

THE ROAD TO ZNE:

WHY HIGH PERFORMANCE SCHOOLS ARE MORE IMPORTANT THAN EVER



NASEO Webinar

March 26, 2015

Presenter:



Bill Orr

Executive Director

Collaborative for High
Performance Schools (CHPS)

Make Every School an Ideal Place to Learn



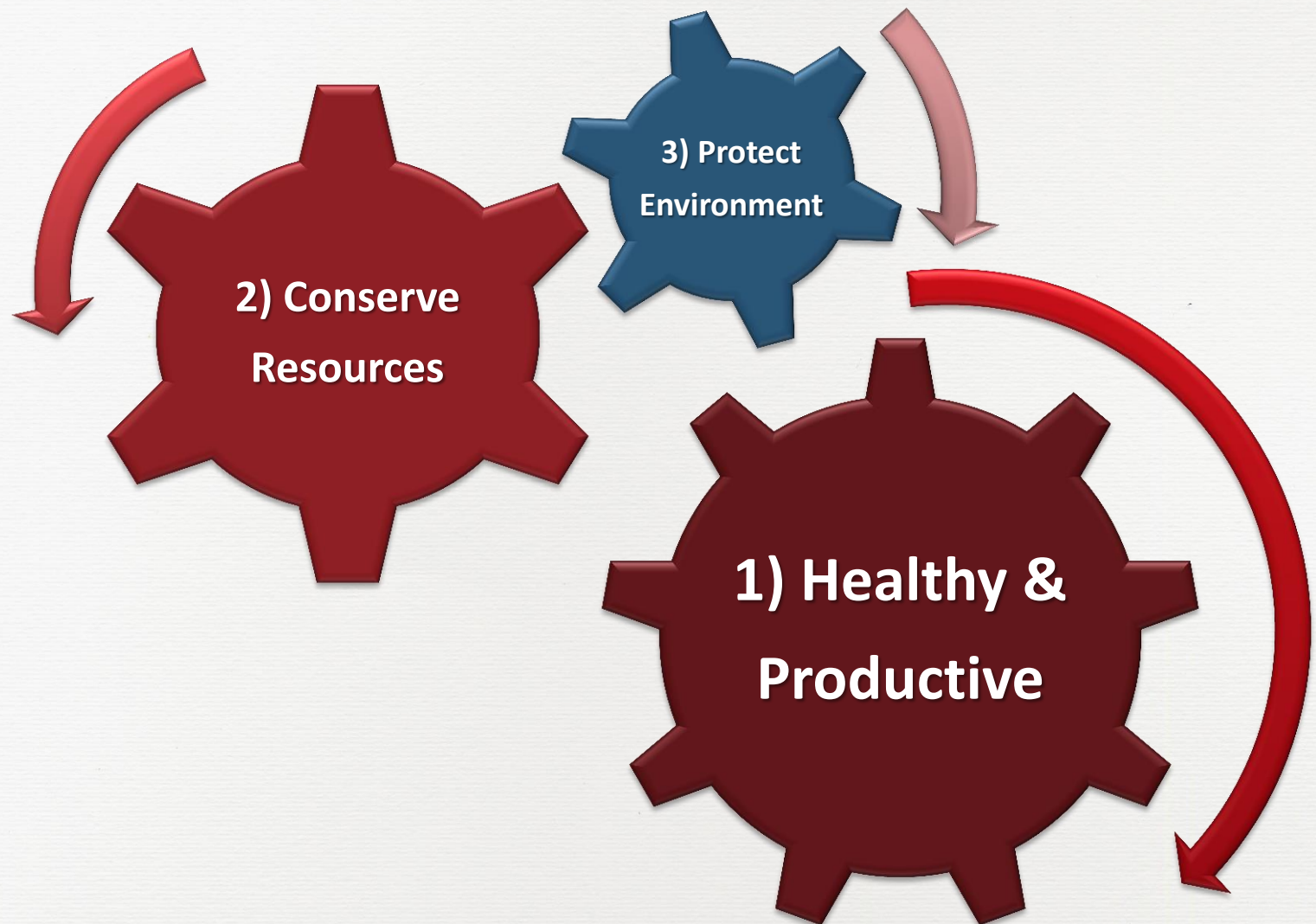
“C” is for Collaborative



“C” is for Collaborative



“HP” is for High Performance



“S” is for Schools

All Schools Can Be High Performance Schools

- Public, Charter & Private
- New Construction
- Renovations & Modernizations
- Prefabricated Classrooms
- Existing Schools

