# The Healthy Schoolhouse 2.0

NOPREN

December 11, 2018



### Agenda

- Welcome & Introduction of Dept of Health Studies & School of Education
- Healthy Schoolhouse 2.0 Overview
- Year 1: Education/Extension/Research
- Year 2 Plans
- Dissemination of year 1 results
- Q & A

Dr. Stacey Snelling, Chair, Department of Health Studies (<u>stacey@American.edu</u>

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### Background

- Work in DC schools around health and nutrition
- Connection of Health and Education
- Conducted implementation analysis of DC's Healthy School Act, Kaiser Foundation of the Mid-Atlantic, Healthy Tots

## Theoretical Context



#### Education

Improve elementary school teachers' nutrition knowledge, health literacy, and personal health behaviors.

Improve students' nutrition knowledge, health literacy, attitudes, and nutritionrelated behaviors.

#### Research

Measure the effects of the implementation of the PD course to increase nutrition lessons.

Measure the effects of targeted nutrition lessons in school classrooms on knowledge, attitudes, and behaviors.

Evaluate the sustainability of the Healthy Schoolhouse 2.0.

#### Extension

Extend the formal classroom instructions to families through school-wide events with local partners focused on food access and nutrition education.

### Healthy Schoolhouse 2.0 Overview

## Education: Professional Development for Teachers

5 hours of professional development during professional learning time

Classroom observations to assess fidelity

Pedometer Challenge to promote health among teachers



1

Session 1: Healthy Schoolhouse 2.0

2

Session 2: My Plate Curriculum & Teacher Kits 3

Session 3: Nutrition Lessons from the My Plate Curriculum 4

Session 4: Food Myths and Facts; Nutrition Label; Portion Distortion 5

Session 5: Feedback, Wrapup, and Next Year's Activities

Education: Professional Development Program

### Education

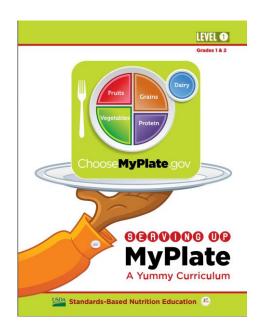
USDA's
Discover MyPlate &
MyYummy
Curriculum

#### 4 levels of curriculum:

- Prek/K
- Level 1: 1<sup>st</sup> & 2<sup>nd</sup> grade
- Level 2: 3<sup>rd</sup> & 4<sup>th</sup> grade
- Level 3: 5<sup>th</sup> grade

#### Incentives:

- Minimum of 3 lessons delivered -> \$75 classroom supplies
- E1 received \$1,000 in supplies
- C1 received \$500 in supplies



#### Teacher quotes:

"Students are engaged and enjoyed the lessons"

"Kits are helpful"

"Students are talking about healthiness in relation to cafeteria food and home meals"

### Education Implementation results

- Average of 24 teachers/staff/administration attended the PD sessions
- 25 school staff signed up for the pedometer challenge; half actively participated. Prizes – blenders, mini food processor, oven-safe food storage
- Observed lesson implementation in 6 classrooms

#### From a pedometer challenge participant:

"Thanks for this experience. I improved my mobility, my consciousness, and my awareness of my health. I actually took time to start working out again. Win, lose, or draw I was a winner in this process. I lost 5 inches off my stomach and about 5 pounds in four weeks. I do intend to keep up with my healthy lifestyle until I get to my goal.

Again, THANK YOU!!!!!!"

