



ALLIANCE FOR
CLIMATE EDUCATION

CHICAGO
PUBLIC
SCHOOLS

CPS

ACE's Work in Chicago Public Schools

Carbon Emissions Reduction Action Project
2010-2012

ACE | Student Engagement

1. Providing opportunities for service learning and environmental stewardship at CPS
2. Overview of CERAP: ACE's theory of engagement and the project steps
3. Case Study: Uplift High School
4. The Data: Student knowledge gains

History of Service-Learning in CPS

- » **1998 – Introduction of service requirement in CPS**
 - › Outreach to community partners
- » **2003 – Teacher engagement strategy**
 - › Professional development
 - › Project opportunities
 - › Community partner collaboration
- » **2010 – School-wide implementation**
 - › Pilot year with 14 high schools – scaled to 100
 - › Link implementation to school organizational structures
 - Small Learning Communities
 - Career and Technical Education

Carbon Emissions Reduction Action Project (CERAP)

- » An Advanced Service Learning Opportunity:
- » Initial funding through EPA and NYLC STEM Project
- » **Project Partners**
 - › Facing the Future
 - › Alliance for Climate Education
 - › CPS Dept of Environment
- » **Project Components**
 - › ACE Assembly
 - › Academic learning: climate change
 - › School-wide carbon audits
 - › Behavior change projects
- » **Evaluation**
 - › Center for Urban Research and Learning (CURL)



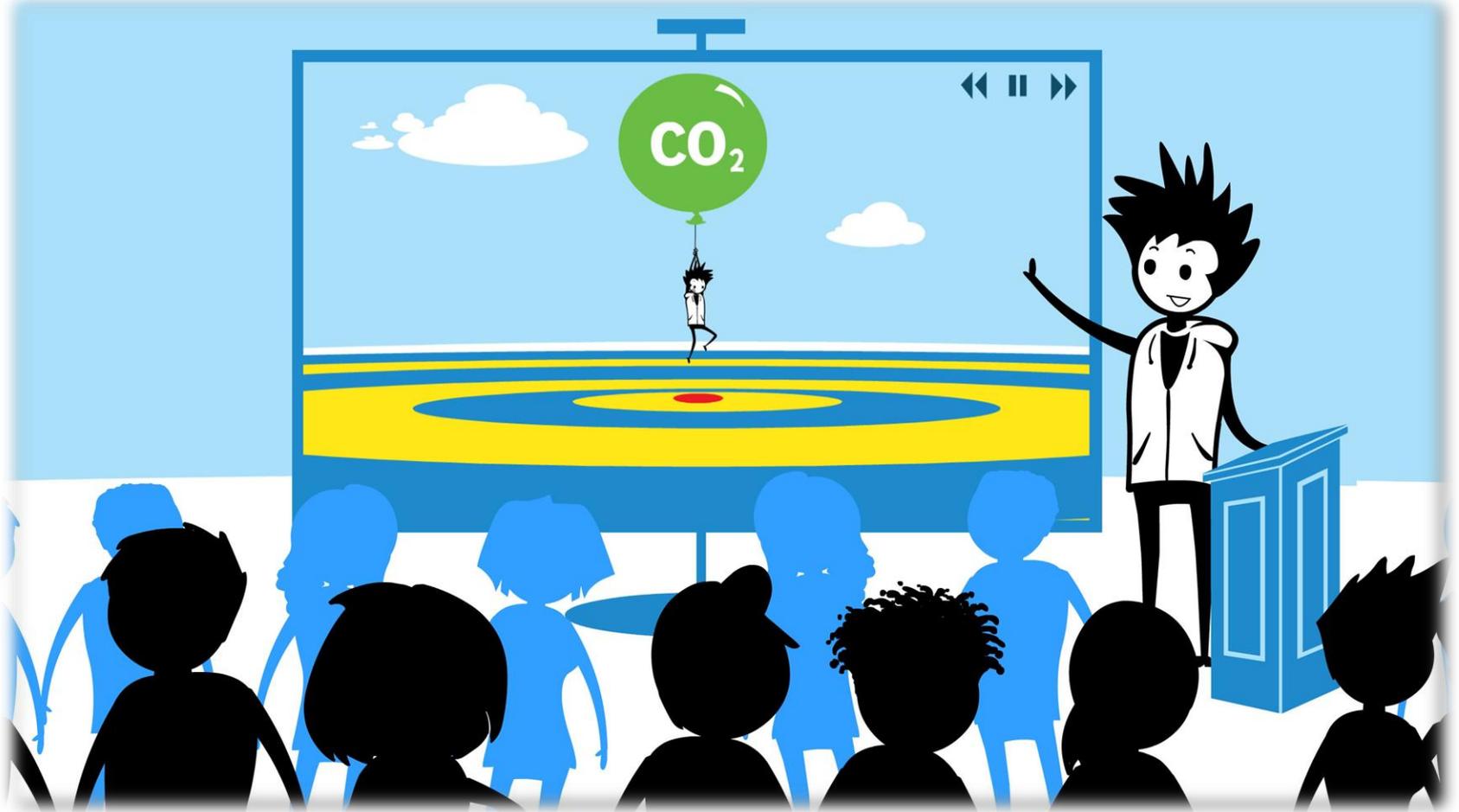
Participating Schools (CPS)

