

The World Congress on Educational Environment



EDUCATORS & OPERATIONS: A Prioritized Approach to Support 21st Century Needs with Limited Resources

San Antonio, Texas
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Safety First!



Agenda



- What Is The Built Environment Life Cycle
- When & How Do Educators + Operations Connect
- 21st Century School Profile
- Conflicts & Constraints
- A New Approach
- A “Lean” Experience
- Prioritization Tools & Techniques
- Reflection



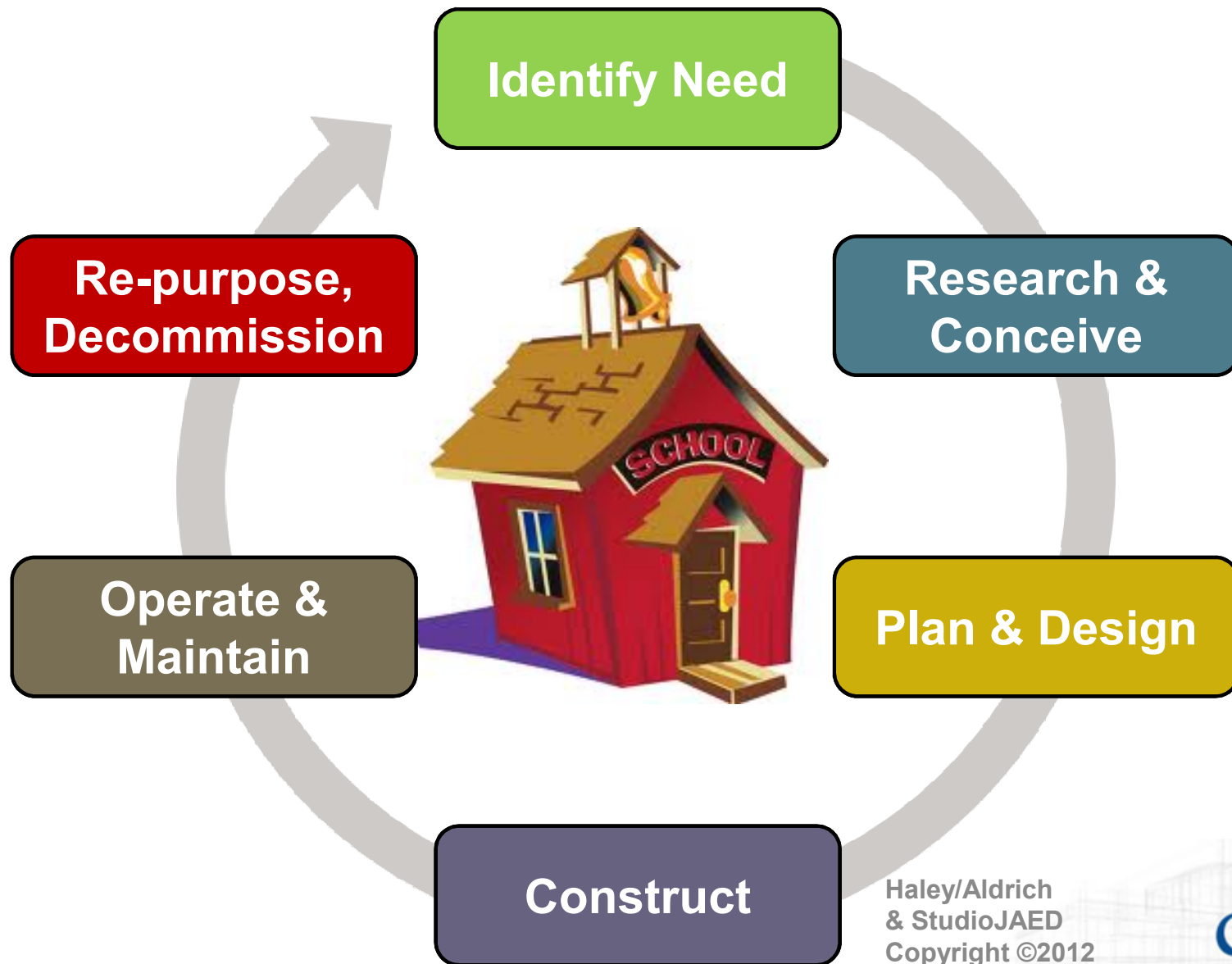
Agenda



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What is the Built Environment Life Cycle



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cefpi
where great schools begin

