposure to carbon dioxide in indoor environments: A short review on human health and psychomotor performance, Environment International 121 (2018) (https://www.sciencedirect.com/science/article/pii/S0160412018312807).
[12] Wisconsin Department of Health Services, Carbon Dioxide (Dec. 20, 2019) (https://www.dhs.wisconsin.gov/chemical/carbondioxide.htm).

PROPOSED REQUIREMENTS:

Section ____. School Ventilation and Efficiency Verification and Repair Program. The Office of Public School Construction shall create and administer a School Ventilation and Efficiency Verification and Repair Program that shall allocate grants to Local Educational Agencies (LEAs) to prepare schools to reopen with functional ventilation systems that are tested, adjusted, and if necessary repaired, by qualified personnel in order to provide recommended ventilation rates as reliably and energy efficiently as possible. Recipients shall: (1) assess, maintain, adjust, and, if necessary, repair existing HVAC systems to ensure ventilation rates meet or exceed the standards set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards; (2) provide MERV 13 filtration or better where feasible, or the maximum MERV filtration that the system design can handle; (3) install CO_2 sensors in classrooms to verify that proper ventilation is maintained throughout the school year; and (4) prepare an HVAC Assessment Report documenting the work performed and identifying any additional system balancing, upgrades, replacements or other measures recommended to improve the health, safety, and/or efficiency of the HVAC system. School Facilities that comply with these requirements shall be provided a COVID-19 Reopening Ventilation Verification Certificate for posting in the building.

An LEA that accepts a grant under this Program for verification of a school facility shall perform the following tasks for all air handling units, roof top units and unitary and single zone equipment in that facility's HVAC system or systems:

(a) Assessment, Maintenance, Adjustment and Repair of Existing Facility Ventilation System.

1. Filtration. Consistent with the recommendations of the ASHRAE Guidance for Reopening Schools, MERV 13 or better filtration shall be installed in the facility's HVAC system where feasible. Qualified personnel shall review system capacity and airflow to determine the highest Minimum Efficiency Reporting Value (MERV) filtration that can be installed without adversely impacting equipment, shall replace or upgrade filters where needed, and shall verify that such filters are installed correctly. Where a system uses Ultraviolet Germicidal Irradiation (UVGI) to disinfect the air, the UVGI lamp shall be checked for proper operation, replacing bulbs as needed and verifying that the ultraviolet light does not shine on filters. Recommendations for additional maintenance, replacement or upgrades to allow for more protective filtration shall be recorded in the HVAC Assessment Report.

2. Economizer. For systems with economizers, qualified personnel shall test system economizer dampers per Section B of NRCA-MCH-05-A – Air Economizer Controls and repair any economizer dampers and controls that are not properly functioning. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report.

3. Ventilation and Exhaust.

A. Assessment. Following the assessment of the filtration and economizer, qualified personnel shall assess the ventilation rates in the facility classrooms, auditoriums, gymnasiums,

nurses offices, restrooms and other occupied areas to determine whether they meet the minimum ventilation rate requirements set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards. Assessment shall include:

(i). Calculation of the required minimum outside air ventilation rates for each occupied area based on the anticipated occupancy and the minimum required ventilation rate per occupant set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards. Calculations shall be based on maximum anticipated classroom or other occupied area occupancy rates and determined by the performing technician. Natural Ventilation shall be designed in accordance with Section 402.2 of the 2019 California Mechanical Code and shall include mechanical ventilation systems designed in accordance with Section 403.0, Section 404.0, or both. Additionally, any room relying on Natural Ventilation shall have a continuously operational CO2 monitor as prescribed in section 7a of this document.[13]

(ii). Measurement of Outside Air per Section B of NRCA-MCH-02-A – Outdoor Air Acceptance and verification of whether the system provides the minimum outside air ventilation rates calculated in subsection (i).

(iii). Survey readings of inlets and outlets to verify all ventilation is reaching the served zone and that there is adequate distribution. Verify if inlets and outlets are balanced within tolerance of the system design. Document read values and deficiencies. If the original system design values are not available, document available information and note unavailability of system design values in the HVAC Assessment Report.

(iv). Verification of building pressure relative to the outdoors to ensure positive pressure differential and to ensure building is not over pressurized.

(v). Verification of coil velocities and coil and unit discharge air temperatures required to maintain desired indoor conditions and to avoid moisture carry over from cooling coils.

(vi). Verification that separation between outdoor air intakes and exhaust discharge outlets meet code requirements.

(vii). Confirmation that the air handling unit is bringing in outdoor air and removing exhaust air as intended by the system design.

(viii) Measurement of all exhaust air volume for exhaust fans, including restrooms. Document any discrepancies from system design. Per ASHRAE Guidance for Reopening and Operating Schools exhaust fans operate whenever HVAC systems are in operation.

(ix) Energy Recovery Ventilation (ERV) system operation and leakage concerns should be addressed according to the recommendations of the ASHRAE Building Readiness document.

[13] California Building Standards Commission. (2019). *California mechanical code*. Sacramento, CA.

B. Adjustment. If the system does not meet the minimum ventilation rate requirements set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards, qualified personnel shall review the system airflow and capacity to determine if additional ventilation can be provided without adversely impacting equipment performance and building Indoor Environmental Quality (IEQ). If additional ventilation can be provided, qualified personnel shall adjust ventilation rates to meet the minimum ventilation rate requirements set forth in the 2019 Title 24 California Building Energy Efficiency Standards to the extent feasible. After adjustment, steps (ii), (iv) and (v) of subsection A shall be repeated.

If minimum ventilation rate requirements set forth in Table 120.1-A of the 2019 Title 24 California Building Energy Efficiency Standards cannot be met, the system shall be repaired, upgraded or replaced as necessary to meet these requirements. Such repairs shall be considered a critical repair and shall be eligible for additional funding under this Program per subsection (7). Priority recommendations for additional HVAC system maintenance, replacement or upgrades to improve ventilation outcomes or ventilation efficiency shall be recorded in the HVAC Assessment Report.

4. Demand Control Ventilation. If installed, demand control ventilation shall be adjusted to a CO_2 set point of 800 ppm or less and tested by qualified personnel per Section B of NRCA-MCH-06-A – Demand Control Ventilation Systems Acceptance[14]. If the demand control ventilation system does not maintain average daily maximum CO_2 levels below 1,100 ppm, it shall be disabled until such time as the LEA determines that the COVID-19 crisis has passed, unless disabling the control would adversely affect operation of the overall system. When disabling a demand control ventilation system, the system must be configured to meet the minimum ventilation rate requirements and tested and adjusted in accordance with section 3. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report.

5. General Maintenance. Qualified personnel shall verify coil condition, condensate drainage, refrigerant charge, heat exchanger operation, and drive assembly and perform critical repairs. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report.

6. Operational Controls. Qualified personnel shall review control sequences to verify systems will maintain intended ventilation, temperature and humidity conditions during school operation. Previously unoccupied buildings shall perform the recommended practices of reopening a building as covered in the ASHRAE Building Readiness document. Verify a daily flush is scheduled for 2 hours before and after scheduled occupancy or demonstrate calculation of flush times per ASHRAE Guidance for Reopening and Operating Schools and Buildings or otherwise applicable local or state guidance. Verify that HVAC system operational times, exhaust fans operation times, setpoints, and enabled features meet ASHRAE Guidance for Reopening and Operating Schools and Buildings or otherwise applicable local or state guidance.

[14] The CO_2 set point of 800 ppm is recommended by the UC Davis Western Cooling Efficiency Center. The purpose of the 800 ppm set point for demand control ventilation systems is to prevent the automated control system from overshooting a maximum 1,100 ppm CO_2 concentration.

7. Repairs. If installed HVAC systems or system components are broken, fail to meet minimum ventilation requirements, or are unable to operate to the original design and intent, corrective work must be completed by qualified personnel prior to resumption of school operation. The Office of Public School Construction shall set aside 10% of Program funds to provide supplemental grants for critical repairs. To the extent available, Program funds may also be used to repair, upgrade or replace system components to improve HVAC system efficiency.

(b) CO_2 Monitoring. To ensure proper ventilation is maintained throughout the school year, all classrooms shall be equipped with a CO_2 monitor that:

(1) Is hard-wired or plugged-in and mounted to the wall between 3 – 6 feet above the floor and at least 5 feet away from the door and operable windows.

(2) Displays the CO_2 readings to the teacher through a display on the device or other means such as a web-based application or cell-phone application.

(3) Notifies the teacher through visual indicator on the monitor (e.g. indicator light) or other alert such as e-mail, text, or cell phone application, when the CO2 levels in the classroom have exceeded 1,100 ppm.

(4) Maintains a record of previous data which includes at least the maximum CO2 concentration measured.

(5) Has a range of 1 - 2000 ppm or greater;

(6) Is certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm CO2 concentration and is certified by the manufacturer to require calibration no more frequently than once every five years.

If a classroom CO_2 concentration exceeds 1,100 ppm more than once a week as observed by the teacher or the facilities staff, the classroom ventilation rates shall be adjusted by qualified personnel to ensure peak CO_2 concentrations in the classroom remain below the maximum allowable CO_2 PPM setpoint. Verification of the installation of CO_2 Monitors in all classrooms shall be included in the HVAC Assessment Report.

(c) HVAC Assessment Report. The LEA shall prepare an HVAC Assessment Report for each school facility that receives Program funds. The HVAC Assessment Report shall include the following information:

(1) Name and address of school facility and person/contractor preparing and certifying Report.

(2) Description of assessment, maintenance, adjustment and repair activities and outcomes.

(3) Verification that the LEA has complied with all requirements of this Section.

(4) Either verification that MERV 13 filters have been installed or verification that the maximum MERV-rated filter that the system is able to effectively handle has been installed and what that MERV-rating is.

(5) The verified ventilation rates for facility classrooms, auditoriums, gymnasiums, nurses' offices, restrooms, offices and other occupied areas and whether those rates meet the requirements set forth in the 2019 Title 24 California Building Energy Efficiency Standards. If ventilation rates do not meet applicable guidance, then an explanation for why the current system is unable to meet those rates should be provided.

(6) The verified exhaust for facility classrooms, auditoriums, gymnasiums, nurses' offices', restrooms and other occupied areas and whether those rates meet the requirements set forth in the design intent.

(7) Clearly define system deficiencies and provide recommendations for additional maintenance, replacement or upgrades, such as upgrading systems to allow for additional ventilation and filtration, adding humidifier systems, or upgrading to more energy efficient systems.

(8) Reports shall clearly document initial operating verifications, adjustments, and final operating verifications and document any adjustments or repairs performed.

(9) Verification of installation of CO_2 Monitors, including make and model of monitors.

The LEA shall maintain a copy of the HVAC Assessment Report and make it available to any member of the public upon request. The LEA shall provide a copy of the HVAC Assessment Report to the Office of Public School Construction. No later than January 1, 2021, the Office of Public School Construction shall prepare a report to the legislature summarizing the additional maintenance, replacement or upgrades needed in California's public schools to meet ASHRAE COVID-19 school safety and efficiency recommendations, along with an estimate of the cost of such work.

(d) COVID-19 Reopening Ventilation Verification Certificate. Upon receipt of a copy of the HVAC Assessment Report, the Office of Public School Construction shall provide the LEA a COVID-19 Reopening Ventilation Verification Certificate for posting in the verified school building that states that the school meets the minimum 2019 Title 24 California Energy Commission requirements for ventilation.

Christopher Ruch is a field experienced Testing Adjusting and Balancing (TAB) technician and supervisor who is currently working for the National Energy Management Institute (NEMI) as the Director of Training. NEMI serves by providing valued education of emerging markets, new technology and advances in manufacturing and construction processes in the sheet metal industry. Inquiries can be made to cruch@nemionline.org.

Theresa Pistochini is the Engineering Manager at the UC Davis Energy and Efficiency Institute with 12 years of experience in applied research in energy efficiency and building operation, primarily in the areas of Heating, Ventilation, and Air Conditioning. Theresa earned her M.S. degree from UC Davis and is a registered professional mechanical engineer in California. Inquires can be made to tepistochini@ucdavis.edu.

CABRILLO UNIFIED SCHOOL DISTRICT

498 Kelly Avenue, Half Moon Bay, California 94019 • 650 712-7100 • Fax 650 726-0279 • www.cabrillo.k12.ca.us

SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Board Governing
FROM: Sean McPhetridge, Ed.D., Superintendent
J Jesus Contreras, Chief Business Officer
CATEGORY: Consent
ITEM TITLE: Approval of Quarterly Report on Williams Uniform Complaints (Education Code §35186)

BACKGROUND INFORMATION

Education Code 35186 requires that Williams complains be filed and resolved using the Uniform Complaint Procedures (UCP). Williams complaints include instructional materials, emergency or urgent facilities conditions that pose a threat to the health and safety of pupils, and teacher vacancy or misassignment and may be filed anonymously. Williams Complaints are filed with the principal, or their designee, of the school in which the complaint arises. Schools have complaint forms available for these types of complaints, but do not reject a complaint if the form is not used as long as the complaint is submitted in writing.

Local governing boards are required to report quarterly to the San Mateo County of Education the nature and number of complaints received during the quarter.

REPORT/PROPOSAL

During the first quarter of the 2020-21 school year, the CUSD received zero (0) Williams complaints.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

Staff recommends receipt and approval of the First Quarter Williams Report.

SAN MATEO COUNTY OFFICE OF EDUCATION
Excellence and Equity in Education

Quarterly Report on 2020-2021 *Williams* Uniform Complaints
[Education Code § 35186]

District: Cabrillo Unified School District

Person completing this form: Rosibel Acosta Title: Admin. Asst. to the Superintendent

Quarter covered by this report (*check one*):

- ☒ **1st Quarter**: July 2020 *through* September 2020 **– DUE October 30, 2020**
- ☐ **2nd Quarter**: October 2020 *through* December 2020 **– DUE January 29, 2021**
- ☐ **3rd Quarter**: January 2021 *through* March 2021 **– DUE April 30, 2021**
- ☐ **4th Quarter**: April 2021 *through* June 2021 **– DUE July 30, 2021**

Date for information to be reported publicly at governing board meeting: October 8, 2020

Please check the box that applies:

☒ No complaints were filed with any school in the district during the quarter indicated above.

☐ Complaints were filed with schools in the district during the quarter indicated above. The following chart summarizes the nature and resolution of these complaints. **Copies of the complaint and the district's written response were emailed to San Mateo County Office of Education.**

General Subject Area	Number of Complaints Received	Number of Complaints Resolved	Number of Complaints Unresolved
Instructional Materials and Textbooks	0	0	0
Facility Conditions	0	0	0
Teacher Vacancy or Misassignment	0	0	0
TOTAL	0	0	0

Sean McPhetridge, Ed. D.
Print Name of District Superintendent

Signature of District Superintendent Date

Remember to sign and date the report **after** *it is presented at the district's board meeting.*

Please submit Board approved report via email to cmaponte@smcoe.org.

101 Twin Dolphin Drive • Redwood City • CA • 94065-1064 • 650-802-5300 • www.smcoe.org

CABRILLO UNIFIED SCHOOL DISTRICT

498 Kelly Avenue, Half Moon Bay, California, 94019 • 650 712-7100 • Fax 650 726-0279 • www.cabrillo.k12.ca.us

SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Sean McPhetridge, Ed.D., Superintendent
CATEGORY: Consent
ITEM TITLE: Approval of Regular and Special Governing Board Meeting Minutes

BACKGROUND INFORMATION

The Governing Board routinely reviews and approves minutes from all regular meetings and special sessions.

REPORT/PROPOSAL

The unadopted minutes of the August 10, 2020 Special Governing Board meeting, the August 12, 2020 Special Governing Board meeting, and the August 13, 2020 Regular Governing Board meeting and are included in this Board packet for consideration.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

Approve as submitted.

Special Governing Board Meeting – Closed Session

(Unadopted) Meeting Minutes

CABRILLO UNIFIED SCHOOL DISTRICT

Monday, August 10, 2020

Closed Session 10:00 AM | Via Zoom: https://cabrillok12.zoom.us/j/96252533419

(For public comments on Closed Session items only)

Board Members Present:	Ms. Kimberly Hines, President Ms. Lizet Cortes, Vice President Ms. Mary Beth Alexander, Clerk to the Governing Board Ms. Freya McCamant, Member Ms. Sophia Layne, Member
Administrators Present:	Dr. Sean McPhetridge, Ed.D., Superintendent

1. CALL TO ORDER – 10:00 AM

a. Public Comments on Closed Session Topics

None.

b. Adjourn to Closed Session – 10:01 AM

2. ADJOURNMENT OF THE MEETING

Meeting was adjourned at 12:00 PM

Minutes prepared by Rosibel Acosta, Administrative Assistant to the Superintendent

Minutes presented by Sean McPhetridge, Ed.D., Secretary to the Governing Board

Certified by:

_____ _____

Mary Beth Alexander Date

Clerk to the Governing Board

Special Governing Board Meeting – Closed Session

(Unadopted) Meeting Minutes

CABRILLO UNIFIED SCHOOL DISTRICT

Wednesday, August 12, 2020

Closed Session 6:00 PM | Via Zoom: https://cabrillok12.zoom.us/j/98714307524

(For public comments on Closed Session items only)

Board Members Present:	Ms. Kimberly Hines, President Ms. Lizet Cortes, Vice President Ms. Mary Beth Alexander, Clerk to the Governing Board Ms. Freya McCamant, Member Ms. Sophia Layne, Member
Administrators Present:	Dr. Sean McPhetridge, Ed.D., Superintendent

1. CALL TO ORDER – 6:00 PM

a. Public Comments on Closed Session Topics

None.

b. Adjourn to Closed Session – 6:01 PM

2. ADJOURNMENT OF THE MEETING

Meeting was adjourned at 8:00 PM

Minutes prepared by Rosibel Acosta, Administrative Assistant to the Superintendent

Minutes presented by Sean McPhetridge, Ed.D., Secretary to the Governing Board

Certified by:

_____ _____

Mary Beth Alexander
Clerk to the Governing Board

Date

Governing Board Meeting Agenda

(Unadopted) Meeting Minutes

CABRILLO UNIFIED SCHOOL DISTRICT

Thursday, August 13, 2020

Closed Session 6:00 PM | Via Zoom: https://cabrillok12.zoom.us/j/94882297812
(For public comments on Closed Session items only)
Public Session 7:00 PM | Via Zoom: https://cabrillok12.zoom.us/j/96710717022

Board Members Present:	Ms. Kimberly Hines, President Ms. Lizet Cortes, Vice President Ms. Mary Beth Alexander, Clerk to the Governing Board Ms. Freya McCamant, Member Ms. Sophia Layne, Member
Administrators Present:	Dr. Sean McPhetridge, Ed.D., Superintendent Dr. Leticia Bhatia, Ed.D., Assistant Superintendent Mr. Jesus Contreras, Chief Business Officer
Student Board Representative Present:	Miss Caroline Dodge, Student Board Representative

1. CALL TO ORDER – 6:00 PM

a. Public Comments on Closed Session Topics

None.

b. Adjourn to Closed Session – 6:01 PM

c. Reconvene to Public Session – 7:01 PM - Welcome

1. Closed Session Action Report: If applicable

President Kimberly Hines reported no action was taken in closed session.