- » Amundsen
- » Arnold Mireles
- » Bogan
- » Burroughs
- » Corliss
- » DuSable
- » Eric Solorio
- » Edwards
- » Evergreen
- » Jones
- » Kennedy
- » Kenwood
- » Lincoln Park
- » North Grand
- » Onahan
- » Richards
- » South Shore Int'l
- » Uplift
- » Westinghouse
- » Whitney Young
- » Von Steuben

Step 1 | Creating an Awakening Moment



The Message: The science is clear



Step 2: Action Teams for student leaders



- » Action Teams kick-start the Action Team
- » Eligible for **grants and leadership trainings**

Connecting CPS to the larger community

- » **1 million+** students reached
- » **\$150,000+** awarded in grants/scholarships
- » **1000+** Action Teams
- » **200k+** students in our network

Step 3: Curriculum implementation

- » Facing the Future
 - › Climate Change & Solutions



Step 4: Student-Led Energy Reduction

- » ACE Classroom Carbon Calculator
- » National and Regional Energy Reduction Project



Step 1: Initial Energy Audit



Step 2: Energy Reduction Campaigns

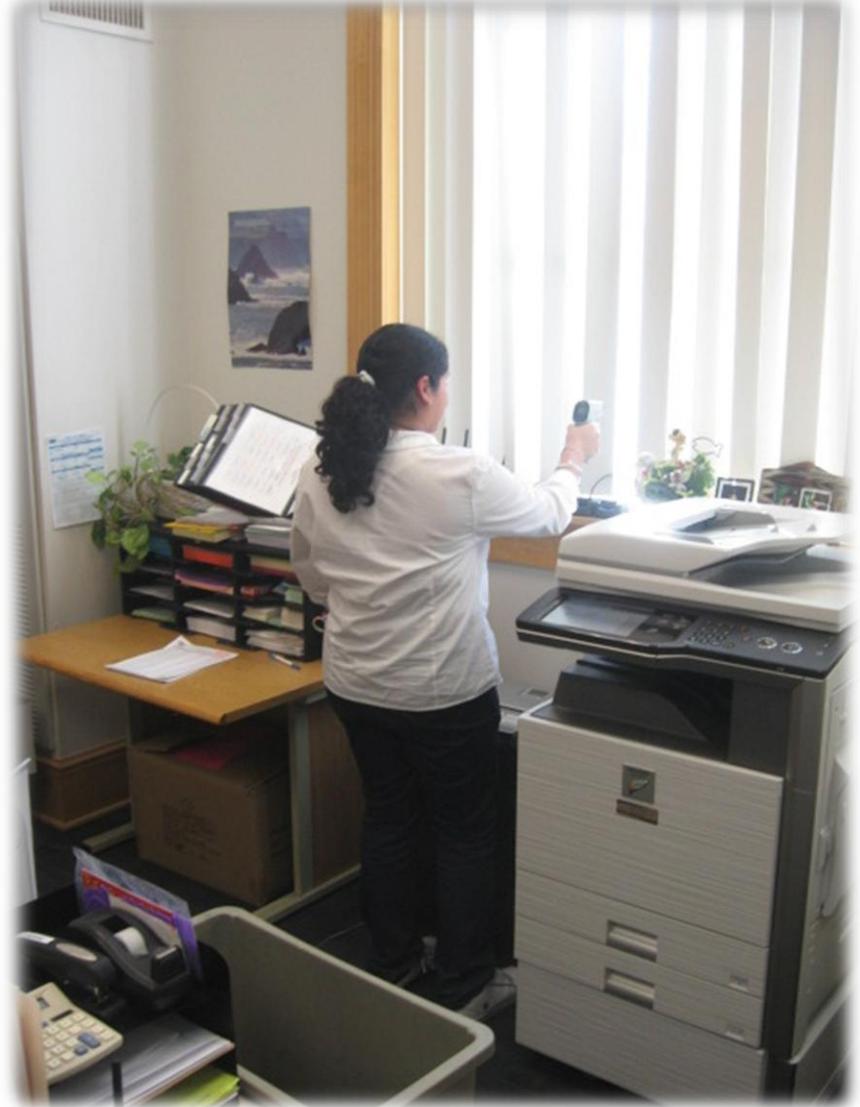
2 Hit the Gym



Step 3: Calculate Savings



Case Study | Hubbard and Kennedy



Step 5: Evaluation Strategy: 2010-2012

- » Intended Outcomes
- » Pre/Post Knowledge Surveys
- » Post-Project Student Evaluation
- » Student Focus Groups
- » Teacher Focus Groups
- » Partnership w/ Center for Urban Research and Learning (CURL) for an independent study