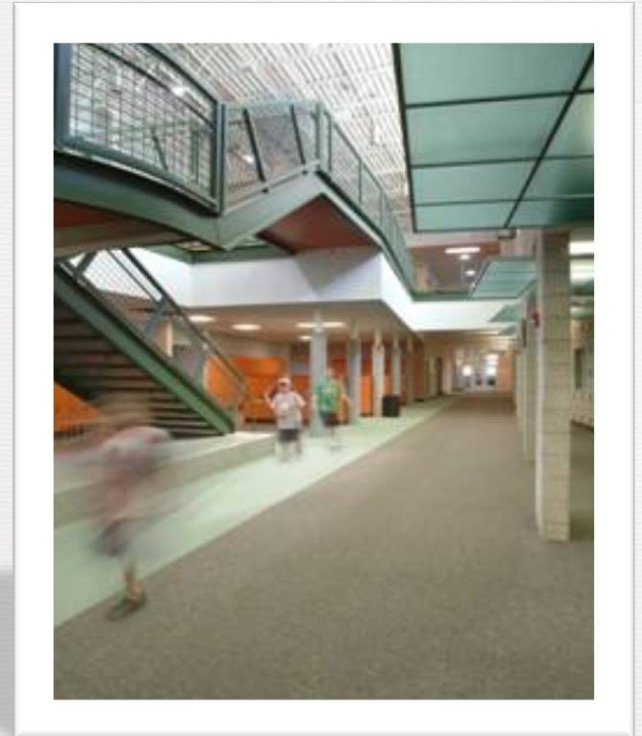


The Core Values of CHPS

- Schools are unique environments
- State-based decision-making and national collaboration are powerful tools for change
- High performance schools bring real benefits
- High performance schools must take a comprehensive approach
- Working collaboratively produces the best results for our schools and students

The Core Values of CHPS

- Schools are unique environments
 - Asthma accounts for an estimated 14 million lost school days for American schoolchildren
 - Schools are an opportunity to both reduce greenhouse gas emissions and educate future decision-makers on its importance



The Core Values of CHPS

- Schools are unique environments
- State-based decision-making and national collaboration are powerful tools for change
 - Gives states control over priorities and creates better buy-in and dovetails with school construction programs
 - Share post-occupancy research and evaluation
 - Collaboration, innovation on strategies and technologies
 - Leverage resources to develop tools



The Core Values of CHPS

- All schools can be high performance
- Schools are unique environments
- State-based decision-making and national collaboration are powerful tools for change
- High performance schools bring real benefits
 - Heightened student performance
 - Reduced operating costs
 - Better occupant health
 - Increased ADA
 - Improved teacher retention
 - Reduced liability exposure
 - Reduced environmental impact
 - Eligible for financial incentives

