Welcoming Child Nutrition to the Student Achievement Planning Table

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Three Facts

• Healthier students are better learners
• Health problems limit student achievement
• Disparities in health (health gaps) contribute to the achievement gap

Plus one more...

• Plans for addressing the achievement gap do not typically include nutrition and health
Session Overview

- Achievement and Health Gap
  - *It Affects the Same Students*

- Students Need School Wellness More Than Ever
  - *Nutrition as an Approach to Closing the Achievement Gap*

- What Child Nutrition Directors Can Do!
What is the Achievement Gap?

- Defined as the Disparity between:
  - White and other Ethnic groups
  - Socio-Economically Disadvantaged and Non-Disadvantaged
  - Can include Disabilities and English Language Learners
Achievement Gap

*True or False?*

- Caucasians have the highest academic performance.
- The achievement gap exists mostly in those states with the highest number of ethnic students.
- The achievement gap gets bigger from 4<sup>th</sup> grade to graduation.
- Income has more of an impact on achievement than race.
Highlights of The Nation’s Report Card

National Assessment of Educational Progress (NAEP)
- http://nationsreportcard.gov/
- National and state reports available
NAEP tell a consistent and widely cited story of the racial achievement gap.

NAEP reading scores Grade 4, 2007
Average scale score

- Asian: 231
- White: 230
- Latino: 204
- Black: 203

National average: 220

Every 10 points is roughly equivalent to 1 year of learning.

1 Based on NAEP's criteria for achievement levels by grade, the difference between "basic" and "proficient" as a fourth and eighth grader is 48 and 50, respectively, in math, and 35 and 43, respectively, in reading—this means to remain at the same achievement level over four years, each year you would gain slightly over 10 points.

SOURCE: US DOE, NCES, NAEP Summary Data Tables, Achievement Levels by Grade
National Disparity in Who Scores Below Basic in Proficiency

This gap exists across the country, with black and Latino students performing worse than white students in nearly every state.

Note: Relationship holds for eighth-grade NAEP results.

SOURCE: US DOE, NCES, National Assessment of Educational Progress (NAEP) Summary Data Tables, subset of states, data for public schools; McKinsey analysis.
The gap grows over time…

This racial achievement gap appears to grow more severe as a child goes from grade 4 to grade 12 and nears entry to the workforce.

Difference in NAEP Math scores, 2004

<table>
<thead>
<tr>
<th>Grade</th>
<th>White-Latino</th>
<th>White-black</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th grade</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>8th grade</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>12th grade</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>

As students enter the workforce

- A significant increase in the math test-score gap occurs between fourth and eighth grade, with additional growth in the gap occurring in high school.
  - Between grades 4 and 12, the gap grows 41% for Latino students and 22% for black students.
- The gap would be even greater by grade 12 if NAEP included the disproportionate number of black and Latino high school dropouts.

Note: Relationship holds for NAEP reading scores, except for a minor narrowing of the black-white gap in eighth grade.

SOURCE: US DOE, NCES, National Assessment of Educational Progress (NAEP) Summary Data Tables, data for public schools.
Low-income students achieve and attain less than high-income students

From primary school...

At or above basic on NAEP, 2005

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Reading</td>
</tr>
<tr>
<td>77</td>
<td>81</td>
</tr>
<tr>
<td>46</td>
<td>57</td>
</tr>
<tr>
<td>57</td>
<td>67</td>
</tr>
<tr>
<td>90</td>
<td>67</td>
</tr>
<tr>
<td>79</td>
<td>51</td>
</tr>
</tbody>
</table>

... to high school...

At or above basic on NAEP, 2005

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Reading</td>
</tr>
<tr>
<td>76</td>
<td>58</td>
</tr>
<tr>
<td>66</td>
<td>38</td>
</tr>
</tbody>
</table>

... to college

Socioeconomic status (SES) of freshmen in Tier 1 colleges

Number by SES quartile

n=170,000

Only 9% of freshmen in the top colleges are from the bottom half of the SES distribution

1 Based on average scores for groups, where 10 points is roughly equivalent to one year of learning, students eligible for free lunch are around two years behind ineligible students (e.g., in grade 4 math in 2007, students eligible for free lunch scored 226, while ineligible students scored 249, a difference of 23).