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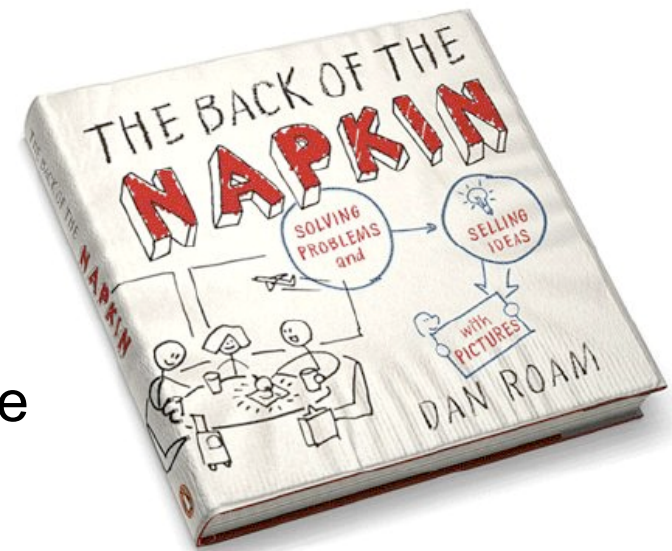


When & How do Educators & Operations Connect



“Old School House Profile”

- Built Environment Life Cycle
 - Routine / Emergency Maintenance Need
 - Major Capital Improvement Project
- Decision Makers
 - Superintendent
 - School Board
 - Director of Facilities
 - Director of Finance



When & How do Educators & Operations Connect



“Old School House Profile”

- Drivers & Points of View
 - Deferred Maintenance
 - “Replacement in Kind”
 - Single System Perspective
 - Not “Customer” Focused

When & How do Educators & Operations Connect



“Old School House Profile”

- Educators & Operations Relationship
 - Parallel to Room Temperature Control
 - Disconnected – As Needed Basis
 - Conditional
- Others?



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21ST Century School Profile



Design Approach / Philosophy

EXEMPLARY - Facility is a visionary, motivational, sustainable, healthy, high-performance teaching tool

PROFICIENCY – Facility is functionally flexible, functionally proximate, structurally adaptable, instructionally supportive

ADEQUACY – Facility is safe and secure, accessible, meets codes and regulations, minimum thermal, acoustic, and lighting requirements

21ST Century School Profile

- [View Classroom Video](#)



21ST Century School Profile



What Does The New
21st Century School
Look Like?

Collaborative Environ.

Project-Based Learning

Cross Curriculum

Technology Rich

Flexible Spaces



21ST Century School Profile



What Value Do **YOU** Desire?

TEAM
EXERCISE

21ST Century School Profile



“Old Profile”

- Built Environment Life Cycle
 - Routine / Emergency Maintenance Need
 - Major Capital Improvement Project

Identify Need

Research & Conceive

Plan & Design

Construct

Operate & Maintain

Re-purpose, Decommission

“New Profile”

Visioning Sessions

Investigate & Invest

Planning Workshops

Sustainable Design

Learner-Centered

Holistic Approach

Integrated Solutions

21ST Century School Profile



“New Profile”

- Decision Makers Expand to Stakeholders
 - Superintendent
 - Director of Finance
 - Director of Facilities
 - School Board
 - Director of Technology
 - Director of Nutrition
 - Director, Arts & Sciences
 - Director of Athletics
 - Director of Security
 - Director of Transportation
 - Principal / Dean
 - Facilities Team
 - Community Partners
 - Special Education
 - Teachers
 - Students
 - Parents