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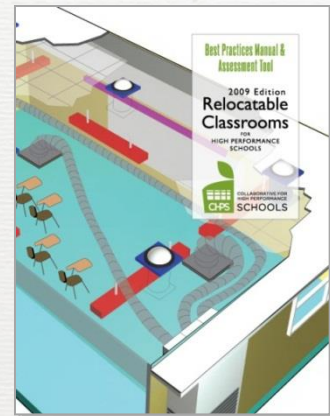
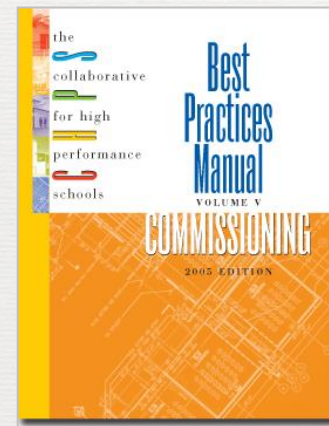
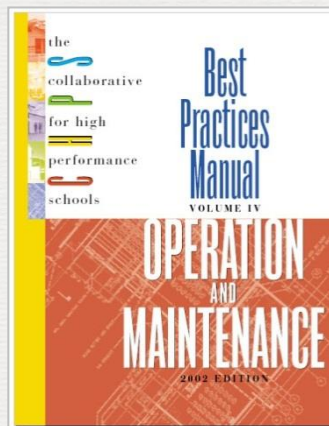
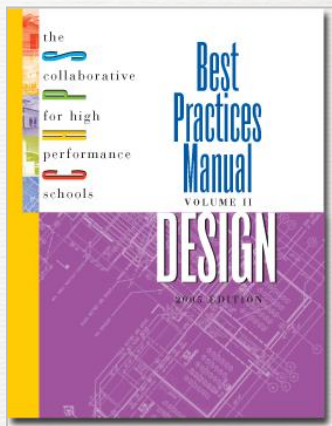
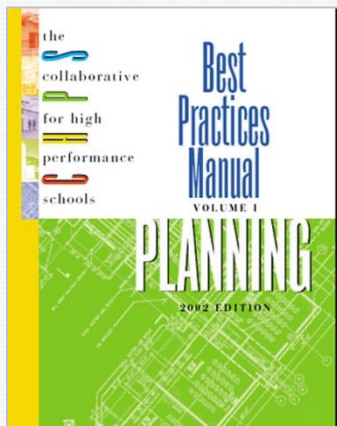
ENVIRONMENT + **HEALTH** + **STUDENT
PERFORMANCE**

The Core Values of CHPS

- All schools can be high performance
- Schools are unique environments
- State-based decision-making and national collaboration are powerful tools for change
- High performance schools bring real benefits
- High performance schools must take a comprehensive approach
- Working collaboratively produces the best results for our schools and students

CHPS Best Practices Manual

- Our most popular and long-standing resource
- Five volumes for a variety of stakeholders



Connecting Conditions to Outcomes



Courtesy of National Clearinghouse for Educational Facilities and National Academy Press