2 Low income is defined as eligible for free or reduced lunch.

SOURCE: National Center for Education Statistics; Center for Education Policy, NAEP data for public schools, College Board
Low-Income White Students Still Academically Outperform

While independent racial and income achievement gaps exist, low-income black and Latino students underperform low-income whites.

NAEP grade 4 math scores, 2007
Average scale score

Low income¹

Not low income

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income¹</td>
<td>236</td>
<td>218</td>
<td>224</td>
</tr>
<tr>
<td>Not low income</td>
<td>252</td>
<td>232</td>
<td>235</td>
</tr>
</tbody>
</table>
The Health Gap

...affects the same students
There is a Health Gap for African American and Hispanic Students

↑ Anemia: 2x Higher rates - African American & Hispanic compared to Caucasian

↑ Poor Dental Health: 2-3x Higher rates

↑ Asthma: 60% Higher rates

↑ Childhood Obesity: 1.5 to 2 X Higher rates

Source: Office of Minority Health, CDC
There is a Physical Fitness Gap

Fitness Assessment (Fitness Grams)

• Measures 6 areas fitness
  – Aerobic capacity, body mass, strength & flexibility
  – Many States Use Them Including: Alabama, California, Delaware, Louisiana, Nebraska, South Carolina, some districts in Texas, West Virginia, NYC

Hispanics/Latinos and African-American Students typically score lower
Sample of District Level Fitness Data

Percentage of Students from a California District in Healthy Fitness Zone*

*5th, 7th, and 9th Grade Students (Avg)

Source: CDE, 2008-2009 PFT Summary
Students Need School Wellness More than Ever!

“Studies show hungry students don't learn as well as their well-nourished peers”

Need for School Nutrition is Growing!

• 41.6 million school meals served in US and growing
• 4.5% increase in one year in students eligible for subsidized meals (2008-2009)

Source: SNA in the Pressure Cooker
Investing in School Wellness.... High Rate of Return

**Academic Achievement**
- Increased readiness to learn
- Better achievement

**Attendance and Behavior**
- Less tardiness and absences
- Fewer visits to school nurse
- Fewer behavior problems

**Funds**
- As school wellness increases the ADA goes up
- As participation in meals increase, the district’s general fund increases
Health Improves Learning

- Poor nutrition decreases cognitive functioning and performance
- Food insufficient children more likely to have lower math scores and to repeat a grade
- Students with the highest fitness scores have the highest SAT-9 scores. *Jim Sallis*

*Wehler, Scott, & Anderson*
Relationship Between Physical Fitness and Academic Achievement in California

Source: California Department of Education 2005
Coordinated School Health Approach Improves Academic Achievement

- Evaluations from initiatives with CSH showed
  - Improved academic achievement
  - Improved attendance
  - Reduced discipline problems
  - Greater assignment completion
  - Increased contact with caring adults


http://www.sboh.wa.gov/Pubs/docs/Health&AA.pdf
Breakfast improves test scores

Which schools have the highest API scores?

It’s those with students who had higher rates of eating breakfast.

Source: California Healthy Kids Survey & CDE’s API Research and STAR data files.
Nutrition and Health Affect Attendance and Behavior

**Poor Nutrition:**
- Increases absenteeism and tardiness
- Overweight students miss 4-6 times more school than normal weight students
  - More likely (1.5X) to be held back a grade

**Breakfast:**
- Improves classroom behavior
- Decreases absenteeism and tardiness
Health Impacts School Budget

Cost of Students being out one day a year:

| District with 10,000 students | $100,000 or more |

A single-day absence costs the district between $9-$20 per day-unhealthy students miss more school

Do The Math!

Figure out the impact to your district
If students attended just one more day:

<table>
<thead>
<tr>
<th>Number of Students:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X $10 for ADA (or higher)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total $ added to budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
Meal Participation Impacts School Budget

- Most California districts get 4% to 5% indirect added to the general fund from meal revenues
Breakfast Adds Up Too!

[Anonymous] District in California

56% of students who ate FRP school lunch did not eat school breakfast

$5.5 million in lost federal meal reimbursements

$220,000 in lost “indirect” funds

What’s your fiscal opportunity?