Intended Outcomes

- » Students demonstrate increased learning about global warming
- » Teachers will report increased engagement of students
- » Students will report improved conservation skills
- » Students will demonstrate increased civic responsibility

Year One Results

Academic Growth (Pre: n=609; Post: n=300)

» Of 13 pre/post questions, positive growth on 12 items

- › #1 – Greenhouse effect: 72.9% - 92.7%
- › #2 – Fossil Fuels: 61.9% - 71.3%
- › #9 – Renewable Energy: 20.5% - 37.1%

» Behavioral Analysis

- › “Almost all students mentioned how the class has changed their attitudes for the better....” (CURL)
- › “It has made me realize how fragile the world is and I am more cautious when I use my resources.” (Student)

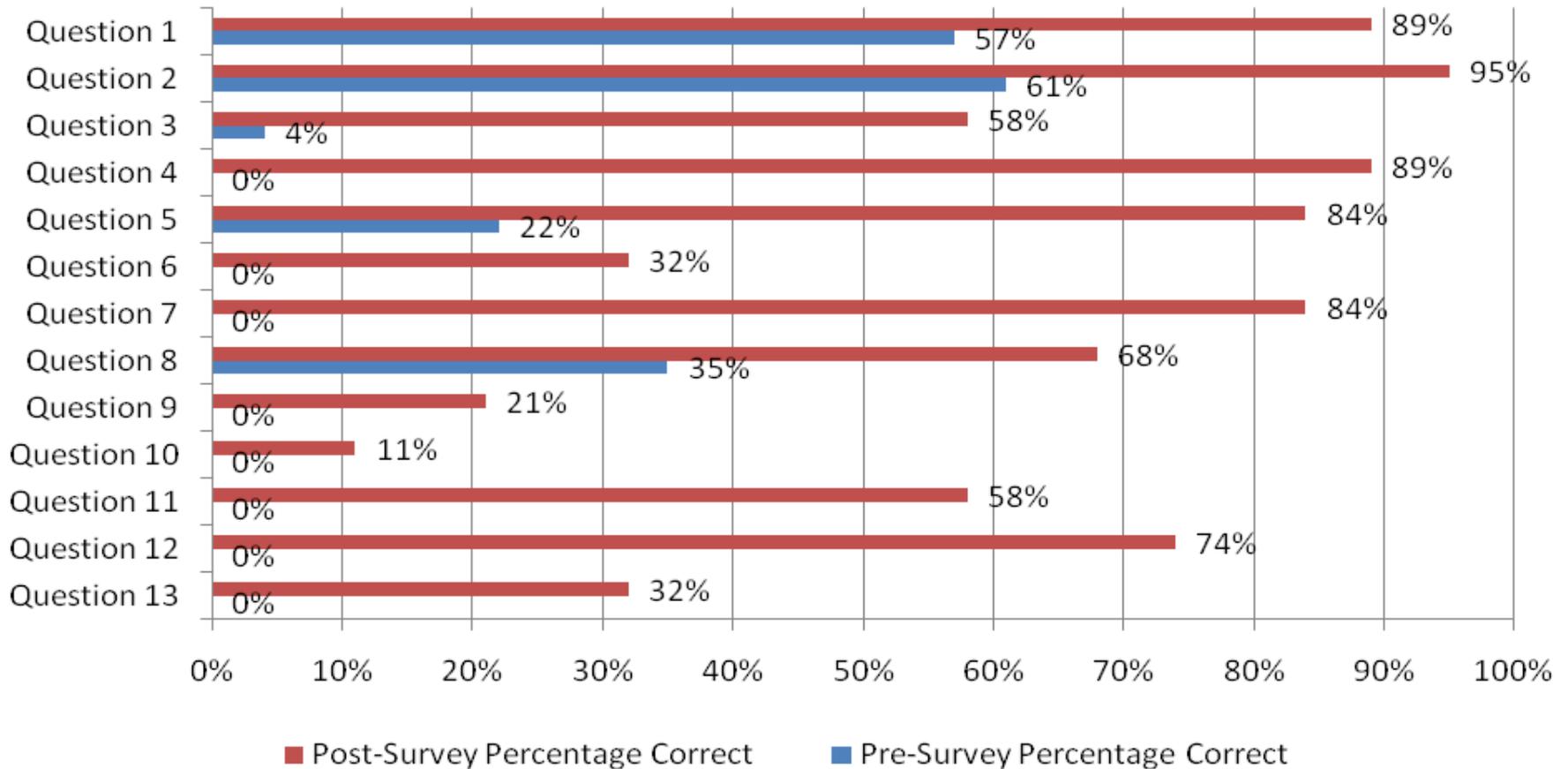
Year One Results (cont.)