2. Pledge of Allegiance

Student Board Representative Caroline Dodge led the Pledge of Allegiance.

2. APPROVAL OF AGENDA

Superintendent Dr. Sean McPhetridge recommended amending the agenda by moving Consent Agenda Item 4.b Approval of Certificated Personnel Report – Part 2 to the General Business Agenda as an Action item.

Motion to approve the agenda, as amended, was made by Member Mary Beth Alexander and seconded by Member Sophia Layne.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye

Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member – aye

(M-102) Passed 5-0 with Student Representative voting aye

3. COMMUNICATIONS

a. Public Comments

Breanna Lafontaine, community member, spoke to the Board on behalf of a group of community members to support CUSD teachers. Ms. Lafontaine said teachers provide stability and have done more for the students when everything was shut down. Ms. Lafontaine also spoke in favor of teachers' salary raises.

b. Employee Organizations Report

1. CUTA Representatives

CUTA Co-President Sean Riordan read to the Board and public a statement made to the teachers and site administration on a personal experience as an HMBHS teacher. Mr. Riordan said the schools have lost many students due to COVID-19 and distance learning and said that now is the moment to re-engage with our students through the best lessons. Mr. Riordan said teachers should provide engaging, productive, and positive instruction and that together they can make a year a success.

2. CSEA Representatives

CSEA President Stig Lynne said classified staff have returned to work and that this is challenging for everybody. Mr. Lynne said staff have been working very hard to provide everything necessary for remote learning. Mr. Lynne wished everyone a healthy start of the school year.

c. Board Members Report

President Kimberly Hines said this is not the usual start of the school year, but it's always exciting to start a new year, and she said she wishes teachers and students the best. Ms. Hines gave a shout out to the Boy and Girls Club of the Coastside for all they are doing for the students.

Member Mary Beth Alexander shared she participated in a California School Board Association meeting. Ms. Alexander said these meetings happen every week and that participation is good to keep members in the loop of what's going on with other districts. Ms. Alexander said it heartening to see how much is going on for the students at the state, county, and district levels. Ms. Alexander said the current situation is hard and chaotic, but, at the same time, exciting to see the positive we might see come of it.

Member Sophia Layne said that despite all the challenges, it is exciting to take advantage of some of the opportunities the crisis is offering, like the shifting from bringing students to education to bringing education to students and the reshaping of the district structures and procedures, school lunch applications, district app, and the website. Ms. Layne said that it is crucial to make sure that the reopening of schools has equity as a focus and that we focus on the students every step of the way.

Member Freya McCamant said that this is a hard time, and people feel stressed about it, and we all should be conscious and aware. Ms. McCamant said everybody should treat each other with kindness and have patience. Ms. McCamant thanked teachers and staff who have already started working, and she thanked students, parents, and community members for all the hard work and support.

d. Superintendent Report

Student Board Representative Caroline Dodge provided the Board and the public an update on Cunha Intermediate, Kings Mountain Elementary, Farallone View Elementary, El Granada Elementary, La Costa Adult School, Hatch Elementary, and Half Moon Bay High School's events and activities.

Superintendent Dr. Sean McPhetridge said the district would work to provide Spanish speaking families the tools to participate in the district remote meeting. Dr. McPhetridge encouraged people to participate in the 2020 census and said that participation in the census as well as applying for district services like free and reduced meals do not have impacts on families and does not fall under the public charge.

Dr. McPhetridge gave appreciation to families for reaching out to him, to staff for what they are doing to try to come back to classrooms to instruct students, and to the Board who have also shown resilience during these challenging times. Dr. McPhetridge also said he appreciates the spirit of partnership and commitment that Sean Riordan showed in his comments earlier.

4. CONSENT AGENDA

a. Approval of Certificated Personnel Report – Part 1
b. Approval of Certificated Personnel Report – Part 2

Item 4.b moved to the General Business Agenda.

c. Approval of Classified Personnel Report
d. Approval of the 2020-2021 Submission of the Consolidated Application & Reporting System
e. Approval of Board Policy 0470 COVID-19 Mitigation Plan Special Update Recommended by the California School Boards Association

Motion to approve consent items 4.a and 4.c through 4.e was made by Member Mary Beth Alexander and seconded by Member Sophia Layne.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-103) Passed 5-0 with Student Representative voting aye

At 9:54 PM, President Kimberly Hines requested motion continue past the 10:00 PM curfew. Motion was made by Member Freya McCamant and seconded by Member Sophia Layne.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-104) Passed 5-0 with Student Representative voting aye

5. GENERAL BUSINESS

a. Update on 45-Day Budget Revision, SB 98, and Opening of School and Approval of New Opening of School Recommendations

Leticia Bhatia, Ed.D., Assistant Superintendent, J Jesús Contreras, Chief Business Officer, Jason Owens, Director of Personnel and Pupil Services, Martha Ladd, Director of Student Services, and Randy Rudolph, Director of Technology, provided an update on the 45-Day Budget Revision, SB 98, and Opening of School Plan. Staff also provided new opening of school recommendations for board approval

Written Comments. The Board received one (1) comment via the Google Public Comment Request form related to this agenda.

To read full public comment submitted via Google Public Comment Request form, please follow the link provided below:

https://docs.google.com/spreadsheets/d/1V-9gFVNsZCeZa04s_S1SCuQwOQOfmlxn0JIcCxYR7Xc/edit?usp=sharing

Motion to approve the implementation of the Hybrid Learning Model (Phase III) at date no sooner than the end of the first quarter, October 16, 2020, was made by Member Freya McCamant and seconded by Member Sophia Layne.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-105) Passed 5-0 with Student Representative voting aye

b. Adoption of Resolution No. 27-20 Appointing Measure M Citizen's Bond Oversight Committee as Advisory Committee for Measure I Parcel Tax

Motion to adopt Resolution No. 27-20 Appointing Measure M Citizen's Bond Oversight Committee as Advisory Committee for Measure I Parcel Tax was made by Member Sophia Layne and seconded by Freya McCamant.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-106) Passed 5-0 with Student Representative voting aye

c. Approval of Tentative Agreement on MOU on Return to School

Motion to approve CUSD/CUTA Tentative Agreement on MOU on Return to School was made by Member Mary Beth Alexander and seconded by Member Lizet Cortes.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-107) Passed 5-0 with Student Representative voting aye

d. Approval of Certificated Personnel Report – Part 2

Motion to deny the offer of probationary employment for 2020-2021 included in the Certified Personnel Report Part 2 was made by Member Lizet Cortes and seconded by Member Freya McCamant.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-108) Passed 5-0 with Student Representative voting aye

8. ADJOURNMENT OF THE MEETING

Motion to adjourn was made by Member Mary Beth Alexander and seconded by Member Sophia Layne.

ROLLCALL
Ms. Kimberly Hines, President - aye
Ms. Lizet Cortes, Vice President - aye
Ms. Mary Beth Alexander, Clerk to the Governing Board - aye
Ms. Freya McCamant, Member - aye
Ms. Sophia Layne, Member - aye

(M-108) Passed 5-0 with Student Representative voting aye

The meeting was adjourned at 10:08 PM

Minutes prepared by Rosibel Acosta, Administrative Assistant to the Superintendent

Minutes presented by Sean McPhetridge, Ed.D., Secretary to the Governing Board

Certified by:

_____ _____
Mary Beth Alexander Date
Clerk to the Governing Board

CABRILLO UNIFIED SCHOOL DISTRICT

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SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Sean McPhetridge, Ed.D., Superintendent
CATEGORY: Consent
ITEM TITLE: Approval of Governing Board Policy Updates as Recommended by the California School Boards Association

BACKGROUND INFORMATION

The Cabrillo Unified School District (CUSD) participates in the California School Boards Association's (CSBA) Policy Online and Manual Maintenance Service. One important component of this optional service is that participating districts receive a quarterly "Policy Maintenance Report" to help keep Board policies up to date and fully compliant. Most often, the proposed changes are mandate-driven. In such instances, staff will suggest that the Board waive additional readings and adopt the suggested revisions en masse and via action. In those instances, when a quarterly maintenance review indicates 1) a need for a change in a policy that provides optional courses of action or 2) the need for a new policy to address a particular issue, staff will suggest that the Board engage in a first and second reading of the document prior to considering policy adoption.

REPORT/PROPOSAL

This month, Board Policy 4119.11/4219.11/4319.11 and 5145.7 are provided for adoption. These Board Policies have been reviewed by appropriate staff and are submitted for your consideration. Staff has further concluded that the proposed revisions reflect new laws and/or additional CSBA suggested wordsmithing that could be considered for adoption under action items.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

Approve as submitted.

CABRILLO UNIFIED SCHOOL DISTRICT
POLICY GUIDE SHEET

Note: Descriptions below identify revisions made to CSBA's sample board policies, administrative regulations, board bylaws, and/or exhibits. Editorial changes have also been made. Districts and county offices of education should review the sample materials and modify their own policies accordingly.

Board Policy 4119.11/4219.11/4319.11 - Sexual Harassment

Policy updated to reflect **NEW FEDERAL REGULATIONS (85 Fed. Reg. 30026)** which require that complaints of behavior that meets the federal definition of sexual harassment be addressed through new Title IX complaint procedures. Title of compliance officer changed to Title IX Coordinator pursuant to federal regulations, and responsibility assigned to Title IX Coordinator to receive complaints and determine the appropriate complaint procedure to use.

Board Policy 5145.7 - Sexual Harassment

Policy updated to include examples of actions to reinforce the district's sexual harassment policy, consistent with **NEW LAW (AB 34, 2019)** which requires posting the sexual harassment policy on the district's web site and **NEW LAW (AB 543, 2019)** which requires displaying a poster and providing the sexual harassment policy in student orientations. Policy also reflects **NEW FEDERAL REGULATIONS (85 Fed. Reg. 30026)** which require that complaints of behavior that meets the federal definition of sexual harassment be addressed through new Title IX complaint procedures. Title of compliance officer changed to Title IX Coordinator throughout policy pursuant to federal regulations.

Cabrillo USD

Board Policy

Sexual Harassment

BP 4119.11
4219.11
4319.11
All Personnel

Cautionary Notice: The following administrative regulation reflects federal Title IX regulations added by 85 Fed. Reg. 30026, effective August 14, 2020, which establish a process for investigating and resolving allegations of conduct that meets the federal definition of sexual harassment. The federal regulations preempt any conflicting state law or regulations, but the interaction between federal and state law is not always clear. Districts should consult legal counsel if questions about a potential conflict arise. Districts should also note that 18 states, including California, have sued the U.S. Department of Education to stop the implementation of these regulations. A preliminary injunction seeking to postpone the effective date of the regulations and prohibit their enforcement is currently pending. If the court grants the injunction, portions of the following administrative regulation will not take effect.

The following policy shall apply to all district employees, interns, volunteers, contractors, job applicants, and other persons with an employment relationship with the district.

The Governing Board is committed to providing a safe work environment that is free of harassment and intimidation. The Board prohibits sexual harassment against district employees and retaliatory behavior or action against any person who complains, testifies, or otherwise participates in the complaint process established for the purpose of this policy.

(cf. 0410 - Nondiscrimination in District Programs and Activities)
(cf. 4030 - Nondiscrimination in Employment)

Sexual harassment includes, but is not limited to, harassment that is based on the **sex,** gender, gender identity, gender expression, or sexual orientation of the victim **and harassment based on pregnancy, childbirth, or related medical conditions**.

~~This policy shall apply to all district employees and to other persons on district property or with some employment relationship with the district, such as interns, volunteers, contractors, and job applicants.~~

~~Any district employee who engages or participates in sexual harassment or who aids, abets, incites, compels, or coerces another to commit sexual harassment in violation of this policy is subject to disciplinary action, up to and including dismissal.~~

~~*(cf. 4117.7/4317.7 - Employment Status Reports)*~~
~~*(cf. 4118 - Dismissal/Suspension/Disciplinary Action)*~~
~~*(cf. 4218 - Dismissal/Suspension/Disciplinary Action)*~~

The Superintendent or designee shall take all actions necessary to ensure the prevention, investigation, and correction of sexual harassment, including but not limited to:

1. Providing training to employees in accordance with law and administrative regulation

2. Publicizing and disseminating the district's sexual harassment policy to employees and others to whom the policy may apply

~~*(cf. 4112.9/4212.9/4312.9 - Employee Notifications)*~~

3. Ensuring prompt, thorough, ~~and~~ fair**, and equitable** investigation of complaints

4. Taking timely and appropriate corrective/remedial action(s), which may require interim separation of the complainant and the alleged harasser and subsequent monitoring of developments

The Superintendent or designee shall periodically evaluate the effectiveness of the district's strategies to prevent and address harassment. Such evaluation may involve conducting regular anonymous employee surveys to assess whether harassment is occurring or is perceived to be tolerated, partnering with researchers or other agencies with the needed expertise to evaluate the district's prevention strategies, and using any other effective tool for receiving feedback on systems and/or processes. As necessary, changes shall be made to the harassment policy, complaint procedures, or training.

Sexual Harassment Reports and Complaints

~~Any d~~**D**istrict employee**s** who feel~~s~~ that ~~he/she has~~ **they have** been sexually harassed in the performance of ~~his/her~~ **their** district responsibilities or who ~~has~~ **have** knowledge of any incident of sexual harassment by or against another employee shall immediately report the incident to ~~his/her~~ **their** direct supervisor, ~~another supervisor,~~ **a district administrator, or** the district's **Title IX C**~~c~~oordinator ~~for nondiscrimination, the Superintendent, or, if available, a complaint hotline or an ombudsman~~. ~~An employee~~ **Employees** may bypass ~~his/her~~ **their** supervisor in filing a complaint ~~where~~ **if** the supervisor is the subject of the complaint. A supervisor or administrator who receives a harassment complaint shall promptly notify the **Title IX C**~~c~~oordinator.

~~Complaints of sexual harassment shall be filed and investigated in accordance with the complaint procedure specified in AR 4030 - Nondiscrimination in Employment. An employee may bypass his/her supervisor in filing a complaint where the supervisor is the subject of the complaint.~~

Once notified, the Title IX Coordinator shall ensure the complaint is addressed through either AR 4119.12/4219.12/4319.12 - Title IX Sexual Harassment Complaint Procedures for complaints meeting the Title IX definition of sexual harassment or AR 4030 - Nondiscrimination in Employment for complaints meeting the state definition, as applicable, and shall offer supportive measures to the complainant.

(cf. 4119.12/4219.12/4319.12 - Title IX Sexual Harassment Complaints)

~~All complaints and allegations of sexual harassment shall be kept confidential to the extent necessary to carry out the investigation or to take other subsequent necessary actions. (2 CCR 11023)~~

Upon investigation of a sexual harassment complaint, a ~~A~~any district employee ~~who~~ **found to have** engage~~s~~**d** or participate~~s~~**d** in sexual harassment or ~~who aids, abets, incites, compels, or coerces~~ **to have aided, abetted, incited, compelled, or coerced** another to commit sexual harassment in violation of this policy ~~is~~ **shall be** subject to disciplinary action, up to and including dismissal**, in accordance with law and the applicable collective bargaining agreement**.