Source: CDE - Nutrition Services Division data for 2008-09 SY
What Child Nutrition Directors Can Do!
Health! The Missing Link in School Reforms to Close the Achievement Gap

“Healthier Students are Better Learners”

- Emphasizes that until students are ready and motivated to learn, strategies to close the achievement gap will not be as effective
  - Research Review from Columbia University March 2010

http://www.equitycampaign.org
Closing the Achievement Gap: Key Role for Nutrition

• National and State Level Initiatives
  – Race to the Top
  – School Improvement Grants
  – Other achievement strategies in your state
    • Such as National Education Association

• District Initiatives
  – Variety of committees, strategic plans to integrate nutrition and wellness
Race to the Top
35 states applied for Phase 2!

State Level Competitive Grants

*Four Specific Areas:*

- **Standards and Assessments**
  - Statewide common set of standards K-grade 12

- **Data Systems** to measure student performance

- **Effective Teachers**
  - Using student achievement and growth as one of the methods to track teacher effectiveness- *breakfast is a key way to increase*

- **Turning around Lowest-achieving Schools**
  - Work in concert with School Improvement Grants
School Improvement Grants

- **Eligibility for persistently-lowest achieving schools**
  - **Tier 1**: Title 1 schools in the Lowest 5%
  - **Funding range**: $50,000-$2,000,000 per year for 3 years

- **Four Intervention Models**
  - Turnaround, Restart, School Closure and Transformation
  - Implications for School Breakfast
Four School Intervention Models

- Turnaround
- Restart
- Closure
- Transformation
## Transformation Model

<table>
<thead>
<tr>
<th>Teachers and Leaders</th>
<th>Instructional and Support Strategies</th>
<th>Time and Support</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace principal</td>
<td>Select and implement an instructional model based on student needs</td>
<td>Provide increased learning time</td>
<td>Provide sufficient operating flexibility to implement reform</td>
</tr>
<tr>
<td>Implement new evaluation system</td>
<td>Provide job-embedded professional development designed to build capacity and support staff</td>
<td>Staff and students</td>
<td>Ensure ongoing technical assistance</td>
</tr>
<tr>
<td>Developed with staff</td>
<td>Ensure continuous use of data to inform and differentiate instruction</td>
<td>Provide ongoing mechanism for community and family engagement</td>
<td></td>
</tr>
<tr>
<td>Uses student growth as a significant factor</td>
<td></td>
<td>Partner to provide social-emotional and community-oriented services and supports</td>
<td></td>
</tr>
<tr>
<td>Identify and reward staff who are increasing student outcomes; support and then remove those who are not</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement strategies to recruit, place and retain staff</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
School Improvement Grants

Possible Allowable Expenses

Support SIG Plan with increased access to meals:

- Computerized points of service for school lunch and breakfast
- Refrigeration and storage for fresh fruits and vegetables
- Rescheduling bus transportation arrival times
- Adding a lunch period – temporary staffing
- Cafeteria signage, other marketing and merchandising campaigns and materials
- Transportable coolers, carts and carrying cases for breakfast
  - breakfast in the classroom delivery system or after school snacks
- Refrigerated carts and other systems
  - grab n’ go service to students, after school snacks
Where Do You Have Input?

Examples of District Level Plans:
- Wellness Committee/Policies
- Coordinated School Health Plans
- Student Achievement Strategies
- Discipline Matrices and Plans
- Safety Plans
- Program Improvement, School Improvement
- Site Council Plans
- Facilities Planning
- Budget Meetings
Steps to Getting Started

1. Start with your own nutrition program

- Pleasant eating areas, adequate seating
- Appealing menus and presentation
- Reduce time in line
- Reduce stigma for free and reduced students
- Expand breakfast program
- Provide substantial after school snacks
- Market meal program to school community
2. **Extend yourself**

- Evaluate your data
  - Meal participation, fitness grams, behavior problems, visits to the nurse, student achievement reports
  - Link facts to achievement gap

- Demonstrate fiscal and academic contributions of your program

- Participate in District Committee/Plans
  - Including School Improvement Grants and Race to the Top, if eligible

- Board Presentations

- Offer Principal Lunch n’ Learns

- Other Meetings - PTA, Teacher’s meetings
Your Turn!

Discuss:
One way you could:

– support academic achievement through your child nutrition program
Share Your Action Plan

1. Select one thing you can do

2. Consider what you need
   - Money, equipment, staffing,
   - Policy changes, administrative approval
   - Parent, student and community buy-in

3. Strategize how to get it
   - What is the benefit to the decision makers?
   - What key facts will be convincing?
   - Best way to approach them?
Questions?

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