» Teacher Experiences

- › **Hands-on learning** is valuable
- › **Adaptability of curriculum** to classroom
- › **Supplemental resources** were a big hit
- › **Action plans and audit process** were popular
- › First year implementation was a challenge

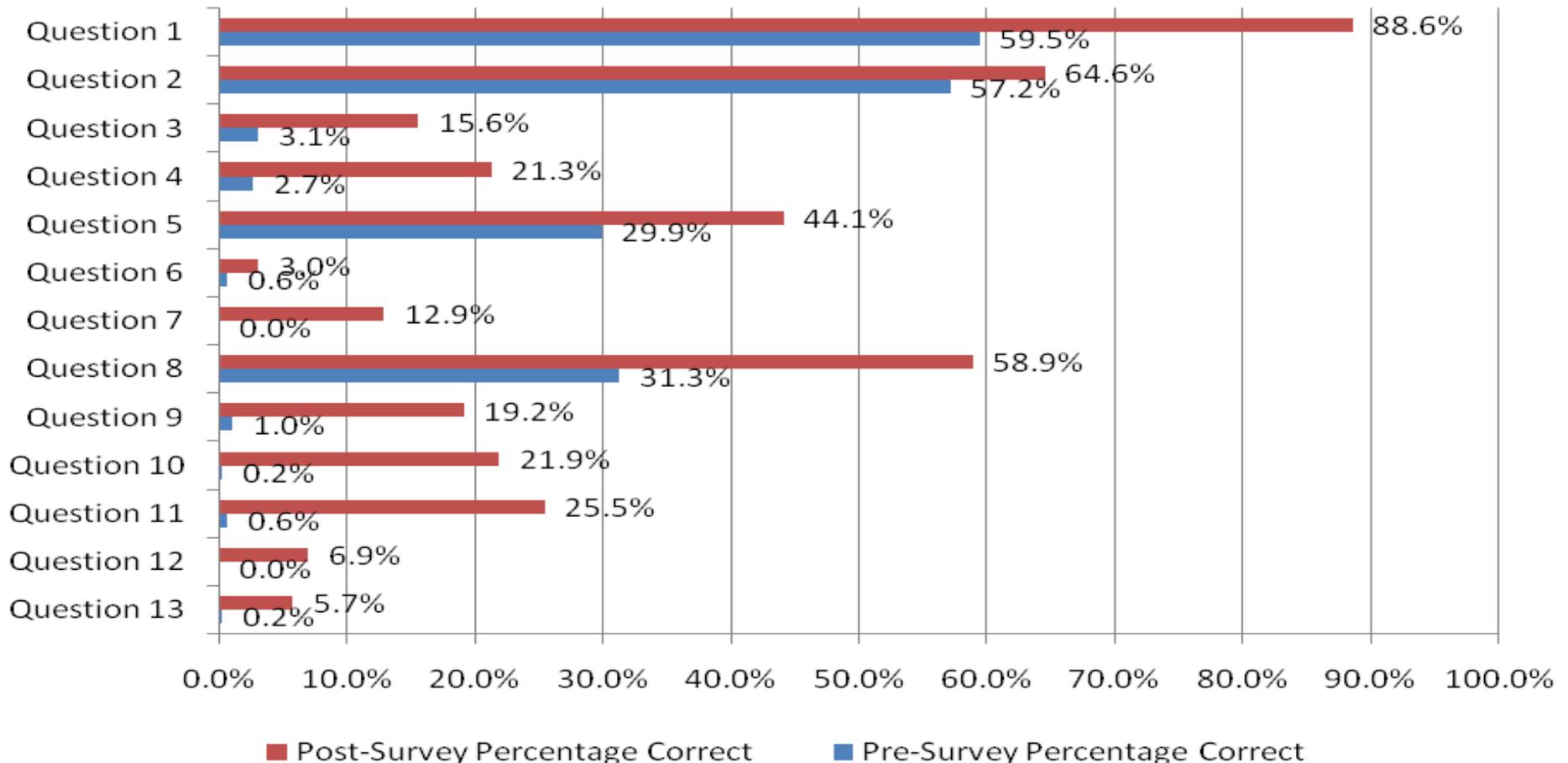
YEAR TWO | SAMPLE SCHOOL RESULTS

Pre-Survey vs. Post-Survey



Year Two | Overall Results

Overall Pre-Survey vs. Post-Survey



Findings from Data

- » Gains in Environmental Awareness
- » Gains in knowledge based on pre/post survey
- » Excitement about action and hands-on activities
- » Excitement about the ability to have an impact on the environment

Questions & Discussion

» Questions?

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