(cf. 4117.7/4317.7 - Employment Status Reports)
(cf. 4118 - Dismissal/Suspension/Disciplinary Action)
(cf. 4218 - Dismissal/Suspension/Disciplinary Action)

Legal Reference:

EDUCATION CODE
200-262.4 Prohibition of discrimination on the basis of sex
GOVERNMENT CODE
12900-12996 Fair Employment and Housing Act, especially:
12940 Prohibited discrimination
12950 Sexual harassment; distribution of information
12950.1 Sexual harassment training
LABOR CODE
1101 Political activities of employees
1102.1 Discrimination: sexual orientation
CODE OF REGULATIONS, TITLE 2
11009 Employment discrimination
11021 Retaliation
11023 Harassment and discrimination prevention and correction
11024 Sexual harassment training and education
11034 Terms, conditions, and privileges of employment
CODE OF REGULATIONS, TITLE 5
4900-4965 Nondiscrimination in elementary and secondary education programs ~~receiving state financial assistance~~
UNITED STATES CODE, TITLE 20
1681-1688 Title IX ~~prohibition against discrimination~~ ***of the Education Amendments of 1972***
UNITED STATES CODE, TITLE 42
2000e-2000e-17 Title VII, Civil Rights Act of 1964, as amended
CODE OF FEDERAL REGULATIONS, TITLE 34
106.1-106.9 Nondiscrimination on the basis of sex in education programs or activities
106.51-~~106.61~~ ***106.82*** *Nondiscrimination on the basis of sex in employment in education programs or activities*
COURT DECISIONS
Department of Health Services v. Superior Court of California, (2003) 31 Cal.4th 1026
Faragher v. City of Boca Raton, (1998) 118 S.Ct. 2275
Burlington Industries v. Ellreth, (1998) 118 S.Ct. 2257
Gebser v. Lago Vista Independent School District, (1998) 118 S.Ct. 1989
Oncale v. Sundowner Offshore Serv. Inc., (1998) 118 S.Ct. 998
Meritor Savings Bank, FSB v. Vinson et al., (1986) 447 U.S. 57

Management Resources:

U.S. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION PUBLICATIONS

Promising Practices for Preventing Harassment, November 2017
WEB SITES
California Department of Fair Employment and Housing: http://www.dfeh.ca.gov
Equal Employment Opportunity Commission: http://www.eeoc.gov
U.S. Department of Education, Office for Civil Rights: http://www.ed.gov/about/offices/list/ocr/index.html

Policy CABRILLO UNIFIED SCHOOL DISTRICT
adopted: December 11, 2008 Half Moon Bay, California
revised: February 16, 2017
revised: June 7, 2018
revised: TBD

Cabrillo USD

Board Policy

Sexual Harassment

BP 5145.7
Students

Cautionary Notice: The following administrative regulation reflects federal Title IX regulations added by 85 Fed. Reg. 30026, effective August 14, 2020, which establish a process for investigating and resolving allegations of conduct that meets the federal definition of sexual harassment. The federal regulations preempt any conflicting state law or regulations, but the interaction between federal and state law is not always clear. Districts should consult legal counsel if questions about a potential conflict arise. Districts should also note that 18 states, including California, have sued the U.S. Department of Education to stop the implementation of these regulations. A preliminary injunction seeking to postpone the effective date of the regulations and prohibit their enforcement is currently pending. If the court grants the injunction, portions of the following administrative regulation will not take effect.

The Governing Board is committed to maintaining a~~n educational~~ **safe school** environment that is free from harassment and discrimination. The Board prohibits**, at school or at school-sponsored or school-related activities,** sexual harassment ~~of~~ **targeted at any** student by ~~students, employees or other persons, at school or at school-sponsored or school-related activities~~ **anyone**. The Board also prohibits retaliatory behavior or action against **any** person~~s~~ who ~~complain~~ reports, **files a complaint or** testif~~y~~**ies about**, or otherwise participate in district complaint processes. **supports a complainant in alleging sexual harassment.**

(cf. 0410 - Nondiscrimination in District Programs and Activities)
(cf. 5131 - Conduct)
(cf. 5131.2 - Bullying)
(cf. 5137 - Positive School Climate)
(cf. 5145.3 - Nondiscrimination/Harassment)

The district strongly encourages students who feel~~s~~ that they are being or have been sexually harassed on school grounds or at a school-sponsored or school-related activity by another student or an adult, or who have experienced off-campus sexual harassment that has a continuing effect on campus, to immediately contact their teacher, the principal, the district's Title IX Coordinator, or any other available school employee. Any employee who receives a report or observes an incident of sexual harassment shall notify the Title IX Coordinator.

Once notified, the Title IX Coordinator shall ensure the complaint is addressed through Title IX complaint procedures or uniform complaint procedures, as applicable, and shall offer supportive measures to the complainant.

(cf. 1312.1 - Complaints Concerning District Employees)
(cf. 1312.3 - Uniform Complaint Procedures)
(cf. 5141.4 - Child Abuse Prevention and Reporting)
(cf. 5145.71 - Title IX Sexual Harassment Complaint Procedures)

The Superintendent or designee shall inform students and parents/guardians of the district's sexual harassment policy by disseminating it through parent/guardian notifications, publishing it on the district's web site, and including it in student and staff handbooks. All district staff shall be trained regarding the policy.

Instruction/Information

The Superintendent or designee shall ensure that all district students receive age-appropriate ~~instruction and~~ information on sexual harassment. Such instruction and information shall include:

1. What acts and behavior constitute sexual harassment, including the fact that sexual harassment could occur between people of the same sex **and could involve sexual violence**

2. A clear message that students do not have to endure sexual harassment **under any circumstance**

3. Encouragement to report observed incidents of sexual harassment even ~~where~~ **when** the **alleged** victim of the harassment has not complained

4. A clear message that student safety is the district's primary concern, and that any separate rule violation involving an alleged victim or any other person reporting a sexual harassment incident will be addressed separately and will not affect the manner in which the sexual harassment complaint will be received, investigated, or resolved

~~*(cf. 5131.5 - Vandalism, Theft and Graffiti)*~~
~~*(cf. 5137 - Positive School Climate)*~~
~~*(cf. 5145.3 - Nondiscrimination/Harassment)*~~
~~*(cf. 6142.1 - Sexual Health and HIV/AIDS Prevention Instruction)*~~

5. A clear message that, regardless of a complainant's noncompliance with the writing, timeline, or other formal filing requirements, every sexual harassment allegation that involves a student, whether as the complainant, respondent, or victim of the harassment, shall be investigated and action shall be taken to respond to harassment, prevent recurrence, and address any continuing effect on students

6. Information about the district's procedures for investigating complaints and the person(s) to whom a report of sexual harassment should be made

~~5~~**7.** Information about the rights of students and parents/guardians to file a **civil or** criminal complaint, as applicable**, including the right to file a civil or criminal complaint while the district investigation of a sexual harassment complaint continues**

8. A clear message that, when needed, the district will implement supportive measures to ensure a safe school environment for a student who is the complainant or victim of sexual harassment and/or other students during an investigation

~~*Complaint Process*~~ ***Disciplinary Actions***

~~Any student who feels that he/she is being or has been sexually harassed on school grounds or at a school-sponsored or school-related activity (e.g., by a visiting athlete or coach) shall immediately contact his/her teacher or any other employee. An employee who receives such a complaint shall report it in accordance with administrative regulation.~~

~~*(cf. 1312.1 - Complaints Concerning District Employees)*~~
~~*(cf. 5141.4 - Child Abuse Prevention and Reporting)*~~

~~The Superintendent or designee shall ensure that any complaints regarding sexual harassment are immediately investigated in accordance with administrative regulation. When the Superintendent or designee has determined that harassment has occurred, he/she shall take prompt, appropriate action to end the harassment and to address its effects on the victim.~~

~~*(cf. 4119.11/4219.11/4319.11 - Sexual Harassment)*~~
~~*(cf. 5141.4 - Child Abuse Prevention and Reporting)*~~
~~*(cf. 5145.3 - Nondiscrimination/Harassment)*~~

~~Any student who engages in sexual harassment of anyone at school or at a school-sponsored or school-related activity is in violation of this policy and shall be subject to disciplinary action. For students in grades 4 through 12, disciplinary action may include suspension and/or expulsion, provided that, in imposing such discipline, the entire circumstances of the incident(s) shall be taken into account.~~

Upon completion of an investigation of a sexual harassment complaint, any student found to have engaged in sexual harassment or sexual violence in violation of this policy shall be subject to disciplinary action. For students in grades 4-12, disciplinary action may include suspension and/or expulsion, provided that, in imposing such discipline, the entire circumstances of the incident(s) shall be taken into account.

(cf. 5144 - Discipline)
~~*(cf. 5131 - Conduct)*~~
(cf. 5144.1 - Suspension and Expulsion/Due Process)
(cf. 5144.2 - Suspension and Expulsion/Due Process (Students with Disabilities))

Upon investigation of a sexual harassment complaint, any employee found to have engaged in sexual harassment or sexual violence toward any student shall be subject to disciplinary action, up to and including dismissal, in accordance with law and the applicable collective bargaining agreement.

(cf. 4117.7/4317.7 - Employment Status Report)
(cf. 4118 - Dismissal/Suspension/Disciplinary Action)
(cf. 4119.11/4219.11/4319.11 - Sexual Harassment)
(cf. 4218 - Dismissal/Suspension/Disciplinary Action)

~~Confidentiality and~~ **Record-Keeping**

In accordance with law, t~~T~~he Superintendent or designee shall maintain a record of all reported cases of sexual harassment to enable the district to monitor, address, and prevent repetitive harassing behavior in ~~its~~ **district** schools.

(cf. 3580 - District Records)

Legal Reference:

EDUCATION CODE
200-262.4 Prohibition of discrimination on the basis of sex
48900 Grounds for suspension or expulsion
48900.2 Additional grounds for suspension or expulsion; sexual harassment
48904 Liability of parent/guardian for willful student misconduct
48980 Notice at beginning of term
48985 Notices, report, statements and records in primary language
CIVIL CODE
51.9 Liability for sexual harassment; business, service and professional relationships
1714.1 Liability of parents/guardians for willful misconduct of minor
GOVERNMENT CODE
12950.1 Sexual harassment training
CODE OF REGULATIONS, TITLE 5
4600-4670 Uniform complaint procedures
4900-4965 Nondiscrimination in elementary and secondary education programs
UNITED STATES CODE, TITLE 20
1092 Definition of sexual assault
1221 Application of laws
1232g Family Educational Rights and Privacy Act
1681-1688 Title IX~~, discrimination~~ ***of the Education Amendments of 1972***
UNITED STATES CODE, TITLE 34
12291 Definition of dating violence, domestic violence, and stalking
UNITED STATES CODE, TITLE 42
1983 Civil action for deprivation of rights
2000d-2000d-7 Title VI, Civil Rights Act of 1964
2000e-2000e-17 Title VII, Civil Rights Act of 1964 as amended
CODE OF FEDERAL REGULATIONS, TITLE 34
99.1-99.67 Family Educational Rights and Privacy
106.1-~~106.71~~ ***106.82*** *Nondiscrimination on the basis of sex in education programs*
COURT DECISIONS
Donovan v. Poway Unified School District, (2008) 167 Cal.App.4th 567
Flores v. Morgan Hill Unified School District, (2003, 9th Cir.) 324 F.3d 1130
Reese v. Jefferson School District, (~~2001~~ ***2000****, 9th Cir.) 208 F.3d 736*
Davis v. Monroe County Board of Education, (1999) 526 U.S. 629
Gebser v. Lago Vista Independent School District, (1998) 524 U.S. 274
Oona by Kate S. v. McCaffrey, (1998, 9th Cir.) 143 F.3d 473
Doe v. Petaluma City School District, (1995, 9th Cir.) 54 F.3d 1447

Management Resources:

CSBA PUBLICATIONS
Providing a Safe, Nondiscriminatory School Environment for Transgender and Gender-Nonconforming Students, Policy Brief, February 2014
Safe Schools: Strategies for Governing Boards to Ensure Student Success, 2011
U.S. DEPARTMENT OF EDUCATION, OFFICE FOR CIVIL RIGHTS PUBLICATIONS
Q&A on Campus Sexual Misconduct, September 2017
Examples of Policies and Emerging Practices for Supporting Transgender Students, May 2016
Dear Colleague Letter: Title IX Coordinators, April 2015
Sexual Harassment: It's Not Academic, September 2008
Revised Sexual Harassment Guidance: Harassment of Students by School Employees, Other Students, or Third Parties, January 2001
WEB SITES

CSBA: http://www.csba.org
California Department of Education: http://www.cde.ca.gov
U.S. Department of Education, Office for Civil Rights: http://www.ed.gov/about/offices/list/ocr

Policy CABRILLO UNIFIED SCHOOL DISTRICT
adopted: June 25, 2009 Half Moon Bay, California
revised: May 31, 2012
revised: TBD

CABRILLO UNIFIED SCHOOL DISTRICT

498 Kelly Avenue, Half Moon Bay, California 94019 • 650 712-7100 • Fax 650 726-0279 • www.cabrillo.k12.ca.us

SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Sean McPhetridge, Ed.D., Superintendent
CATEGORY: Information
ITEM TITLE: Presentation of Administrative Regulation 0415.1 Sexual Orientation, Gender Identity, and Gender Expression (SOGIE)

BACKGROUND INFORMATION

The CUSD Governing Board approved Board Policy 0415 (Equity) in 2019. As such, CUSD acknowledged its appreciation of our community's diversity and committed our staff and stakeholders to safeguarding the rights of marginalized learners to help ensure equal access and ongoing support is provided to every student, every day.

REPORT/PROPOSAL

Administrative Regulation 0415.1 is presented tonight to give an overview of work done by CUSD staff with a CUSD LGBTQ Round Table and our local CoastPride partners to help operationalize Board Policy 0415. Typically Administrative Regulations are not presented for Board approval and serve instead as internal work of staff to help guide actions and practices intended to support the implementation of Board Policies that outline the overarching goals of the district. Tonight staff present on AR 0415.1 as a way to give background and context on how CUSD is working to ensure the rights of all learners are protected, with a particular focus on protecting the rights of students with regard to sexual orientation, gender identity, and gender expression (SOGIE). Like other districts that have recently created Administrative Regulations to establish how staff will work in this same regard, CUSD is commemorating and celebrating LGBTQ History Month while also creating guiding regulations that can help staff in the implementation of BP 0415 (Equity). Ultimately AR 0415.1 also serves as a template by which other ARs can be created to help guide staff ongoing in their work to operationalize BP 0415 in other regards, namely in the protection and support of students of diverse backgrounds and identities. Staff envision the creation of ARs in the future that will outline the safeguards that will be established to protect our diverse learners based on their protected class status (e.g., ability, ethnicity, gender, nationality, race, religion, and/or sexual orientation). Finally, attached to tonight's presentation are BP 0415, AR 0415.1, and a recently submitted grant to the California Department of Education that helps describe the work currently being done in CUSD professional development with anti-bias and anti-racist training to help educators investigate their own backgrounds and experiences in order to better serve students of diverse backgrounds and identities who are currently underserved for various reasons.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

This item is information only. A recommendation is not applicable to this item.

CABRILLO UNIFIED SCHOOL DISTRICT

Every Student, Every Day!

Both In Words and In Actions: Defining Equity in Board Policy and Taking Concrete Efforts to Enact It in Cabrillo Unified School District

October 8, 2020

Governing Board Meeting

CUSD's Equity Policy Defines Our District Goal

- Cabrillo Unified School District adopted Board Policy 0415 in 2019
- BP 0415 proclaims our district beliefs about our appreciation of diversity, our commitment to safeguarding the rights of marginalized learners, and our need to review data and plan targeted actions to help us achieve the district's mission to address the needs of every student, every day
- BP 0415 specifically outlines our goal of eradicating institutional bias, and CUSD staff have already implemented actions in the past year and outlined steps to address implicit and explicit biases affecting student achievement
- Tonight we offer examples of operationalizing BP 0415, specifically through crafting Administrative Regulation 0415.1 to address needs of our learners who deserve and require our attention and our support in order to flourish

Administrative Regulation 0415.1 (SOGIE)

- As a standard part of our work, district staff will often create and use Administrative Regulations (ARs) to outline the actions to be taken to operationalize Board Policies that define overarching district goals
- ARs provide concrete and specific actions to be taken in day-to-day operations to help achieve the aims and intent of Board Policies
- Though not typically presented for approval by the Governing Board, ARs are sometimes provided to give background and context so the Board, public, and staff can understand how the work is structured
- AR 0415.1 is presented tonight both to accompany our celebration of LGBTQ History Month and to mark the work CUSD plans on doing to address the needs of students, regardless of their sexual orientation, gender identity, and/or gender expression (SOGIE)

AR 0415.1 Serves as a Template for Other ARs

- While AR 0415.1 addresses the needs and rights of all learners, it is also specific with regard to its focus on addressing SOGIE issues (i.e., sexual orientation, gender identity, and/or gender expression)
- There is a clear need for this work: neighboring districts have recently been named in a San Mateo County Grand Jury Report that reports the continued frequency of hate speech and discriminatory actions that are unacceptably still evident in our districts and our schools
- AR 0415.1 outlines protections and supports to be provided to students and families, and it lays the groundwork as a template for other ARs that can be crafted for this same purpose for all students, regardless of their identifications (e.g., protected class descriptors of disability, race, gender, religion, nationality, and/or sexual orientation)

BP 0415 and AR 0415.1 Presented for Review

- It would take too long in this forum to read AR 0415.1 in its entirety or review BP 0415 in detail, but both are attached to this presentation
- Tonight's presentation acknowledges CUSD has a policy naming its prioritized focus on equity while presenting AR 0415.1 as an example of how CUSD aims to protect the rights of all learners, specifically regarding sexual orientation, gender identity, and gender expression
- CUSD staff thank CoastPride leaders who have worked with us in an LGBTQ Round Table to create and present AR 0415.1, and we look forward to continuing partnership with others in this kind of work so we draw upon stakeholder input to create BPs and ARs to inform and guide work to enact and operationalize other BP 0415 equity efforts

Next Steps

- CUSD is committed to operationalizing BP 0415 to protect the rights of all learners, and we understand we now need to communicate to families, staff, and students about our commitment to the rights of all and the steps stakeholders can take if those rights are violated
- CUSD will continue to provide professional development and trainings that help staff reflect on our own actions and beliefs with regard to respecting diversity and encouraging the achievement of all learners
- Attached is a grant application describing efforts underway to address concerns named in the recent San Mateo Grand Jury Report that reflect current societal concerns about ableism, ethnocentrism, homophobia, racism, sexism, religious bigotry, and other “isms” we denounce in CUSD
- In future presentations, staff will continue to report on other efforts that are being taken to operationalize Board Policy 0415 and to help CUSD achieve our proclaimed focus on equity through concrete, targeted actions

Questions?