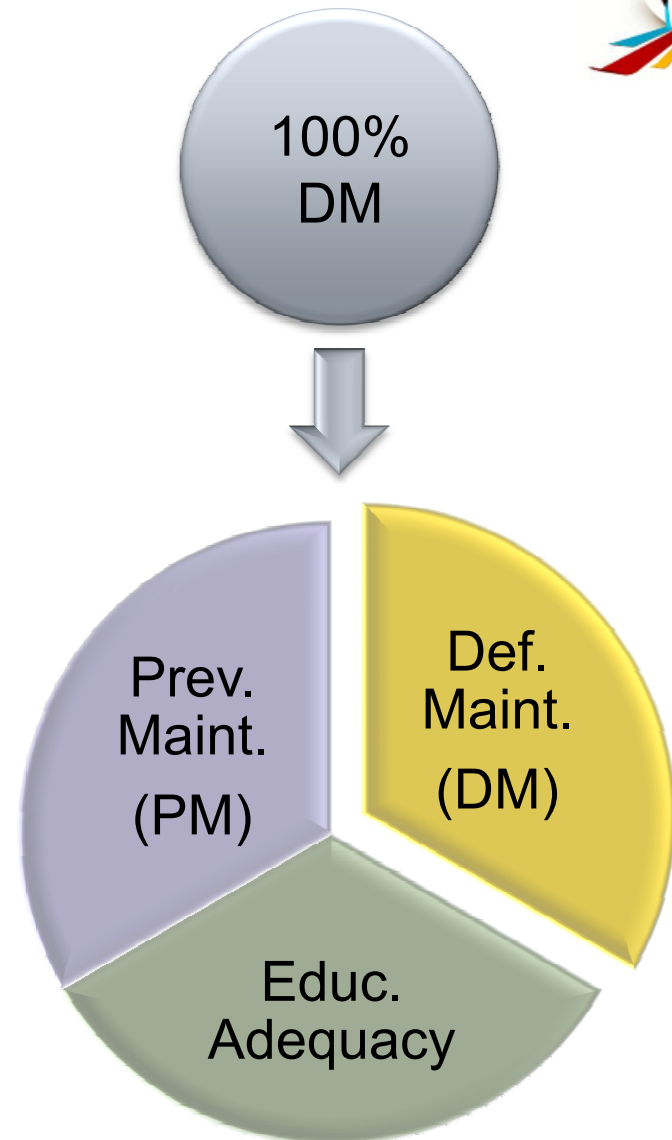


21ST Century School Profile



“New Profile”

- Drivers & Points of View
 - Deferred Maintenance (DM)
 - Preventive Maintenance (PM)
 - Educational Adequacy
 - Sustainable Design
 - Energy Conservation Minded
 - Holistic Systems Perspective
 - “Customer” Focused