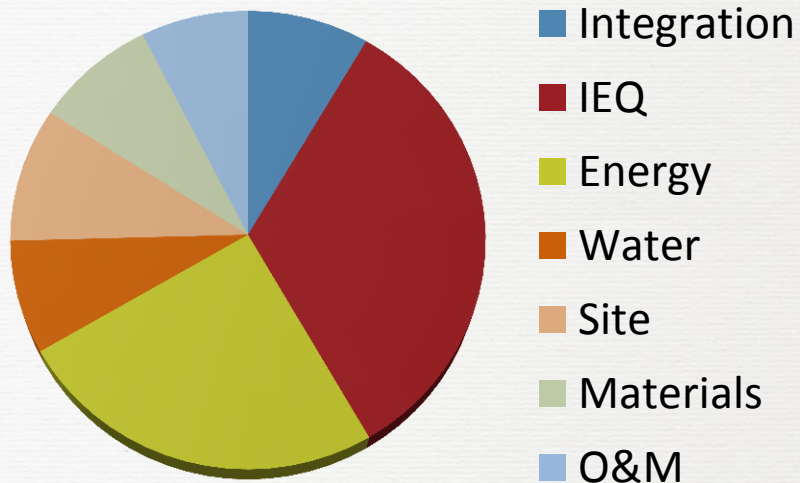
The CHPS Criteria™



WEIGHTING USING PRIORITIES

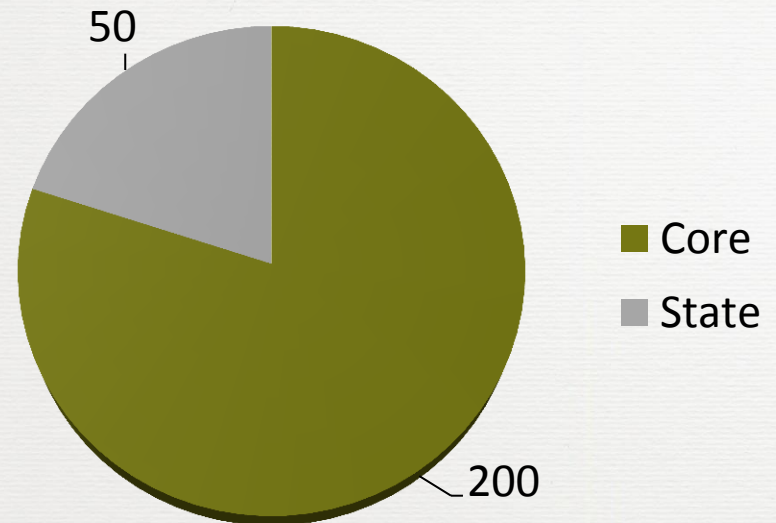
Core Criteria

% Pts



Local Adaptations

Pts



CHPS WEIGHTING COMPARISON

Category	Core/US-Criteria	2014 CA-CHPS	NE-CHPS V 3.0
Integration	8.4%	9.2%	8.4%
IEQ	33.7%	31.2%	30.4%
Energy	24.8%	28.0%	27.2%
Water	7.9%	8.8%	8.4%
Sites	9.4%	9.2%	8.8%
M&W	8.4%	6.8%	7.6%
O&M	7.4%	6.8%	9.2%

Criteria Set-up

Example: 2014 US-CHPS Criteria

Seven High Performance Categories

- Integration (II)
- Indoor Environmental Quality (EQ)
- Energy (EE)
- Water Efficiency (WE)
- Sites (SS)
- Materials & Waste Management (MW)
- Operations & Metrics (OM)



ENERGY

Design Toward Zero Net Energy (ZNE)

- Energy Prerequisite
- Superior Energy Performance
- ZNE Bonus
 - ZNE Capable
 - ZNE (Innovation)