Thank you!

Cabrillo USD

Administrative Regulation

Sexual Orientation, Gender Identity, and Gender Expression (SOGIE)

AR 0415.1
Philosophy, Goals, Objectives and Comprehensive Plans

Administrative Regulation 0415.1 serves to help Cabrillo Unified School District operationalize CUSD Board Policy 0415. AR 0415.1 provides guidance to district staff and stakeholders in the administration of BP 0415's commitment to safeguarding the rights and well-being of students.

The Governing Board believes urgent action and ongoing attention are needed to transform individual and institutional acts if we are to acknowledge and respect the diversity that exists among the district's community of students, staff, families, and community members. The Board believes these efforts are required to achieve the district's vision, mission, and goals. Addressing needs of the most marginalized learners requires a recognition of the inherent value of diversity, the cultivation of a diverse staff, and a demonstration of our collective awareness of the implicit and explicit biases existing in society that are based on the following diversity characteristics: race, color, ancestry, nationality, national origin, ethnic group identification, ethnicity, language, immigration status, age, religion, marital status, pregnancy, parental status, physical disability, mental disability, sex, sexual orientation, gender identity, and gender expression.

By adopting CUSD Board Policy 0415 Equity in 2019, the CUSD Governing Board proclaimed our district's commitment to collective action that acknowledges the pressing need for educators to develop a propensity, a knowledge, and the courage to discuss, name, and describe the levels of exclusion, oppression, hostility, homophobia, and racism in the United States. CUSD's Governing Board also recognized in that Board Policy that collective action must be taken to promote diversity and protect the rights of those impacted by actions and beliefs based on a perception of one or more of such diversity characteristics or an association with a person or group with one or more of these actual or perceived characteristics. In adopting BP 0415, the Governing Board stated clearly that it will not allow our schools, staff, and stakeholders to perpetuate these biases because it has been shown that these biases and the resulting actions based on these biases cause irreparable harm and set students on inequitable footing to succeed. The Governing Board thus commits itself to use an equity lens in analyzing proposed policies, institutional practices, programs, plans, forms, outreach materials, and budgetary decisions.

The Superintendent and/or her/his designee shall adopt, and may periodically revise, administrative regulations necessary to implement and enforce Board Policy 0415. CUSD's Governing Board and staff are committed to developing regulations to provide the following:

1. An adequate description of Board Policy 0415 to the school community of parents, guardians, caregivers, students, and employees in order to communicate its importance;

2. A detailed step-by-step explanation of and guidance on how the above rights will be implemented at each school and how we will look together at the ways we structure inequity in education and intentionally interrupt these practices;

3. A regular review process that will engage the school community, assess how each school is implementing this policy, and result in assessments of the ability to implement the achievement of this policy; and

4. A complaint and resolution procedure that the school community can use when they believe the letter or spirit of this policy is not being followed.

Sexual Orientation, Gender Identity, and Gender Expression (SOGIE)

Education Code 218 (AB 493 2019)
California Code of Regulations (5 CCR Section 4900(a)

This regulation is intended to help educate and advise district staff and stakeholders regarding non-binary, transgender, and gender non-conforming student concerns in order to help promote a safe learning environment for all students and to ensure that every student has equal access to all components of their educational program. Board Policy 0415 requires CUSD schools and staff to recognize the diversity of our school community and to take collective action by employing an equity lens to ensure our schools are free from implicit and explicit biases as well as addressing unlawful discrimination, including discriminatory harassment, intimidation, and bullying based on actual or perceived sexual orientation, gender, gender identity, gender expression (SOGIE), and/or its intersection with race, color, ancestry, nationality, national origin, ethnic group identification, ethnicity, language, immigration status, age, religion, marital status, pregnancy, parental status, physical disability, and mental disability.

The need for this is clear. CUSD recognizes each and every child can reach their full potential if they have the educational foundation to succeed. California lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ) students, however, often face verbal, physical, and online harassment, which has significant effects on their academic achievement. In the Gay Lesbian and Straight Education Network's (GLSEN) 2017 National School Climate Survey, over 70 percent of LGBTQ students nationwide reported being called names or threatened based on their sexual orientation. In the San Mateo County 2018 Study, the rate was 80%. Nearly one in four LGBTQ students reported physical harassment based on their gender expression, and over 48 percent reported cyberbullying. These problems have direct effects on how students perform in school. GLSEN's 2017 survey data shows that the average grade point average for LGBTQ students who experience higher levels of harassment is significantly lower than for LGBTQ students who experience lower levels of harassment, and the data also shows that nearly 35 percent of LGBTQ students report missing school because they felt unsafe or uncomfortable, with over 10 percent missing four or more full days in the month immediately preceding the survey. In spite of these problems, research has shown that over half of LGBTQ students who are harassed or assaulted in school do not report these incidents to school staff, primarily because they doubt any effective intervention will occur or because they fear that the incidents could escalate if reported.

It has been demonstrated that creating supportive learning environments for LGBTQ students improves their performance in school. Students in schools with peer support clubs report lower levels of victimization, are more likely to report that school personnel intervened when they witnessed harassment, and are less likely to miss school because of safety concerns. According to California Safe Schools Coalition, students who have experienced harassment at school because of their actual or perceived gender identity or expression are twice as likely as their peers to report having carried a gun to school or to have reported attempting suicide. Students who are harassed are also more likely to be truant or academically disengaged. One California Safe Schools Coalition survey found that nearly 109,000 school absences at the middle and high school levels in California each year are due to harassment based on actual or perceived sexual orientation, costing California school districts at least $39.9 million each year.

The District is committed to providing in-service training in CUSD school sites and partnering with community resources for the support of lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ) students. The District is also committed to employing strategies to increase support for LGBTQ students and thereby improve overall school climate. The CUSD Governing Board calls on its staff and stakeholders to regularly ask the following core questions: “How are we perpetuating exclusion, oppression, hostility, and homophobia?” “What are the structural and systemic changes that will eradicate these values and behaviors?” “How are we affirming and accounting for different sexual orientations, gender identities, and gender expressions (SOGIE) of our diverse school community with regard to internal, interpersonal, instructional, and institutional practices?”

Internal Orientation: Statement of Beliefs

1. Students have the right to decide what information to share, how to share it, with whom, and when to share it. The type of information that they may keep confidential or seek to amend, even after graduation, includes the following:

    a. Heath information, including the right to keep private their physical and behavioral health information;

    b. Legal information, including the right to keep private their biological sex assigned at birth and their former legal name; and

    c. Sexual orientation, gender identity, and gender expression (SOGIE) information

2. School staff need training to help elicit SOGIE information and safeguard confidential information in all its communications and reports, and this information will be used to enforce the student rights described below. For example, all internal systems for collecting information will be adapted to ensure that students are always called by their preferred name and pronouns.

3. Schools will collect SOGIE information and will maintain confidentiality when reporting this information.

Interpersonal Orientation: Statement of Beliefs

1. Students have the right to share their authentic selves and to feel safe to do so, including:
    a. Freedom of speech – This includes the right to respectfully express opinions or ideas which may offend others, including discussion of topics related to when in our history the rights of any people have been contested;

    b. Freedom of expression – This includes the right of students to be able to express their multi-faceted identities:

        i. To explore their personal, family, and cultural histories and to understand the privileged or oppressed lenses through which we express ourselves and see others. To illustrate this point, our school personnel as professionals must sharpen and tune their cultural lenses, learn to manage their own social-emotional responses to student diversity, and locate and acknowledge their own socio-political positions;

        ii. To be open about their sexual orientations, gender identities, and gender expressions (SOGIE). To illustrate this point, while students have the right to take a date of any gender to dances, prom, or any other school-related or after-school activities, it is critical for educators to see their courage, see their identities, and celebrate how they express themselves; and
        iii. To wear clothing consistent with their multi-faceted and intersectional identities, including their gender identities, within the parameters of the dress code as it relates to safety. A school's dress code shall be gender neutral. Schools shall not enforce specific attire based on gender.

2. Students have the right to be seen, heard, and participate, including the following:

    a. Being accepted as they wish to be seen and also being able to express themselves. For example, this refers specifically to a student being able to claim their asserted gender identity. There are no medical or mental health diagnoses or treatment thresholds that students must meet in order to have their gender identity recognized and respected. Students may initiate a process to change their name, pronoun, attire, with regard to access to District programs, activities, and facilities. Schools shall customize support to optimize a student's access according to their gender identity.
    b. Being addressed by their preferred name and pronoun. While inadvertent slips or honest mistakes may occur, the intentional or persistent refusal to respect a student's self-proclaimed gender identity is a violation of District policy and may constitute discrimination under State law. However, some situations may understandably exist (e.g., communications with the family, state or federal records, and/or student records where a name or gender with which the student identifies is not authorized) where it may be necessary and recommended for staff to be informed of a student's legal name and gender. In these situations, staff should prioritize the safety, confidentiality, and respect of the student in a manner consistent with the law.

Instructional Orientation: Statement of Beliefs

1. Access to Instruction— Students have the right to learn about themselves, which includes access to information. It is vital for educators to see the brilliance of their students, celebrate their innovation, recognize their unique forms of expression, and promote their irrepressible potential and promise. Specifically, we will instruct on, give access to, and discuss the excellence and high-achievement of the diversity of historical and present-day LGBTQ leaders. The District will remove school internet filters that prevent such access while taking steps to adhere to established internet safety protocols. We will review and update the following:

    a. A review of history and social sciences curricula at all grade levels to help illuminate and instruct students about violations of and struggles for human rights. It is necessary as a society to acknowledge unflinchingly the instances in United States history when our own best ideals were betrayed by our inhumanity and violence against group members because of SOGIE;

    b. A review of historical and current figures in all fields and across all subjects that combat implicit and explicit biases relating to SOGIE;

    c. A review of sexuality and sexual health education that does not assume heteronormative values and that respects all SOGIE;

    d. A review of after-school clubs, sports, and activities that reflect the diversity of the school community to eradicate implicit and explicit biases relating to SOGIE;

    e. A review of teacher lesson plans, books, discussion topics, and instructional examples to avoid heteronormative, gender-specific, or stereotyping examples. The use of gender to divide groups of students (for example, boys and girls into separate lines to exit or enter the classroom or to partner for dances) should be discouraged if it forces gender non-conforming students to identify in a way that may subject them to teasing. Attention should be paid to how gender is used in classroom examples, including mathematics, as these stereotypes may be used to reinforce SOGIE stereotypes.

2. Access to Professional Development- Administrators, counselors, faculty members, and all school personnel shall be given regular targeted training on countering anti-bias and demonstration of self-awareness of their own biases as it relates to SOGIE.

Institutional Orientation: Statement of Beliefs

The District is committed to promoting and engaging LGBTQ students in shaping policies and practices that directly impact their educational experiences and foster safe and inclusive schools. This AR, with input from those impacted, will be regularly updated to ensure that our schools are focusing on the questions of equity, uprooting bias, and providing an educational foundation that puts every LGBTQ student on an equitable footing.

The District will protect the following student rights:

1. The right to a positive and welcoming school climate. Schools shall be proactive in protecting students from threatening or potentially harassing or discriminatory behavior based on actual or perceived SOGIE. Opportunity transfers shall not be a school's first response when students do not feel safe. The district and school shall take affirmative steps to address their safety so that they can remain enrolled at their neighborhood school. Opportunity transfers should only be considered as a last resort when deemed necessary for the protection or the personal welfare of a transferring student or when specifically requested by the student and/or parent/guardian. This student and/or parent/guardian must consent to any such opportunity transfer.

2. The right to access locker rooms, restrooms, and overnight accommodations on field trips that correspond to their gender identity. Students who identify as nonbinary or gender-fluid should be granted access to the locker room, restroom, and overnight accommodation that they find best aligns with their gender identity.

3. The right to participate in all school programs (including competitive athletics, intramural sports, athletic teams, competitions, and contact sports) consistent with their gender identity. Students who identify as nonbinary or gender-fluid should be granted the opportunity to participate in athletic activities they find best align with their own gender identities. When conducting physical education classes and fitness evaluations, teachers will address and evaluate students by their gender identity.

4. The right to access culturally competent LGBTQ counseling services, including local community-based organizations that provide support to LGBTQ children and youth as well as local physical and mental health providers with experience in treating and supporting LGBTQ children and youth by leveraging SOGIE training for school and community providers.

How to File a Complaint

The District's Uniform Complaint Procedures (BP 1312.3; BP 0410) shall be used to report internal, interpersonal, instructional, and institutional complaints based on actual or perceived sexual orientation, gender identity, and gender expression (SOGIE). Examples of bases for complaints include, but are not limited to, the above list as well as the following examples of prohibited conduct by the District and schools, whether taken by school personnel, those acting on behalf of the school, and students:

1. Refusing to address a student by a name and the pronouns consistent with their gender identity

2. Disciplining or disparaging a transgender student because their mannerisms, hairstyle, or style of dress correspond to their gender identity, or disciplining a non-transgender student because their mannerisms, hairstyle, or style of dress do not conform to stereotypes for their gender or are perceived as indicative of the other sex

3. Blocking access to or saying disparaging remarks about a student's entry to the bathroom that corresponds to their gender identity because the student is either transgender or gender-nonconforming

4. Taunting a student because they participate in an athletic activity more typically favored by a student of the other sex

5. Revealing a student's transgender status to individuals who do not have a legitimate need for the information

6. Use of gender-specific slurs, including homophobic remarks, like “that’s so gay”

7. Physical assault of a student motivated by hostility toward them because of their SOGIE

8. Rejection by the District of a student's asserted gender identity

9. Denial of access to facilities that correspond with a student's gender identity

10. Discriminatory enforcement of a dress code

The District designates the individual(s) identified below as the employee(s) responsible for coordinating the District's efforts to comply with state and federal civil rights laws (including Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act, and the Age Discrimination Act of 1975) and to answer inquiries regarding the District's nondiscrimination policies.

The coordinator/compliance officer (Education Code 234.1; 5 CCR 4621) may be contacted at:

Superintendent, Cabrillo Unified School District
498 Kelly Ave, Half Moon Bay, California 94019
(650) 712-7112

Definitions – These definitions are intended as functional descriptors, not as labels:

Biological Sex: Biological sex refers to the objectively measurable organs, hormones, and chromosomes in a person’s body. It is the sex assigned at birth.

Confidentiality and Reporting of SOGIE Information: When confidential information is shared, if reported, it will only be reported in the aggregate; no identifying information will be reported that would link answers back to the individual student.

Gender: Gender is defined as “a person's actual sex or perceived sex and includes a person's perceived identity, appearance, or behavior, whether or not that identity, appearance, or behavior is different from that traditionally associated with a person's sex at birth.” This identification can be the same or different as that assigned at birth. This identification does not have to adhere to binary identities of male or female. (5 CCR Section 4910(k))

Gender-Expansive: This term conveys a wider, more flexible range of gender identity and/or expression than typically associated with the binary gender system.

Gender Expression: Gender expression means a student's gender-related appearance and behavior, whether or not stereotypically associated with the student's assigned sex at birth. (Education Code 210.7)

Gender-Fluid: |According to the Oxford English Dictionary, this term refers to a person who does not identify with a single fixed gender; this term is indicative of or relating to a person having or expressing a fluid or unfixed gender identity.

Gender Identity: Gender identity of a student means the student's gender-related identity, appearance, or behavior as determined from the student's internal sense of their gender, whether or not that gender-related identity, appearance, or behavior is different from that traditionally associated with the student's physiology or assigned sex at birth.

Gender-Nonconforming: Gender non-conforming student means a student whose gender expression differs from stereotypical expectations.

Homophobia: Homophobia refers to the fear and/or hatred of and/or discomfort with people who are attracted to members of the same sex.

Implicit Bias: Implicit bias refers to the unconscious attitudes and stereotypes that shape our responses to certain groups especially around race, class, language, age, gender, and sexual orientation. Implicit bias operates involuntarily, often without one’s awareness or intentional control Implicit bias is not implicit racism.

Non-Binary: Non-binary is an umbrella term for genders that fall outside the conventional gender binary (e.g., boy/man or girl/woman). Not all non-binary persons identify as trans, and not all trans individuals identify as non-binary.

Sexual Orientation: Sexual orientation refers to an inherent, immutable, and enduring emotional, romantic, or sexual attraction to other people.

SOGIE: SOGIE is an abbreviation combining sexual orientation, gender identity, and gender expression, and as a term it has become one of the main reference terms to describe the LGBT (or lesbian, gay, bisexual, and transgender) community. It is now being introduced in many legal doctrines, such as in state and federal laws and in United Nations documents. As a term, it is becoming popular in social media. Its usefulness lies in its inclusiveness: The term “LGBT” is specific to lesbian, gay, bisexual, and transgender people, but SOGIE refers to characteristics common to all human beings because everyone has a sexual orientation and a gender identity.

Transgender: Transgender student means a student whose gender identity or gender expression is different from that traditionally associated with the assigned sex at birth.

Transphobia: The fear and hatred of, or discomfort with, transgender people.

Regulation CABRILLO UNIFIED SCHOOL DISTRICT
approved: **TBD** Half Moon Bay, California

CABRILLO UNIFIED SCHOOL DISTRICT

CDE EQUITY GRANT APPLICATION $20,000

Superintendent Thurmond & the California Department of Education will award mini grants of up to $20,000 each (applicants may request consideration for more than $20,000 for compelling circumstances). The grants will be funded by contributions from an ongoing philanthropic partner, the S.D. Bechtel, Jr. Foundation and the allocation will be made by the Californians Dedicated to Education Foundation (CDEF).