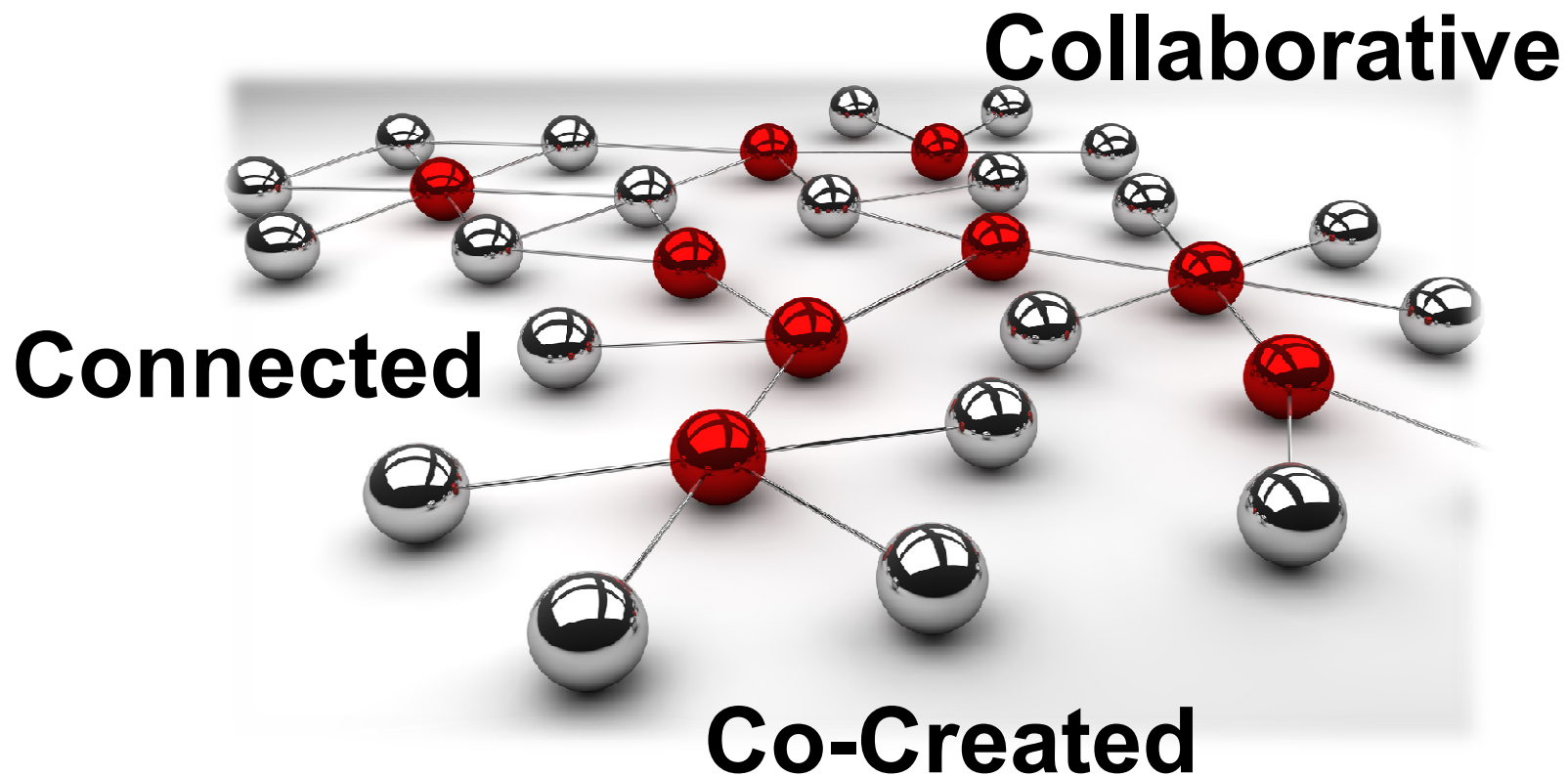


21ST Century School Profile



“New Profile”

- Relationship Between Educators & Operations



Agenda

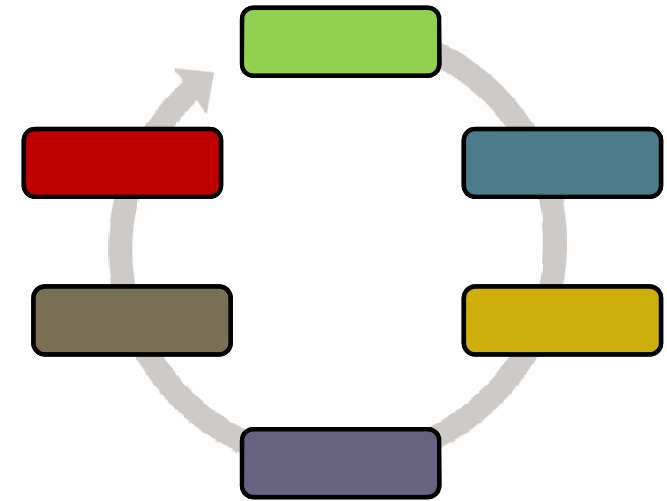


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Conflicts & Constraints

“STAKEHOLDER” Issues



TEAM
EXERCISE

Conflicts & Constraints



- Increasing Deferred / Unplanned Maintenance
- Increasing Building User Expectations
- Others..



Conflicts & Constraints

Where Do We Go From Here?



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A New Approach



Lean Is A Proven Method To:

Increase **Value**

Reduce **Waste**

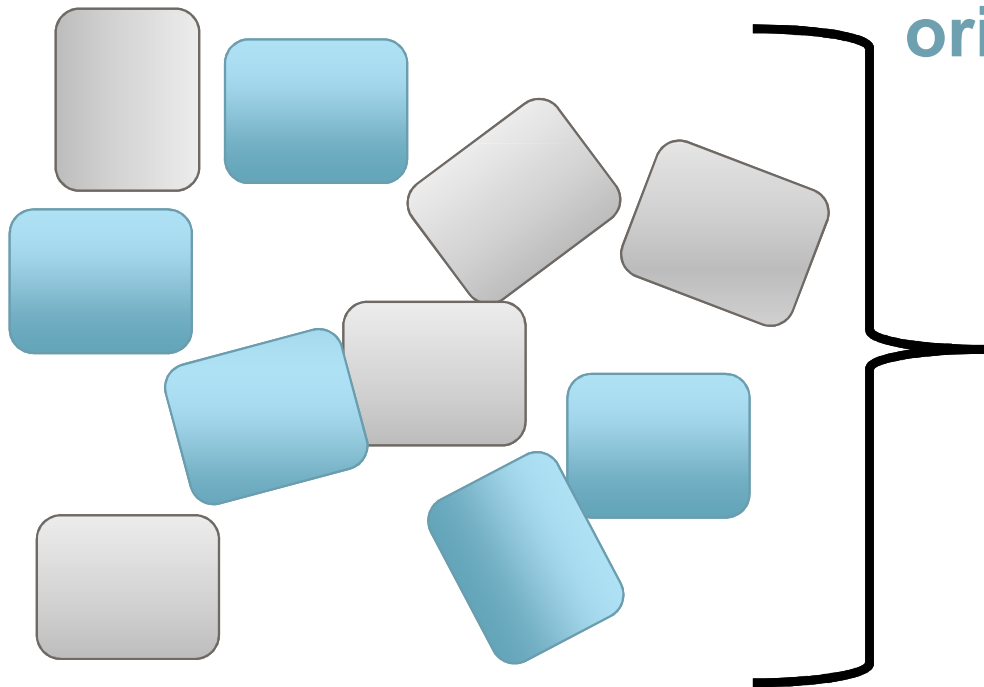
Respect **People**



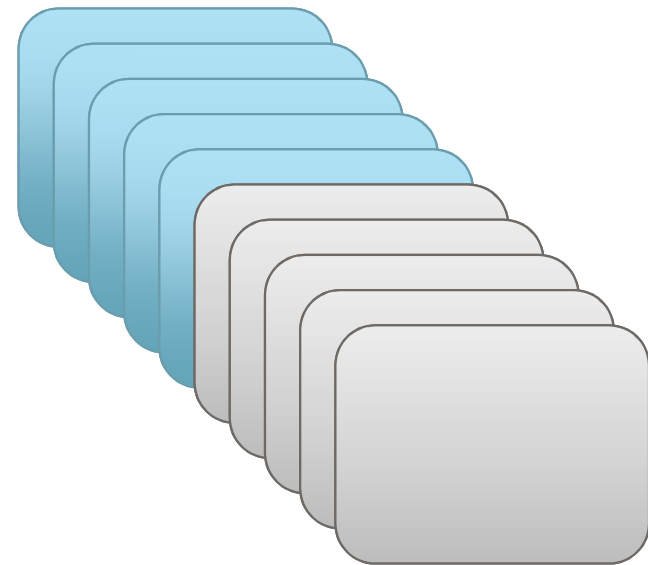
A New Approach...Why A Lean Strategy



Takes Fragmented,
Isolated Efforts...



...and Develops a
Systems & Process-
oriented Holistic Approach



A New Approach...Why A Lean Strategy



Seeing Value vs. Waste



Vs.



A New Approach...Why A Lean Strategy



A New Approach...Why A Lean Strategy



Eight Deadly Resource WASTES

Transportation

Inventory

Motion

Waiting

Overprocessing

Overproduction

Defects

Unused Employee Creativity,
Skill, Talent

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A “Lean” Experience

- Play Video



A “Lean” Experience

Learn to See Problems Together!



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Prioritization Tools & Techniques



FRAMEWORK for Decision-Making

- Institutional “Vision”
- Stakeholder Identified “Values”

LENS to Establish Priorities

- Standards with Defined Parameters
- Educator + Operations Perspectives
- Integrated Prioritization Model



Prioritization Tools & Techniques



Step 1 – Identify Categories Based On Primary Drivers and / or Perspectives

Perspective

- Institutional / Strategic Initiatives
- Facility Operations & Maintenance
- Educators

Category

Purpose /
Function

Bldg Condition
/ System

Educ. Adequacy
(Infrastructure)

Prioritization Tools & Techniques

Step 2 – Identify Characteristics



Category

Purpose /
Function

Bldg Condition
/ System

Educ. Adequacy
(Infrastructure)

Characteristic

Type of Facility

- Identification of facility type based on it's primary core function (options: (1) basic or (2) expanded use model)

High Energy Consumer

- Buildings or Systems within that consume or require significant energy to support or perform the mission

Classroom Technology

- Rating based on % of classrooms or student learning areas that meet the fully integrated technology standard

Prioritization Tools & Techniques

Step 2 – Identify Characteristics



TEAM
EXERCISE

Prioritization Tools & Techniques

Step 3 – Rank Characteristics & Develop Criteria



Rank Characteristics

- Identify Maximum 10 – 12 Defining Characteristics
- Evaluate And Assign A Priority
- Apply A Numeric Value



Prioritization Tools & Techniques

Step 3 – Rank Characteristics & Develop Criteria



Develop Criteria per Characteristic

- High Energy Consumer
 - High Use / Demand & Waste Potential
 - Medium Use / Demand
 - Low Use / Demand
- Classroom Technology
 - Standalone Workstations
 - Laptop Carts
 - Fully Integrated

Buildings or systems within the consume or require significant energy to support or perform the mission.

Rating based on % of CR's of student learning areas that meet the fully integrated technology standard



Prioritization Tools & Techniques



- Insert Decision Matrix Tool

Prioritization Tools & Techniques



FRAMEWORK for Decision-Making

- Institutional “Vision”
- Stakeholder Identified “Values”

LENS to Establish Priorities

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RESULT: Data-Driven, Objective Decision Making

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Reflection



What Does Working This Way Yield?

Increase
Consensus
And An
Understanding
Of Shared
Values

Reduce
Conflicts And
Constraints
That Impede
Prioritization Of
Needs

Directing
Dollars To
Prioritized
Needs
Increases
Ability to
Achieve 21st
Century Goals

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Thank You!