East Bay Met, Newport, RI



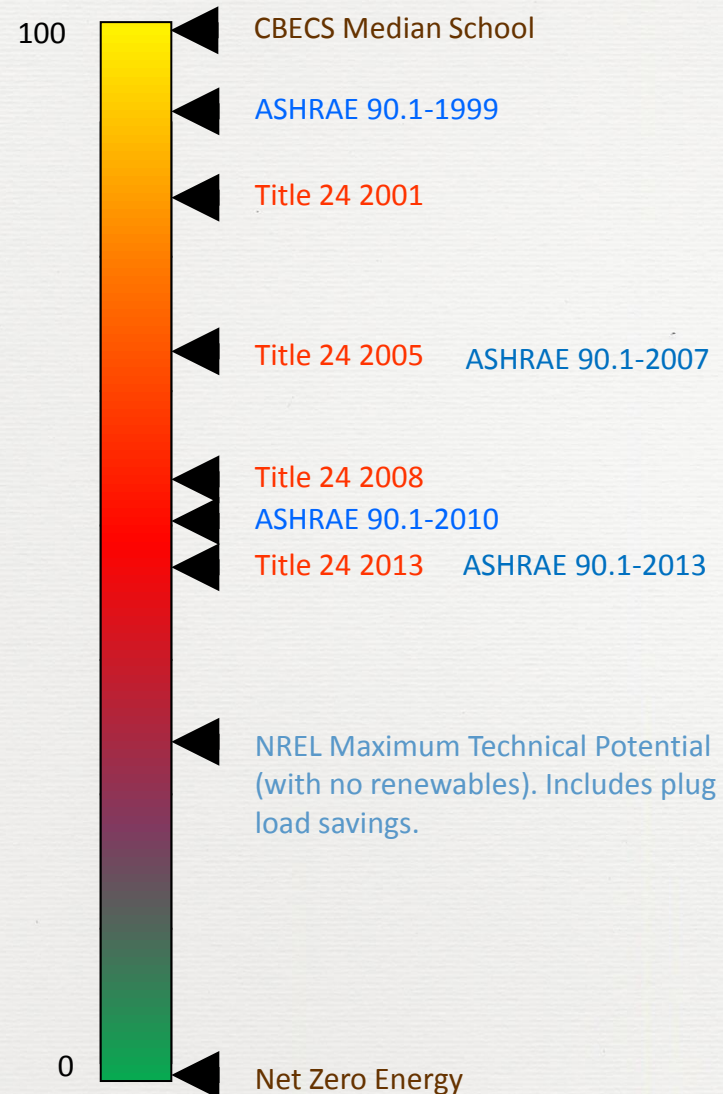
La Escualita Ed Ctr, Oakland, CA

DESIGN TOWARD ZNE

zEPI Scale

Moving down the scale can be achieved by:

- Code compliance
- More efficient
 - Windows
 - HVAC
 - Lighting
- Integrated design
 - Daylighting
 - Natural ventilation
- Plug load reductions
- Renewables



CHPS RECOGNITION

PROJECT
TYPE

New School
Construction

Existing
Schools

Prefabricated
Classrooms

TOOLS

Design and
Construction
Criteria

Performance
Benchmarking /
Report Card

High Performance
PreFAB Classrooms
Criteria

RECOGNITION

CHPS Verified

High Performance

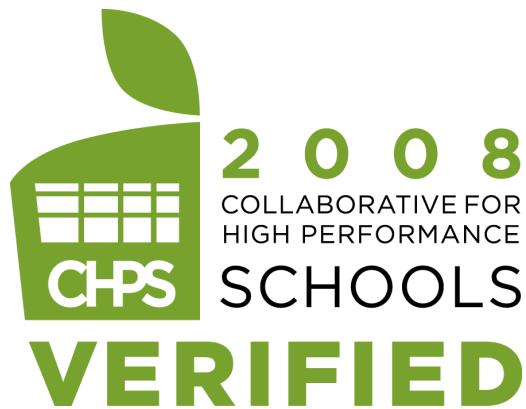
CHPS Designed

High Improvement

CHPS PreFAB

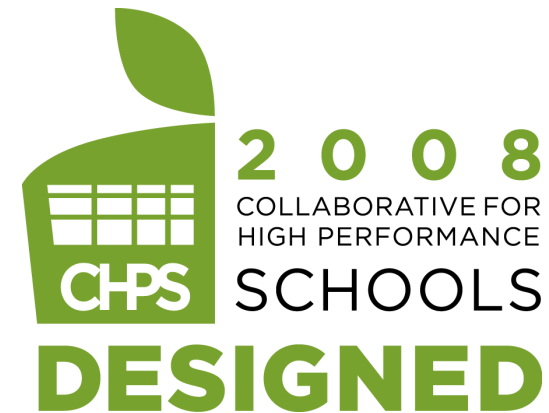
CHPS Verified

- Technical Assistance, 3rd-party documentation review



CHPS Designed

- Voluntary self-certification system



*Create healthy and productive
learning environments*



Indoor Air Quality



Energy Efficiency



Thermal Comfort



Water Efficiency



Acoustics



Waste Reduction



Visual Quality

*Conserve natural resources
and save money*



Now What?

- Subscribe to the CHPS E-bulletin (monthly newsletter): www.chps.net/connect
- Attend a free CHPS webinar: www.chps.net/events
- Become a CHPS member
- Get involved with a CHPS Committee
- Bring CHPS to your state
- Find us on social media



QUESTIONS?

NOW'S THE TIME!

Bill Orr

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