Organizations with extensive experience in leading related educator trainings – including Equality California, National Equity Project, and the Simon Weisenthal Center's Museum of Tolerance are among those who are available partners for resources and professional development, LEAs may choose their own trainers or programs. Mini grants must be focused on providing professional learning on topics that address hate, bigotry, racism or any form of bias or prejudice. Topics for training could include, but are not limited to, anti-racism, anti-Semitism, LGBTQ+ inclusivity, Islamophobia, bullying of Asian American students, and anti-hate focus areas. Training may focus on any subject that addresses bias or prejudice towards any group of students.

Any LEA interested in receiving a mini-grant should fill out the Google form and submit their application as early as possible, the first round of grants will be reviewed after 11:59 p.m. Tuesday, September 29. After September 29 grants will be considered on a rolling basis depending on available resources. If your proposal is accepted, the district will be required to sign assurances that will include a reporting mechanism on the impact of the grant.

If you have any questions regarding the mini-grant proposal please email edtoendhate@cde.ca.gov.

1. LEA Name

Cabrillo Unified School District

2. Contact Person (Name & Email)

Leticia Bhatia

bhatial@cabrillo.k12.ca.us

3. Number of schools within LEA

9 schools

4. Number of students, please provide breakdown by student groups.

Total number of students = 3,136

African American (10)

American Indian or Alaska Native (1)

Asian (39)

Filipino (31)

Hispanic or Latino (1,634)

Pacific Islander (4)

White (1,268)

Two or More Races (144)

Not Reported (5)

5. Number of staff, please provide demographic breakdown.

Total Employees - 294

Male - 99 Female - 195

American Indian - 1 (1 Male) Filipino - 3 (1 Male, 2 Female)

Chinese - 4 (1 Male, 3 Female) Hispanic - 82 (29 Male, 53 Female)

Japanese - 1(1 Male, 0 Female) Unknown - 2 (1 Male, 1 Female)

Other Asian - 2 (2 Female) Caucasian - 197 (64 Male, 133 Female)

Black - 2 (1 Male, 1 Female)

6. What type of diversity, equity, & inclusion or antiracist/anti bias training has your district facilitated or previously participated in? If you haven't been able to complete the training, please explain why.

We are currently engaging in a powerful training offered by CircleUp Education. We began this partnership in 2019-2020 by delivering two powerful trainings based on implicit bias in schools. For the 2020-2021 school year, we have increased our training from 2 to 6 2.5 hrs training per year.

Below you will find an overview of the trainings we are providing this school year:

The Diversity Uncovered™ Training:
Training #1 Equity

Training Description
The Diversity Uncovered™ is the perfect interactive introduction to Diversity, inclusion and equity for educators. This training is designed to take participants on a journey to develop a common language to identify and address challenges related to unconscious bias and discrimination in schools. During the training, participants will:

- Reflect on the tension and awkwardness surrounding fears, reservations and concerns associated with conversations about prejudice, discrimination and inequities in the workplace.
- Develop common language and understanding of diversity, inclusion, and equity key terms and concepts in order to prevent misunderstandings and conflict
- Deeply explore implicit bias and microaggressions that show up in teaching practices, relationships with students and staff, and unconscious assumptions towards mmmm students
- Develop an awareness of the difference between ***conscious and intentional discrimination*** versus ***unconscious and unintentional discrimination.***

Topics Covered
Stereotypes & Assumptions
Unconscious Bias
Microaggressions
Social Identities

Training # 2 - Equitable Practices (Cycles of Inquiry)

The Unraveling Equity™ Training
Course Description
The Unravelling Equity™ Training takes participants on an experiential journey to review the differences between *“equality”* and *“equity”* and how each are woven into policies and practices that benefit some students and disadvantage others. This training explores specific areas within your school district where inequities occur in order to *unravel the values and beliefs around "fairness"* that lead to these inequities.

Participants learn how to develop an "equity lens" to review the impact of policies and practices in school focus areas (such as discipline, attendance, or curriculum) and their impact on a specific student group populations (such as Hispanic/ Latino, White, Special Education, etc) to assess inequities. Participants will have the opportunity to use real district data as a case study.

Topics Covered
Equity vs. Equality
Implicit Bias
Equity Lens Development
Internal vs. External Diversity
Institutional and Structural Discrimination

Training 3 - Equitable Practices - EL Best Practices
Restorative Approaches & Strategies for Promoting Equity & Inclusion in the Classroom

Course Description
The RISA™ Basics II Training teaches participants about the importance of forming relationship building and inclusion habits that become part of the daily classroom schedule and a regular component of staff meetings. Participants will learn several non-circle Relationship Building Practices and approaches, explore how to integrate them into their daily habits, and practice several simple examples to help promote inclusion and equity in the classroom that allows ALL students to feel heard and included in the classroom.

Participants will learn how intentional relationship building, like non-circle practices, help to dissolve stereotypes and unconscious assumptions that perpetuate discrimination and misunderstandings in the classroom.

Topics Covered
Relationship Building Habits & Approaches
Relationship Building Cue Cards™
Community Agreement Practices

7. What will your focus be for this professional learning opportunity?

The focus for this professional learning opportunity will be to help our staff develop the self-awareness and empathy tools needed to reach our population of students who come from extremely different backgrounds than our staff. We want to help our staff develop an equity and lens so that they can examine their teaching practices,

identify the ways in which their practices may be seeped by biases, and disrupt the ways in which our overall district could be perpetuating systemic racsm and discrimination unconsciously. Ultimately, our focus is to work together as an entire district to be effective change agents in our respective roles to ensure our most marginalized students (ex: Hispanic and Latino boys, socioeconomically disadvantaged students, students with disabilities, homeless, foster youth, LGBTQ, and English Language Learners) are treated with dignity and respect and held to an equally high standard as our white students.

8. How does this focus align with the needs of your community, students, and families?

Cabrillo Unified School District join with our greater Coastside community and families to teach the whole child. We have robust programs throughout our students' school careers in the arts, mathematics, science, and literacy. We participate in early literacy programs in pre-school including the San Mateo County program The Big Lift. All of our schools have implemented a Positive Behavior Intervention and Support (PBIS) framework and Social Emotional Learning programs in Kindergarten through Twelfth grade. And yet we have a persistent achievement gap in our Hispanic and Latino/a/x subgroups as compared to our white subgroup and significant disproportionality in the identification of Latino boys with Specific Learning Disability (SLD). We are in the early stages of creating policies and practices in our commitment to our LGBTQ youth. This persistent achievement gap and over-identification of students for Special Education Services speaks to a need to look deeper at barriers that likely exist in our systems, policies, practices, instructional strategies, and academic counseling through an equity and anti-bias lens. Through a comprehensive evaluation of not only our systems and programs but also ourselves, we seek to come together as a community to serve our children no matter their identity, cultural heritage, and/or ethnic background to truly and faithfully provide equal access and equitable opportunities to all our students. This not only serves our children but also fosters a strong, inclusive, anti-racist/anti-biased, compassionate, and caring community.

9. Please indicate your training partner(s), if known.

Cabrillo Unified School District has partnered with the San Mateo County Office of Education and CircleUp Education.

SMCOE

https://www.smcoe.org/

CircleUp Education

https://www.circleuped.org/

10. Describe your implementation plan.

Beginning 2019-2020, we adopted a district wide Multi-Tiered System of Support training initiative. After analysis of quantitative and qualitative data and a designation of Significant Disproportionality, we determined the need for further equity training. For the 2020-2021 school year, we have partnered with CircleUp in order to provide 6 district-wide trainings around equity and implicit bias training. Please refer to our 2020-2021 district wide training.

https://docs.google.com/spreadsheets/d/1Ei3It8zD8DaZjGlPUk9xyO41oJFjMZVgXQLhyFZRMjU/edit?usp=sharing

11. What is your timeline for implementation?

The timeline for implementation will be 2 years: 2020-2021 and 2021-2022

12. What do you hope to achieve with this professional learning opportunity, what will be your measurable outcomes?

With this ongoing professional learning opportunity, we hope to continue to address our staff's mindsets and our district's culture, processes, and systems that systemically disadvantage our Latino/a/x students, Special Education students, LGBTQ students, Homeless students, Foster Youth, and English learners. We believe it is the examination and change of these systems and personal biases that will make education more accessible and meaningful to our Latino/a/x and other at-promise students.

Our hope is that these efforts are reflected in the reduction of Significant Disproportionality between our Latino/a/x boys in comparison to other student subgroups as well as decrease the performance gap between our Special Education students, LGBTQ students, Homeless students, Foster Youth, and English learners. We will use both local and state assessments, including our California Dashboard data, as well as qualitative data to measure these outcomes.

13. How will you measure your outcomes?

We will use both local and state assessments, including our California Dashboard data, as well as qualitative data to measure these outcomes. Qualitative data will include surveys from staff, families, and students.

14. Please indicate estimation of training costs by providing a budget breakdown (grant request).

The budget costs will include contracts with CircleUp, SMCOE, or other equity training providers and hourly pay for staff, including PD materials and supplies, for a total of $20,000.

15. How will you sustain the work after the grant money is utilized?

This work will be sustained by training staff and will support building systems that lead to equitable practices.

16. In approximately 500 words, tell us why it's important to you to receive this grant.

At Cabrillo Unified School District, equity has been and will continue to be a primary focus for professional development. We have a significant achievement gap between our Latino/a/x students, English Learners, LGBTQ, and Socioeconomically Disadvantaged students. In 2019 CUSD approved an Equity Policy (BP 01415) which demonstrates our commitment for inclusion and integration of equitable practices at the district, school, and classroom level. The CDE Equity Grant will allow CUSD to implement ongoing practices and training, helping us redefine systems that will close the social and academic achievement gap between our underperforming students and those that have reached proficiency. These practices will also include Social Emotional Learning (SEL) training and the increased inclusion of culturally relevant curriculum relevant to our students' lives.

As our mission states, Cabrillo Unified School District is an exemplary learning community committed to valuing our distinct cultural identities and to "develop critical thinkers and socially responsible citizens who actively participate in their individual learning and development and are fully prepared to embrace their next challenge. We accomplish this by utilizing our unique natural resources and engaging the entire Coastside community and its partners in providing a rich and academically rigorous curriculum in a safe and nurturing environment."

During this unprecedented transition from in-person learning to Remote Learning, we continue our commitment to provide our educators with high-quality professional development opportunities. Creating and sustaining a teacher effectiveness system that enhances student achievement directly correlates on well-developed professional development opportunities focused on district goals. Professional development is one of the most significant capacity-building investments we make in order to support academic and social achievement of all CUSD students.

The Cabrillo Unified School District values professional development, and this professional development is a fundamental piece of our Local Control Accountability Plan (LCAP). Professional development increases educators' knowledge and enhances their professional skills, deepens educators' understanding and appreciation for the varied needs of students, and enhances educators' capacity to facilitate the learning success of all students.

The 2020-2021 Staff and District Professional Development Plan is directly linked to the district's LCAP goals and sites' Single Plan for Student Achievement (SPSA) goals. We continue the use of our Multi-Tiered System of Support (MTSS) framework while weaving in the thread of equity to make our plan a whole. This CUSD 2020-2021 Staff and District Professional Development Plan has been developed in collaboration with our site educators and principals to provide meaningful learning opportunities aligned to our district foci and also to help us meet the individual professional development needs at each site.

Cabrillo USD
Board Policy
Equity

BP 0415
Philosophy, Goals, Objectives, and Comprehensive Plans

The Governing Board believes that the diversity that exists among the district's community of students, staff, parents/guardians, and community members is integral to the district's vision, mission, and goals. Addressing the needs of the most marginalized learners requires recognition of the inherent value of diversity and acknowledgement that educational excellence requires a commitment to equity in the opportunities provided to students and the resulting outcomes.

(cf. 0000 - Vision)
(cf. 0100 - Philosophy)
(cf. 0200 - Goals for the School District)
(cf. 0410 - Nondiscrimination in District Programs and Activities)
(cf. 5145.3 - Nondiscrimination/Harassment)

In order to eradicate institutional bias of any kind, including implicit or unintentional biases and prejudices that affect student achievement, and to eliminate disparities in educational outcomes for students from historically underserved and underrepresented populations, the district shall proactively identify class and cultural biases as well as practices, policies, and institutional barriers that negatively influence student learning, perpetuate achievement gaps, and impede equal access to opportunities for all students.

The Board shall make decisions with a deliberate awareness of impediments to learning faced by students of color and/or diverse cultural, linguistic, or socio-economic backgrounds. To ensure that equity is the intentional result of district decisions, the Board shall consider whether its decisions address the needs of students from racial, ethnic, and indigent communities and remedy the inequities that such communities experienced in the context of a history of exclusion, discrimination, and segregation. Board decisions shall not rely on biased or stereotypical assumptions about any particular group of students.

(cf. 6173 - Education for Homeless Children)
(cf. 6173.1 - Education for Foster Youth)
(cf. 6174 - Education for English Learners)
(cf. 6175 - Migrant Education Program)
(cf. 9000 - Role of the Board)
(cf. 9310 - Board Policies)

The Board and the Superintendent or designee shall develop and implement policies and strategies to promote equity in district programs and activities, through measures such as the following:

1. Routinely assessing student needs based on data disaggregated by race, ethnicity, and socio-economic and cultural backgrounds in order to enable equity-focused policy, planning, and resource development decisions

(cf. 0400 - Comprehensive Plans)
(cf. 0460 - Local Control and Accountability Plan)
(cf. 6162.5 - Student Assessment)

2. Analyzing expenditures and allocating financial and human resources in a manner that provides all students with equitable access to district programs, support services, and opportunities for success and promotes equity and inclusion in the district. Such resources include access to high-quality administrators, teachers, and other school personnel; funding; technology, equipment, textbooks, and other instructional materials; facilities; and community resources or partnerships.

(cf. 0440 - District Technology Plan)
(cf. 3100 - Budget)
(cf. 4113 - Assignment)
(cf. 7110 - Facilities Master Plan)

3. Enabling and encouraging students to enroll in, participate in, and complete curricular and extracurricular courses, advanced college preparation programs, and other student activities

(cf. 6141.4 - International Baccalaureate Program)
(cf. 6141.5 - Advanced Placement)
(cf. 6143 - Courses of Study)
(cf. 6145 - Extracurricular and Cocurricular Activities)
(cf. 6152.1 - Placement in Mathematics Courses)

4. Building a positive school climate that promotes student engagement, safety, and academic and other supports for students

(cf. 5137 - Positive School Climate)

5. Adopting curriculum and instructional materials that accurately reflect the diversity among student groups

(cf. 6141 - Curriculum Development and Evaluation)
(cf. 6161.1 - Selection and Evaluation of Instructional Materials)

6. Providing and/or collaborating with local agencies and community groups to ensure the availability of necessary support services for students in need

(cf. 1400 - Relations Between Other Governmental Agencies and the Schools)
(cf. 6164.2 - Guidance/Counseling Services)
(cf. 6164.5 - Student Success Teams)
(cf. 6179 - Supplemental Instruction)

7. Promoting the employment and retention of a diverse staff that reflects the student demographics of the community

8. Providing district staff with ongoing, researched-based, professional learning and professional development on culturally responsive instructional practices

(cf. 4131 - Staff Development)
(cf. 4231 - Staff Development)
(cf. 4331 - Staff Development)

9. Conducting program evaluations that focus on equity and address the academic outcomes and performance of all students on all indicators

(cf. 0500 - Accountability)

The Board shall regularly monitor the intent and impact of district policies and decisions in order to safeguard against disproportionate or unintentional impact on access to district programs and achievement goals for specific student populations in need of services.

Legal Reference:
EDUCATION CODE
200-262.4 Educational equity
52077 Local control and accountability plan
60040 Selection of instructional materials
GOVERNMENT CODE
11000 Definitions
11135 Nondiscrimination in programs or activities funded by state
PENAL CODE
422.55 Definition of hate crime
422.6 Interference with constitutional right or privilege
CODE OF REGULATIONS, TITLE 5
4900-4965 Nondiscrimination in elementary and secondary education programs
UNITED STATES CODE, TITLE 20
1400-1482 Individuals with Disabilities in Education Act
1681-1688 Discrimination based on sex or blindness, Title IX
2301-2415 Carl D. Perkins Vocational and Applied Technology Act
6311 State plans
6312 Local education agency plans
UNITED STATES CODE, TITLE 29
794 Section 504 of the Rehabilitation Act of 1973
UNITED STATES CODE, TITLE 42
2000d-2000d-7 Title VI, Civil Rights Act of 1964
2000e-2000e-17 Title VII, Civil Rights Act of 1964 as amended
2000h-2000h-6 Title IX
12101-12213 Americans with Disabilities Act
CODE OF FEDERAL REGULATIONS, TITLE 28
35.101-35.190 Americans with Disabilities Act
36.303 Auxiliary aids and services
CODE OF FEDERAL REGULATIONS, TITLE 34
100.1-100.13 Nondiscrimination in federal programs, effectuating Title VI
104.1-104.39 Section 504 of the Rehabilitation Act of 1973
106.1-106.61 Discrimination on the basis of sex, effectuating Title IX

Management Resources:
CSBA PUBLICATIONS
Meeting California's Challenge: Access, Opportunity, and Achievement: Key Ingredients for Student Success, 2017
The School Board Role in Creating the Conditions for Student Achievement, 2017
African-American Students in Focus: Closing Opportunity and Achievement Gaps for African-American Students, 2016

African-American Students in Focus: Demographics and Achievement of California's African-American Students, 2016
Latino Students in California's K-12 Public Schools, 2016
Research-Supported Strategies to Improve the Accuracy and Fairness of Grades, 2016
Climate for Achievement Governance Brief Series, 2015
Math Misplacement, 2015
CENTER FOR URBAN EDUCATION PUBLICATIONS
Protocol for Assessing Equity-Mindedness in State Policy, 2017
WEB SITES
CSBA: http://www.csba.org
California Department of Education: http://www.cde.ca.gov
Center for Urban Education: https://cue.usc.edu
Safe Schools Coalition: http://www.casafeschools.org

Policy CABRILLO UNIFIED SCHOOL DISTRICT
adopted: September 12, 2019 Half Moon Bay, California

CABRILLO UNIFIED SCHOOL DISTRICT

498 Kelly Avenue, Half Moon Bay, California 94019 • 650 712-7100 • Fax 650 726-0279 • www.cabrillo.k12.ca.us

SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Sean McPhetridge, Ed.D., Superintendent
CATEGORY: Action
ITEM TITLE: Proclamation Endorsing November as National Native American Heritage Month

BACKGROUND INFORMATION

National Native American Heritage Month celebrates the accomplishments of the original inhabitants, explorers, and settlers of the United States**.** Native Americans have made distinct and important contributions to California, the United States, and the rest of the world in many fields. Today there are more than 100 recognized tribes in California, more than any other state in the nation. The United States Bureau of the Census determined in 2010 there were over 720,000 individuals in the State of California of Native American descent, making it the largest Native American population in the 50 states. For thousands of years, the San Francisco and Monterey Bay areas were the home to many different Indian tribes, each with its own territories and dialects, and today these tribes are known collectively as the Ohlone people. Tonight staff present a proclamation endorsing November as National Native American Heritage Month for Governing Board approval to acknowledge and appreciate the many contributions of Native American and indigenous peoples to the Coastside, California, the United States, and the world at large. In so doing, CUSD aims to honor, remember, and give thanks to Native American and indigenous people who were the first people to live in California and the Americas.

FISCAL ANALYSIS

There is no financial impact to the General Fund.

RECOMMENDATION

Adopt Proclamation Endorsing November as National Native American Heritage Month.

CABRILLO UNIFIED SCHOOL DISTRICT
HALF MOON BAY, CALIFORNIA

PROCLAMATION

National Native American Heritage Month
November

WHEREAS, National Native American Heritage Month celebrates the accomplishments of the original inhabitants, explorers, and settlers of the United States; and

WHEREAS, Native Americans have made distinct and important contributions to California, the United States, and the rest of the world in many fields; and

WHEREAS, today there are more than 100 recognized tribes in California, more than any other state in the nation; and

WHEREAS, the United States Bureau of the Census determined in 2010 that there were over 720,000 individuals in the State of California of Native American descent, making it the largest Native American population in the 50 states; and

WHEREAS, Americans of all ages recognize the outstanding achievements and contributions of this nation's original inhabitants and their descendants; and

WHEREAS, at the time of first European contact, the San Francisco and Monterey Bay areas were the home to at least fifty Indian tribes, each with its own territories and dialects; and

WHEREAS, today these tribes are known collectively as the Ohlone people; and

WHEREAS, the ancestral past of the Ohlone people spans ten thousand years, reaching back to the Ice Age and predating European contact that happened just a few hundred years ago; and

WHEREAS, Cabrillo Unified School District and the Coastside community recognize the importance of understanding the history of this area, particularly with regard to honoring the cultures and lives of the Ohlone people and other indigenous peoples who lived here first;

NOW, THEREFORE, BE IT PROCLAIMED that the Cabrillo Unified School District Governing Board recognizes November as National Native American Heritage Month.

PASSED AND ADOPTED by the Governing Board of the Cabrillo Unified School District on the 8th day of October, 2020, by the following vote:

Mary Beth Alexander:	_____	Aye	_____	No	_____	Abstain	_____	Absent
Lizet Cortes:	_____	Aye	_____	No	_____	Abstain	_____	Absent
Kimberly Hines:	_____	Aye	_____	No	_____	Abstain	_____	Absent
Sophia Layne:	_____	Aye	_____	No	_____	Abstain	_____	Absent
Freya McCamant:	_____	Aye	_____	No	_____	Abstain	_____	Absent

Certified by:

_____
Mary Beth Alexander
Clerk to the Governing Board
Cabrillo Unified School District

Attest by:

_____

Sean McPhetridge, Ed.D.
Secretary to the Governing Board
Cabrillo Unified School District

CABRILLO UNIFIED SCHOOL DISTRICT

498 Kelly Avenue, Half Moon Bay, California 94019 • 650 712-7100 • Fax 650 726-0279 • www.cabrillo.k12.ca.us

SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: Mr. Jason Owens, Director of Personnel and Pupil Services
Ms. Martha Ladd, Director of Student Services
Mr. Randy Rudolph, Director of Technology
Mr. Jesus Contreras, Chief Business Officer
Dr. Leticia Bhatia, Assistant Superintendent, Curriculum and Instruction
CATEGORY: Information/Action
ITEM TITLE: Update on Opening of School Plan and Approval of New Recommendations

BACKGROUND INFORMATION

The presentation presented to the Governing Board will provide and update on the Opening of School Plan and will provide new recommendations for board approval.

REPORT/PROPOSAL

Staff will provide an update on our Opening of Schools Plan.

RECOMMENDATION

Approve the new recommendations pertaining to the Opening of Schools Plan for Cabrillo Unified School District.

CABRILLO UNIFIED SCHOOL DISTRICT

Every Student, Every Day!

Opening of Schools Update

October 8, 2020

Governing Board Meeting

AGENDA

I. Recommendations from OSSC
II. OS Steering Committee Update
III. Survey Results
IV. Technology Update
V. Enrollment Update
VI. Engagement Update
VII. Budget Update
VIII. Questions

Recommendations from Opening of School Steering Committee

Recommendations to CUSD Board

1. **Begin Phase 1.5 (modified Phase II):**
   - Allow classroom staff to choose if they are comfortable returning for in-person instruction provided PPE is in place and if they feel safe
   - Serve at-promise students (including: students with disabilities and English learners) **as soon as possible but after October 16, 2020**
   - Submit waiver for Phase II as soon as possible
   - Serve at-promise students when COVID19 risk level is **red ("substantial" at 5-8 % COVID positive cases)**
2. **Begin Phase III:**
   - Allow classroom staff to choose if they are comfortable returning for in-person instruction provided PPE is in place and if they feel safe
   - Serve all students enrolled in our "Hybrid Learning Model" only if both SMC and HMB risk levels are **orange (2%-4.9% "moderate" COVID positive cases) for at least 2-3 weeks then begin planning for entering Phase III**
   - Begin Phase III no earlier than January 18, 2021

Subject to consultation with employees and bargaining units

Opening of Schools Steering Committee Update

Chief Business Officer

Jesus Contreras

Assistant Superintendent

Curriculum & Instruction

Leticia Bhatia

CABRILLO UNIFIED SCHOOL DISTRICT

Every Student, Every Day!

Opening of School Steering Committee Updates

Members of our OS Steering Committee met on September 17th. Below are the OSSC meeting dates for the 2020-2021 school year:

- September 17, 2020: 3-4:30 pm
- October 1, 2020: 3-4:30 pm
- October 15, 2020: 3-4:30 pm
- November 19, 2020: 3-4:30 pm
- January 14, 2021: 3-4:30 pm
- February 18, 2021: 3-4:30 pm
- March 18, 2021: 3-4:30 pm
- April 15, 2021: 3-4:30 pm
- May 13, 2021: 3-4:30 pm

OSSC & DELAC Advisory Questions Asked

1. What's working?
2. What can be improved?
3. Should we send out a survey to stakeholders? If so, what essential topics should we include?
4. What are our collective thoughts about the waiver for CUSD?
5. Currently, we have an in-person instruction no earlier than October 16th. Do we want to consider/propose a new date for starting in-person instruction?

Opening of Schools Committee Input

OS Steering Committee

- Morning remote learning is productive for students
- All technology hardware is in place and students who need a chromebook have received one
- Our at-promise students need more support
- Length of zoom classes in elementary should be scheduled to end by noon
- **Begin Phase 1.5 (modified Phase II):**
  - Allow classroom staff to choose if they are comfortable returning for in-person instruction provided PPE is in place and if they feel safe)
  - Serve at-promise students (including: students with disabilities and English learners) **as soon as possible but after October 16**
  - Submit waiver for Phase II as soon as possible(if needed)
  - Serve at-promise students when COVID19 risk level is red "substantial at 5 % - 8 % COVID cases
- **Begin Phase III:**
  - Allow classroom staff to choose if they are comfortable returning for in-person instruction provided PPE is in place and if they feel safe
  - Serve all students enrolled in "Hybrid Learning Model" only if both SMC and HMB risk levels are **orange (2-4.9% "moderate" COVID positive cases) for at least 2-3 weeks then begin planning for entering Phase III**
  - Begin Phase III no earlier than January 18, 2021
- Additional training to support technology needs for both parents and for teachers
- Agree to submit waiver for Phase II after Thanksgiving break and Phase III after winter break (if COVID conditions are safe and there is a decrease in cases - Blueprint for Safer Economy - 2-4.9% COVID positive cases)
- Proceed to Phase III only if both county and HMB risk level is orange "moderate" 2-4.9%
- Concern about shortage of custodial staff

District English Learner Advisory Committee

- CUSD teachers and staff is much appreciated for their time, commitment, and outreach to ensure their children are engaged
- Wifi is an issue where there are more than 2 students in a household
- Overall, there is too much homework/classwork assigned during asynchronous (a few parents asked for optional enrichment)
- About 50% of families present do not want to return until there is a vaccine but may change their mind once they see the model classroom for hybrid learning with safety protocols in place (suggested a video)
- About 50% of families would return because remote learning is not effective for learning
- Survey and DELAC input is much appreciated
- Supported pushing the start no earlier date for Phase II after Thanksgiving break and Phase III to after winter break
- Suggestion to always send site communication in both English and Spanish

SMC County Risk Status: Blueprint for Safer Economy

Every county in California is assigned to a tier based on its test positivity and adjusted case rate. At a minimum, counties must remain in a tier for at least 3 weeks before moving forward. Data is reviewed weekly, and tiers are updated on Tuesdays. To move forward, a county must meet the next tier's criteria for two consecutive weeks. If a county's metrics worsen for two consecutive weeks, it will be assigned a more restrictive tier. Public health officials are constantly monitoring data and can step in if necessary.

County risk level	Adjusted cases	Positivity rate
WIDESPREAD Many non-essential indoor business operations are closed	More than 7 Daily new cases (per 100k)	More than 8% Positive tests
SUBSTANTIAL Some non-essential indoor business operations are closed	4-7 Daily new cases (per 100k)	5 – 8% Positive tests
MODERATE Some indoor business operations are open with modifications	1 – 3.9 Daily new cases (per 100k)	2 – 4.9% Positive tests
MINIMAL Most indoor business operations are open with modifications	Less than 1 Daily new cases (per 100k)	Less than 2% Positive tests

Opening of Schools Survey Overview

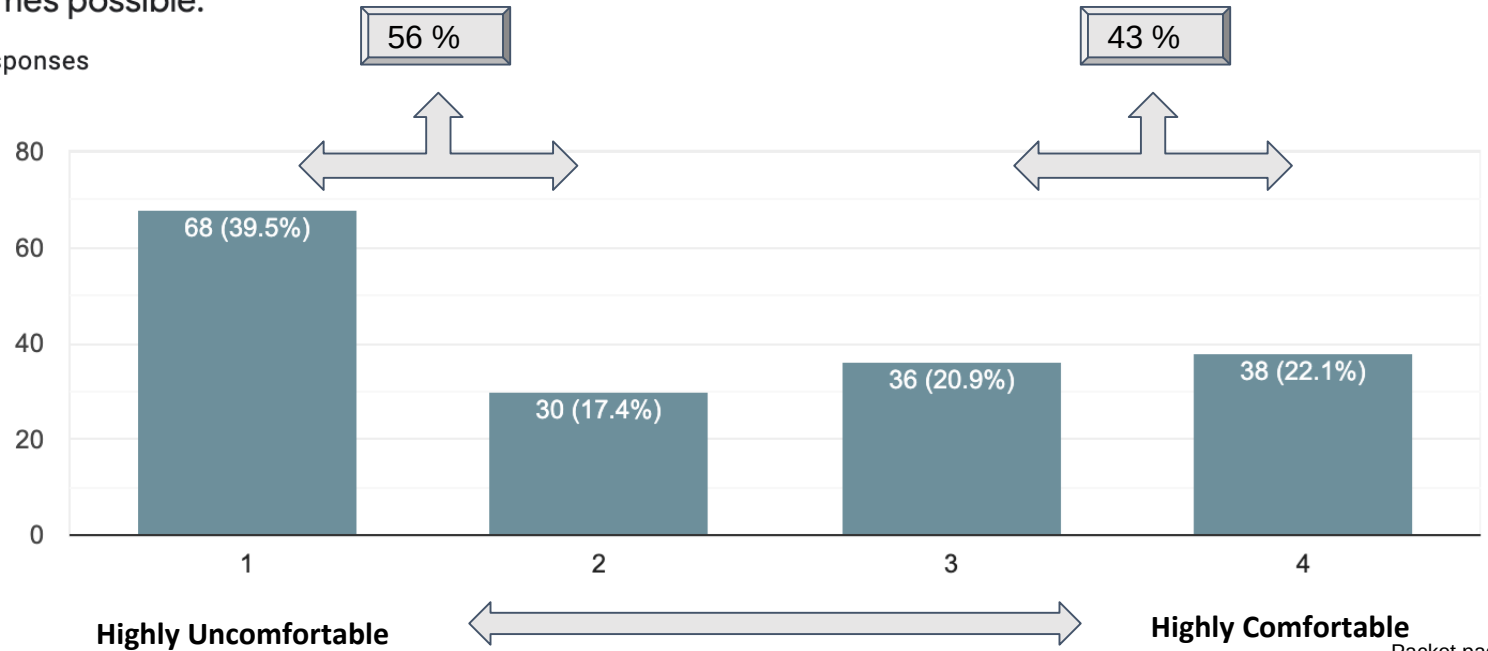
Assistant Superintendent Curriculum & Instruction

Leticia Bhatia

Return to Hybrid Learning (Staff Responses)

Please rate your comfort level with returning to your worksite assignment in the Hybrid Learning Model (cohort groups 2 days in person and 3 days asynchronous) as soon as it becomes possible.

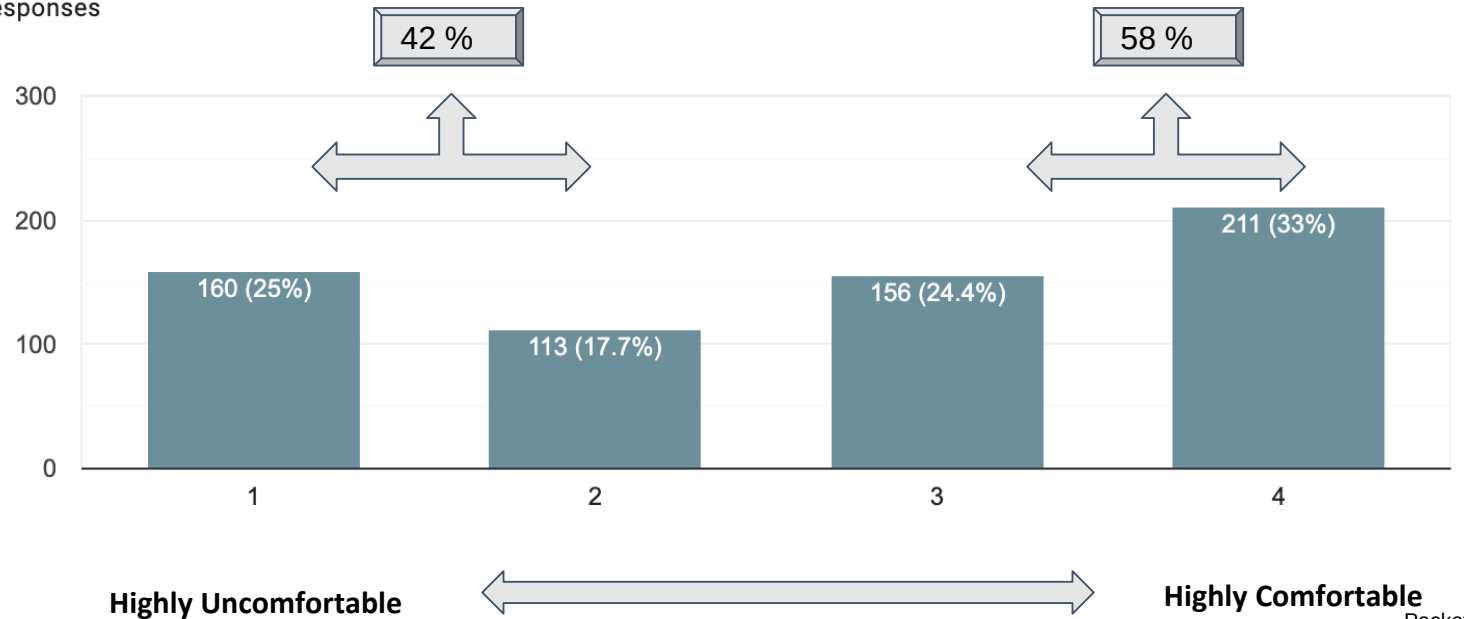
172 responses



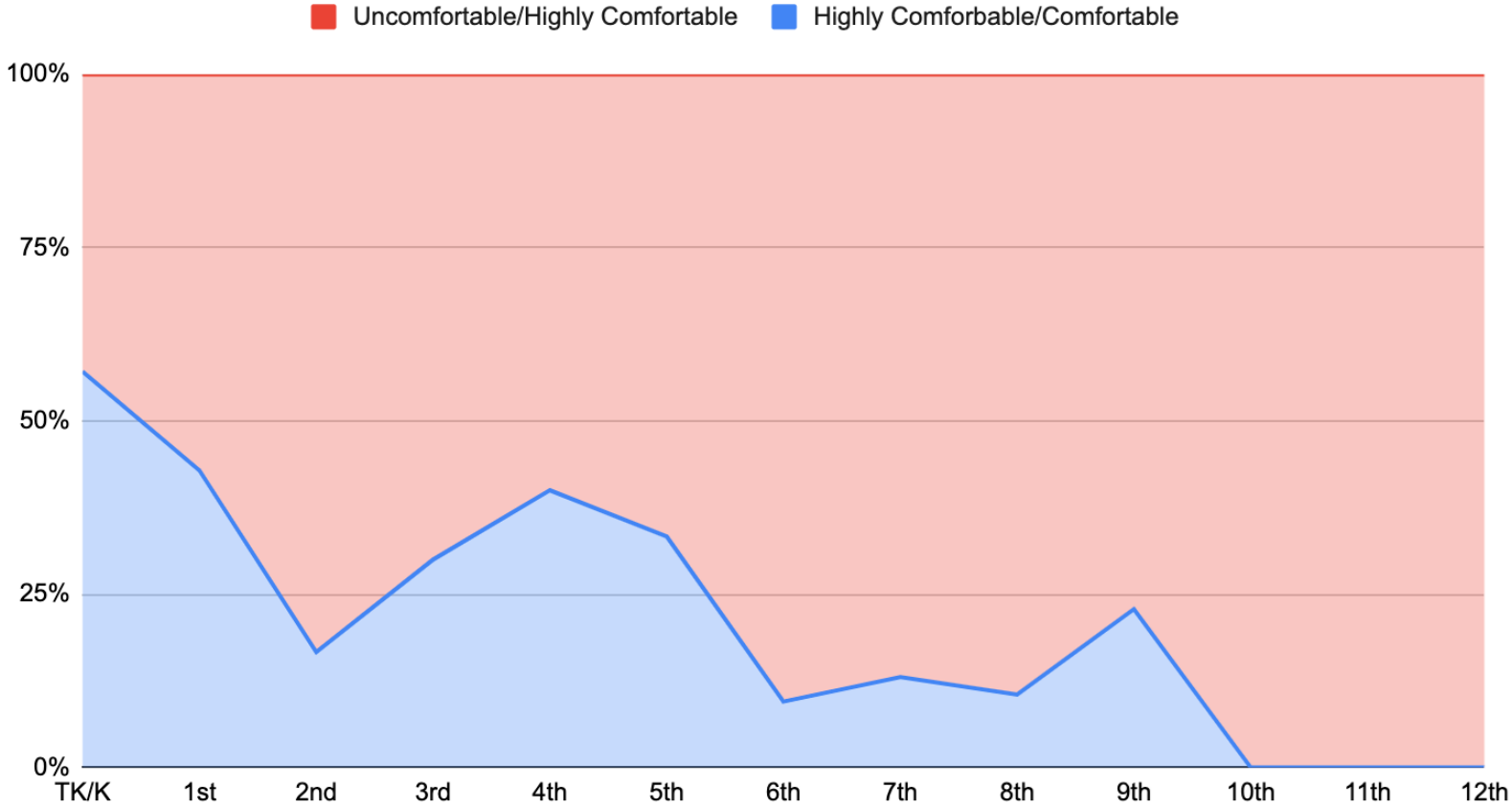
Return to Hybrid Learning (Parent & Guardian Responses)

Please rate your comfort level with CUSD schools reopening in the Hybrid Learning Model as soon as it becomes possible. /Califique su nivel de comodidad con la reapertura de las escuelas de CUSD en el Modelo de Aprendizaje Híbrido tan pronto como sea posible.

640 responses

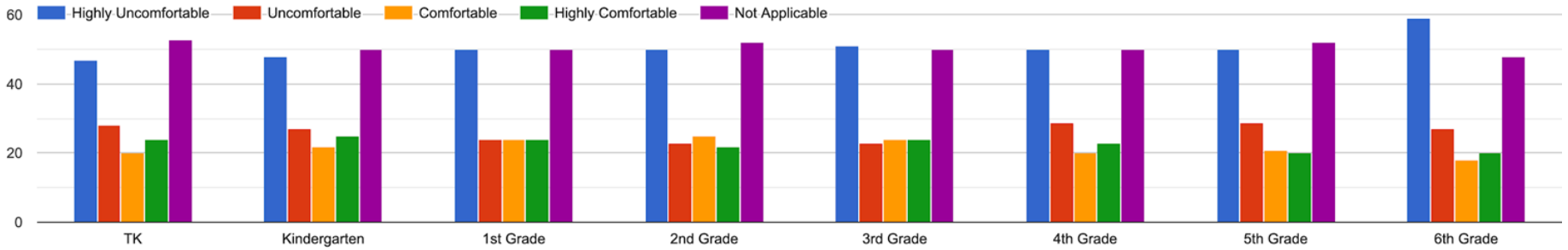


Comfort Level to Return to Hybrid Learning Model (Staff) by Grade Level



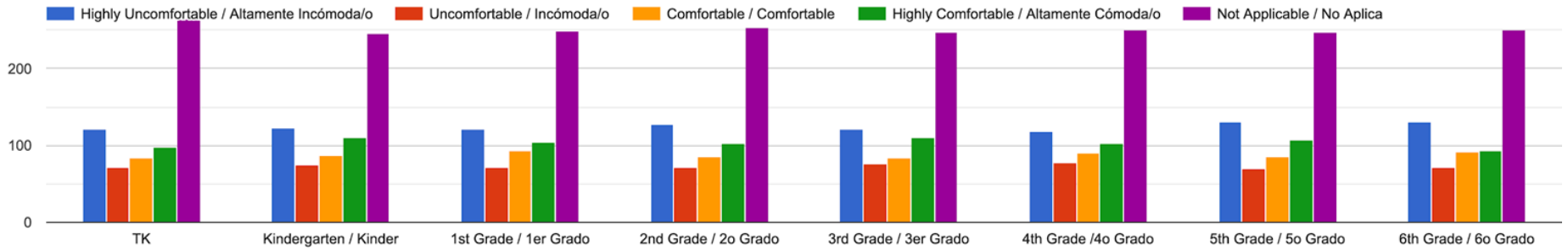
Support for Waiver Application (Staff Responses)

Please rate your level of agreement with CUSD requesting a waiver to offer in-person instruction for students in grades TK-6th grade.



Support for Waiver Application (Parent/Guardian Responses)

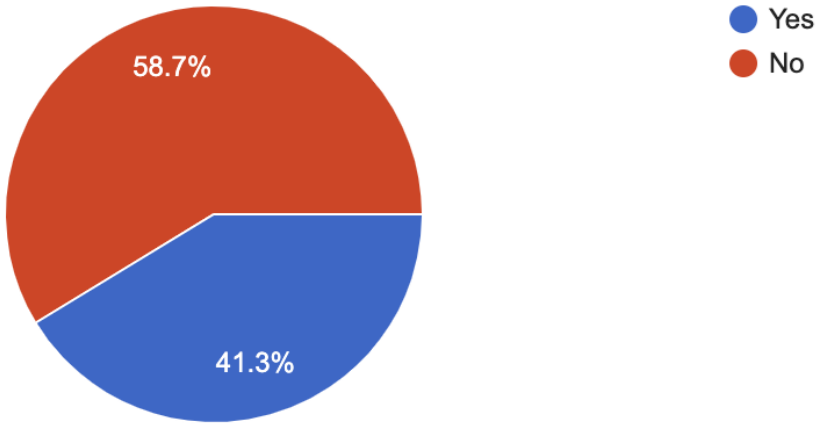
Please rate your level of agreement with CUSD requesting a waiver to offer in-person instruction for TK-6th students. / Califique su nivel de acuerdo con que CUSD solicite una exención para ofrecer instrucción en persona para estudiantes de grados TK-6o grado.



Comfort Level to Return While in the Red-Coded Tier (Staff Responses)

According to the state's new framework, San Mateo County would need to be in the red-coded tier for two weeks before schools could open for in-person instruction. At that time, would you feel comfortable with CUSD reopening in the Hybrid Learning Model (cohort groups 2 days in person and 3 days asynchronous)?

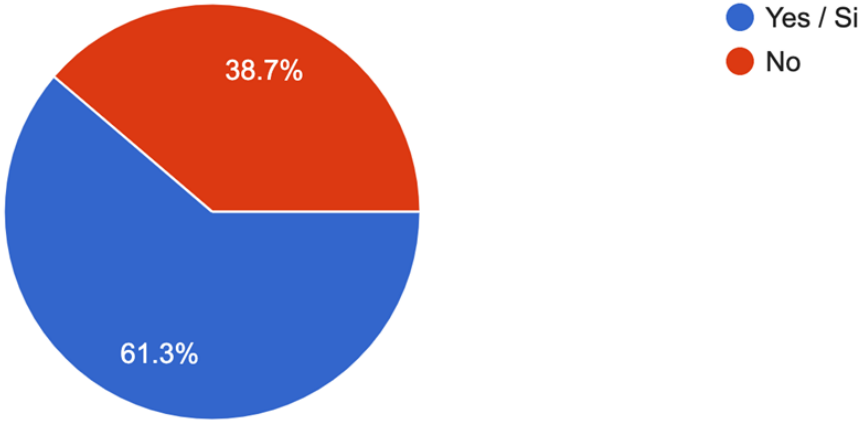
172 responses



Comfort Level to Return While in the Red-Coded tier (Parent/Guardian Responses)

According to the state's new framework, San Mateo County would need to be in the red-coded tier for two weeks before schools could open for ...apertura de CUSD en el modelo apredizaje Hybrid?

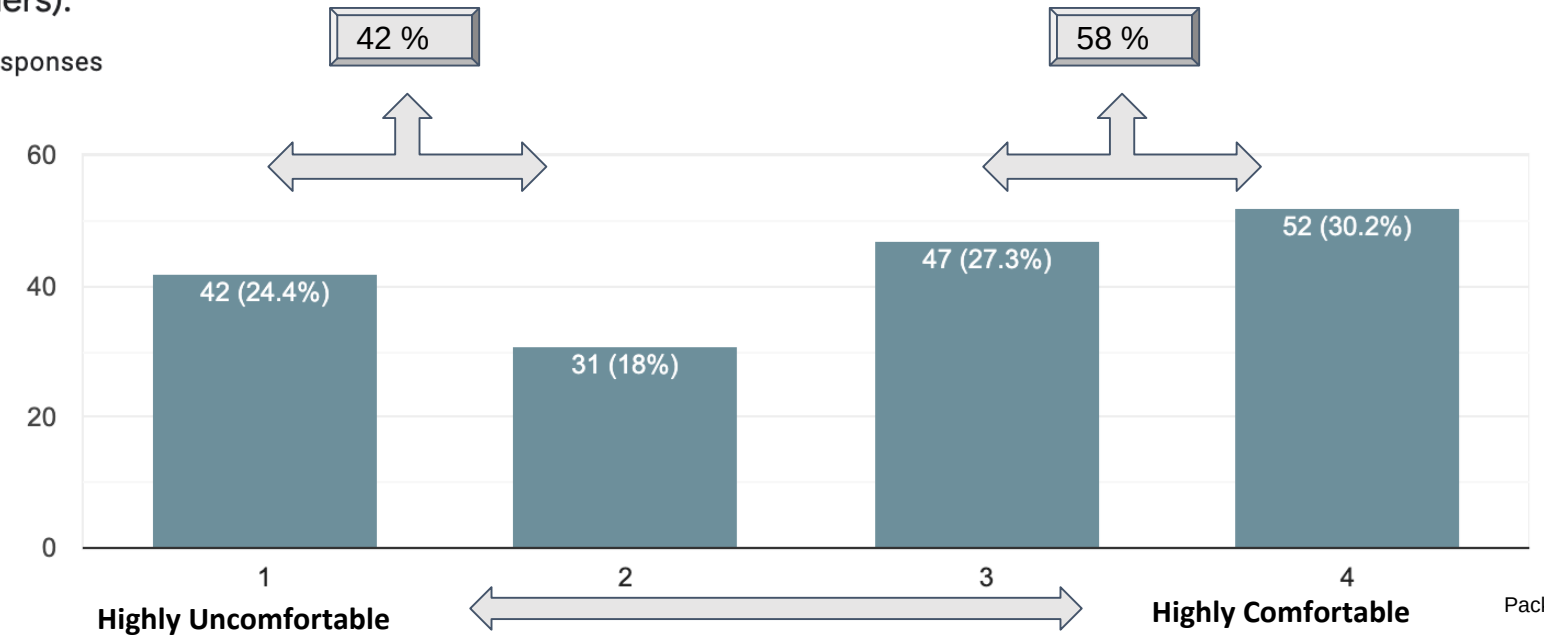
640 responses



Entering **Phase II** of Remote Learning Model Instruction (Staff Responses)

Please rate your level of agreement with CUSD utilizing the new guidance for small cohorts to bring in small groups of our at-promise students (i.e. students with disabilities and English learners).

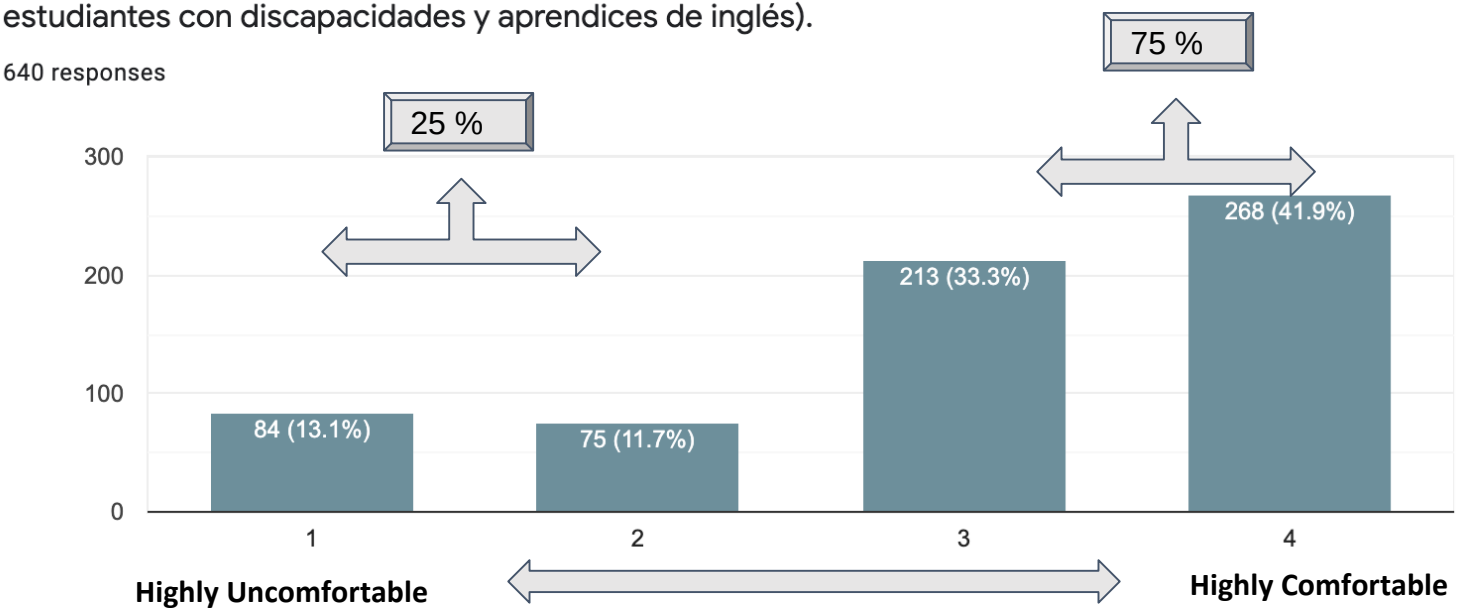
172 responses



Entering **Phase II** of Remote Learning Model Instruction (Parent/Guardian Responses)

Please rate your level of agreement with CUSD utilizing the new guidance for small cohorts to bring in small groups of our at-promise students (i.e. students with disabilities and English learners). / Califique su nivel de acuerdo con CUSD utilizando la nueva guía para grupos pequeños para traer grupos pequeños de nuestros estudiantes más necesitados (es decir, estudiantes con discapacidades y aprendices de inglés).

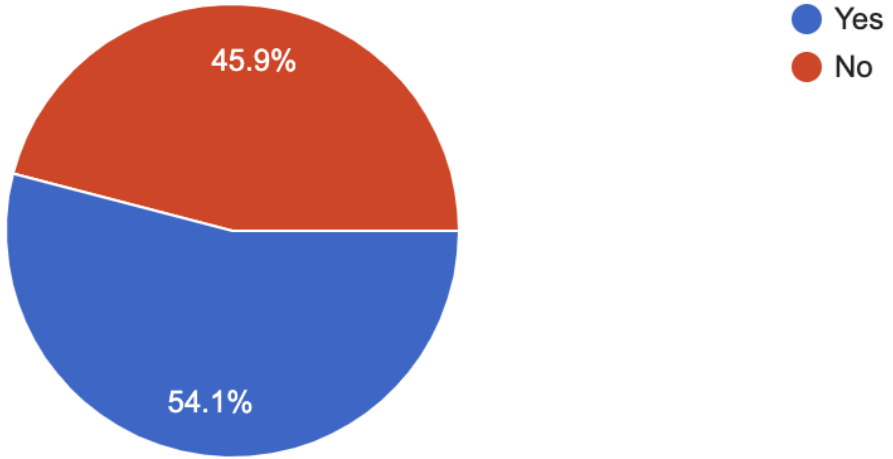
640 responses



Entering **Phase III** of Remote Learning Model Instruction (Staff Responses)

Would you support beginning Phase III of instruction, our Hybrid Learning Model, after Winter Break?

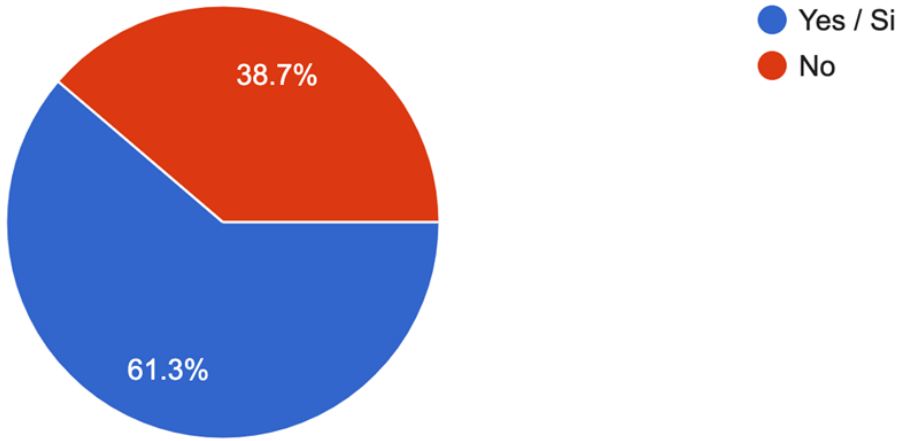
172 responses



Entering **Phase III** of Remote Learning Model Instruction (Parents/Guardian Responses)

According to the state's new framework, San Mateo County would need to be in the red-coded tier for two weeks before schools could open for ...apertura de CUSD en el modelo apredizaje Hybrid?

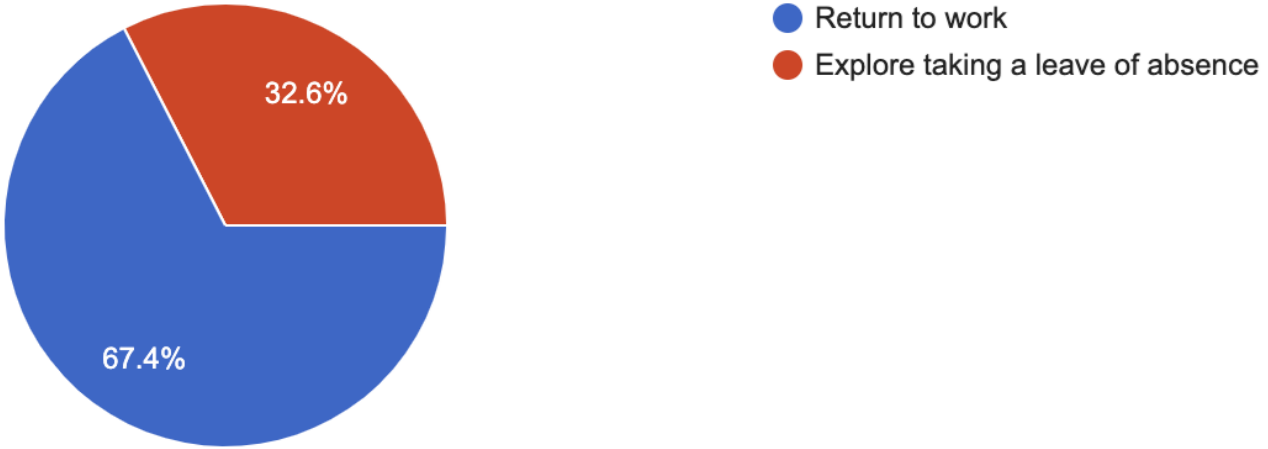
640 responses



Return to Work During Red-Tier "Substantial" Risk Level 4-8% positive cases (Staff Responses)

If CUSD opens once we are in the red tier for two weeks, would you return to work or explore taking a leave of absence?

172 responses



Opening of Schools Technology Update

Director of Technology

Randy Rudolph

In Support of Distance Learning

- Distributed Chromebooks to each student
- Configured new laptop computers for each teacher
- Increased Wifi coverage on campus and in outdoor areas (HS/Int)
- Installed Large WiFi hotspots at Pillar Ridge
- Worked with SM Library to distribute individual hotspots
- Worked with SM County on Public WiFi for Moonridge and Pillar Ridge locations
- Added several new learning applications for teachers/students to use
- Provided District-sponsored Zoom accounts for remote instruction
- Continually monitoring the needs of teachers, students, and parents to troubleshoot their challenges, as needed
- Be available in person or remotely to provide on-demand tech support

Opening of Schools Enrollment Update

Director of Personnel and Pupil Services

Jason Owens

2020-2021 ENROLLMENT REPORT

SCHOOL	Gr PK	Gr TK	Gr K	Gr 1	Gr 2	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 10	Gr 11	Gr 12	TOTALS
El Granada	6	16	47	50	55	59	53	50								336
Farallone View			27	20	38	27	28	32								172
Hatch- EO		8	23	32	35	47	27	36								208
Hatch-Immersion			70	45	44	42	67	65								333
Kings Mountain		5	7	4	11	10	10	9								56
Cunha									210	236	221					667
Half Moon Bay HS												276	251	240	223	990
Pilarcitos														6	21	27
Ind. Study																
El Granada			1	4	4			1								10
Farallone View			7	5	4	1	12									29
Hatch			8	4	5	4	1	2								24
Kings Mountain							1									1
Cunha									2	5	2					9
Half Moon Bay HS												8	20	15	27	70
Pilarcitos															1	1
TOTALS:	6	29	190	164	196	190	199	195	212	241	223	284	271	261	271	2933

Enrollment Totals



"Traditional" Study	2789
Independent Study	+ 144
Total Enrollment	**2933**













Employee Testing -- COVID 19

- Cabrillo Unified School District (CUSD) is partnering with the San Mateo County Office of Education (SMCOE). CUSD to be added to the SMCOE master contract with Curative.
- Curative provides a saliva swab testing solution (throat).
- The testing can be completed independently by the staff member.
- Testing may be administered in groups on a rotating basis, with exact timing to be determined. Ideally, 50% of staff will be tested every two weeks.
- Testing may submitted in groups vs. individually.
- Cost for testing--approximately $30/test.
- Results of test would be reported to employees and CUSD simultaneously.

CURATIVE
COVID-19 DETECTION

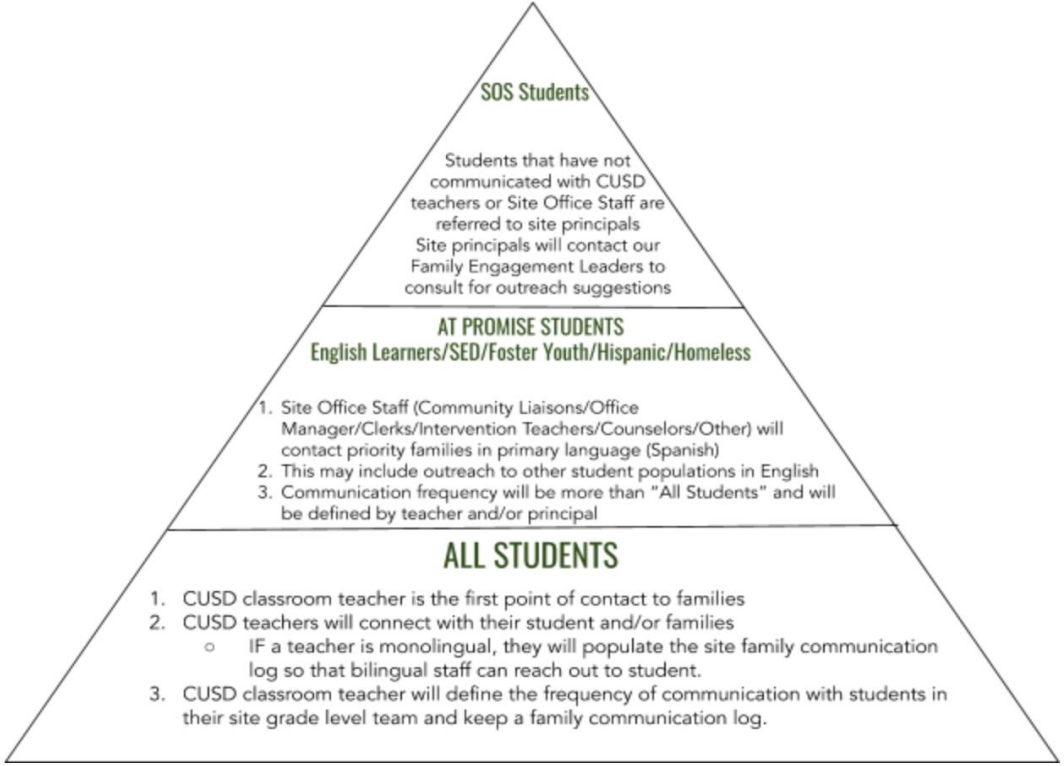
SAN MATEO COUNTY OFFICE OF EDUCATION

Opening of Schools Reengagement Update

Director of Student Supports

Martha Ladd

A Tiered Approach for Organizing Outreach



Quantitative and Qualitative Sources of Data:

- Attendance in Zoom/G-Meet sessions
- Completion percentages in Edgenuity
- Logins to digital platforms (Google Class, SeeSaw)
- Logins to digital programs
- Contact logs (admin, teachers, liaisons, counselors - phone, email, text)
- Calls from families to front office
- Coordination of Service Teams (COST) (Cougar Talks at HS)
- Educational Support staff contact (Paras, Speech, OT, PT, APE)

Our Action Plan

- Review all data weekly and generate list of focus students at each grade level
- Based on individual student narratives, determine a tiered response
- Mobilizing District and community resources to address student needs
- Tiered responses include: adjustment in work or schedule, referral for counseling services, referral for family/social services, home visits, and regular phone/virtual visits

Other Opportunities

- District level coordination of data to determine trends in families across schools
- Development of Distance Learning tiered response for home visits
- Coordination with community partners and parent groups for Tier I support for students and families

General Trends in the Data

- Concerns for students fall into two main categories - academic and engagement.
- Academic concerns are related to assignments completed, regular access to digital programs, and completion rates on Edgenuity
- Engagement is related to social emotional wellbeing. Connection to teachers and staff, parent reports of student wellbeing, and stability of the family are all part of student/family engagement.

Opening of Schools: Facilities & Budget Update

Chief Business Officer

Jesus Contreras

COVID-19 Ready Assessment Centers

Assessment Centers are set up at El Granada and Hatch Elementary.

Centers are observant of the *"Four Pillars"* and are equipped with:

- Plexiglass, gloves, hand sanitizer, thermometers, and technology
- Testers were trained on PPE equipment and protocols
- Custodial staff were trained on daily disinfecting protocols
- Principals, office staff, and custodial staff support the centers

Adherence to guide:

San Mateo County Health Department

Assessment Center Using 4 Pillar Guidance





CUSD Facility Use Requests:

Community groups are requesting use of CUSD fields and facilities. Due to COVID-19, CUSD facilities are officially CLOSED. They are only open, in a highly controlled manner, to groups and organizations whose operating protocols meet COVID-19 ready standards. The authorization process includes:

- Propose to CUSD a COVID-19 Safe Plan for the specific activities
- Provide evidence of appropriate PPE equipment and protocols to be used
- Revision and approval of protocols by San Mateo County Counsel

2020-21 CUSD Budget Advisory Groups

School Finance Office Hours

- Informal “themed” discussion/collaboration and brainstorming ideas to promote transparency and access to information for stakeholders.

4:00 to 6:00 PM on:
9/30/20;10/28/20;12/2/20;1/27/21;2/24/21;3/24/21;4/28/21;5/26/21;6/30/21

Budget Committee

- Formal in-depth discussions to increase the efficiency of our operation (expenditures).

6:30 to 8:00 PM on: 10/28/20;1/27/21;3/24/21;5/26/21;6/30/21

ERAF Recalculation and Resolution:

SB 98 provided the code to resolve this dispute. These funds will be used to offset our current $15,000,000 loan (TRAN).

	DUE to CUSD Before Interest	Interest	Total DUE
FY 18-19	$ 10,541,781.55	$ 98,062.36	$ 10,639,843.91
FY 17-18	$ 3,798,640.27	$ 35,279.25	$ 3,833,919.51
	$ 14,340,421.82	**$ 133,341.61**	**$ 14,473,763.42**

Questions?

CABRILLO UNIFIED SCHOOL DISTRICT

498 Kelly Avenue, Half Moon Bay, California 94019 • 650 712-7100 • Fax 650 726-0279 • www.cabrillo.k12.ca.us

SUPERINTENDENT
Sean McPhetridge, Ed.D.

GOVERNING BOARD
Mary Beth Alexander
Lizet Cortes
Kimberly Hines
Sophia Layne
Freya McCamant

MEMORANDUM

MEETING DATE: October 8, 2020
TO: Members of the Governing Board
FROM: J Jesus Contreras, Chief Business Officer
Gabe Johnson, SYSERCO Account Executive
James Crawford, Consultant
CATEGORY: Information
ITEM TITLE: Update on the Cabrillo Unified School District Solar Project

BACKGROUND INFORMATION

The CUSD, in conjunction with its energy solutions partner Syserco, will present to the board an update on the next phase of energy work that is currently in the *Project Development* phase. As CUSD continues to focus on operational improvements, cost savings, and resiliency, the focus for the next phase includes Solar PV, Battery Storage, and EV Charging stations. CUSD has identified several locations where Solar PV, Battery Storage, and EV Charging make economic sense and are in closest alignment with the goals of the CUSD. *Syserco Energy Solutions* will present to the Board the proposed scope of work and will be available for questions.

REPORT/PROPOSAL

Staff will provide an update on the proposed CUSD Solar Project.

RECOMMENDATION

Receive the information presentation regarding he CUSD Solar Project.

Cabrillo Unified School District
Focusing on Energy to Plan for the Future





Objectives *(updated)*

1. Reduce Utility Expenditures by Approximately $400,000 / year
2. Reduce Ongoing Operational Expenses
3. Avoid Future Capital Cost Requirements
4. Improve Learning and Teaching Conditions of Occupied Spaces
5. Reduce Risk and Liabilities Associated with Failing Equipment or Poor Air Quality
6. Maximize Local Electricity Generation = Reduce Dependence on Utility Grid
7. Provide Resiliency Facilities for PSPS Power Shutoffs
8. Prepare for California's Electrification of Vehicles by Installing EV Charging Stations
9. Reduce Carbon Footprint of District
10. Broadcast Positive Results & Integrate Green Technology with Students and Staff



Game Plan

1. Shrink District Energy Load by Reducing Energy Consumption

2. Address Critical Needs Infrastructure Improvements

3. Offset Remaining Load with Solar PV

4. Create “Grid Independence” Resiliency & Additional Cost Savings with Battery Storage

5. Install EV Charging Stations @ Solar PV Parking Lot Locations

Background

In November, 2019 the District hired Syserco Energy Solutions to perform a Comprehensive District-Wide Energy Analysis to Identify Key Areas for District to Achieve Objectives

Phase 1: Status: Approved by Board in May, 2020: Implementation In Progress
District-Wide Energy Efficiency & Facility Improvement Project

Phase 2: Status: Project Development In Progress
District-Wide Solar PV, Battery Storage, EV Charging Stations

Phase 1 Energy Efficiency Project Metrics

Scope of Work

- LED Lighting
- HVAC Fan Motor Upgrades
- Energy Management Temp Controls
- Water Conservation
- Hydronic Systems Efficiency
- Transformers
- Power Quality Improvement

Project Metrics

- Total Cost: $1,786,678
- Annual Utility Savings: $179,928
- Simple Payback: 9.9 years
- 20-Year NET Savings: $5,752,155*

**Factoring 4% Annual Utility Escalation*

Phase 2:
Solar PV – Battery Storage – EV Charging Stations

Scope of Work

- Install carport and/or rooftop Solar PV systems
- Capture SGIP Grant to offset cost of Battery Storage systems
- Capture CALeVIP Grant to offset cost of EV Charging Stations
- Targeting (3) Site Locations
  - HMBHS
  - Cunha ES
  - DO/Hatch/Pilarcitos *(contiguous property)*
- Concept = Solar+Storage+EV @ Each Site

Project Metrics

- Solar PV
  - Total Size = 600-800 kW
  - Mostly Covered Parking ; Potential Roof
  - Estimated Annual Savings: $200K+
  - Estimated Costs: $2M-$3M
- Battery Storage
  - TBD – Locations, Size, Uses, etc.
- EV Charging Stations
  - TBD – Locations, Qty's, Uses, etc.

Solar PV Preliminary Layouts
Half Moon Bay High School



Solar PV Preliminary Layouts
District Office – Hatch ES – Pilarcitos HS



Solar PV Preliminary Layouts
Cunha IS



Exploring Possibility of Upgrading Production from Existing, Legacy PV Modules

Examples of Solar PV – Battery Storage – EV Charging Stations











Next Steps

1. Syserco Energy Solutions to Complete Project Development for Solar PV / Battery Storage / EV Charging Stations

1a. Apply/Secure Grant Funding for Battery Storage and EV Charging

2. District Staff Finalize Project with Syserco Energy Solutions

3. Present Recommended Project to Board for Consideration of Approval

4. Approve Project / Execute Contract / Begin Implementation

Goal is to Execute Contract in December, 2020 & Begin Construction Spring 2021
With targeted completion date by December 31, 2021