#### Extension:

Nutrition Education Activities at the Joyful Food Markets

Planting seeds

Make-your-own applesauce

Discovering heart rate

MyPlate exploration

Average attendance = 142 students







### Extension







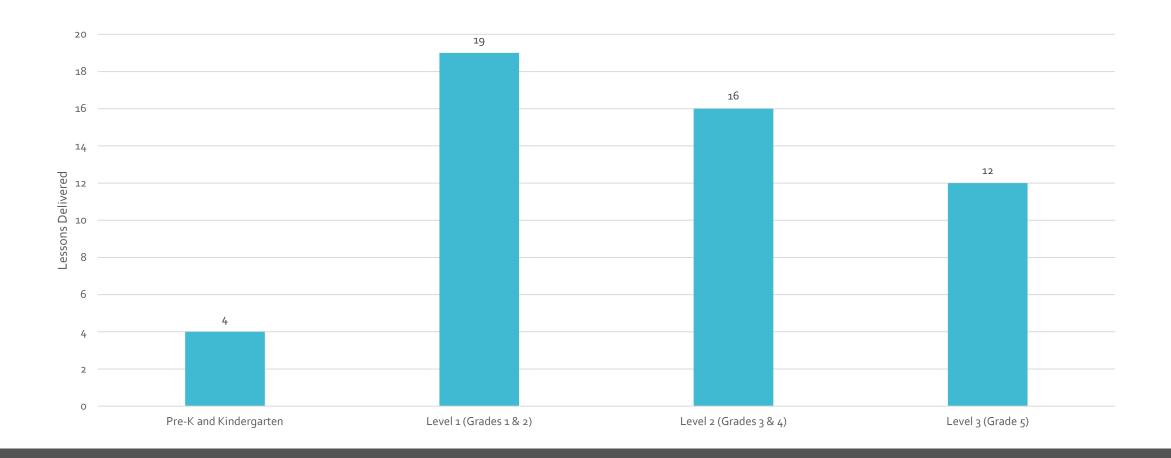


### Research Questions

- Goal R1: Measure the effects of the implementation of the PD course to increase nutrition lessons within elementary schools.
- Objective R1: Increase teachers' self-efficacy as it relates to the integration of nutrition concepts within classroom lessons.
- Goal R2: Measure the effects of targeted nutrition lessons in elementary school classrooms on student knowledge, attitudes, and behaviors.
- Objective R2A: Increase students' nutrition knowledge and improve attitudes towards fruit and vegetable consumption.

School	Ward	Enrollment (2016-2017)	Race/Ethnicity	% Economically Disadvantaged	ESEA Classification	Breakfast Participation
E1	7	391	92% Black; 7% Hispanic/Latino	100%	Rising	71.46%
C1	7	299	97% Black, 3% Hispanic/Latino	100%	Priority	82.91%

### School Demographics: Year 1 (SY 2017-18)

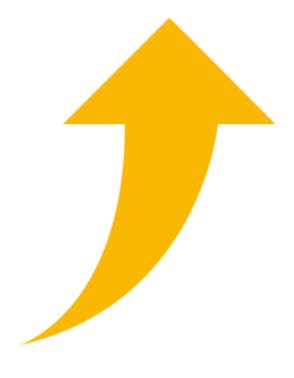


### Curriculum Implementation

## Curriculum Implementation

There is a significant positive correlation between the number of PD sessions teachers attended and the number of lessons taught  $(r^2=0.233, p<0.05)$ .

Nutrition Lessons
Delivered in
Classroom



**PD** Sessions

Student and Teacher Surveys and Consumption

- **Student Survey**: E1 (n=141)\* and C1 (n=134)\* student surveyed on knowledge of nutrition concepts
- **Teacher Survey**: E1 (n=15)\* and C1 (n=10)\* surveyed re: personal health, self efficacy around teaching health, beliefs about the intersection of health and education
- Consumption: October, March, May fruit and vegetable

9) Circle the SOMETIMES food.

Student sample question:





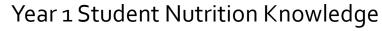


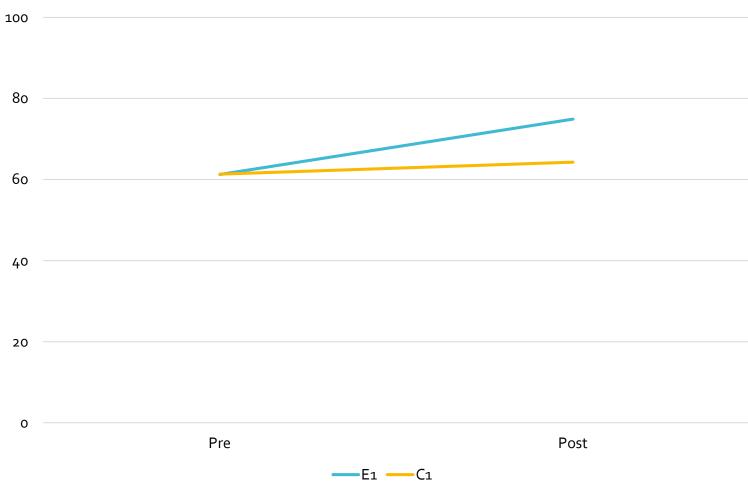
#### Teacher sample question:

I feel prepared, empowered or able to integrate health education into my current curriculum.

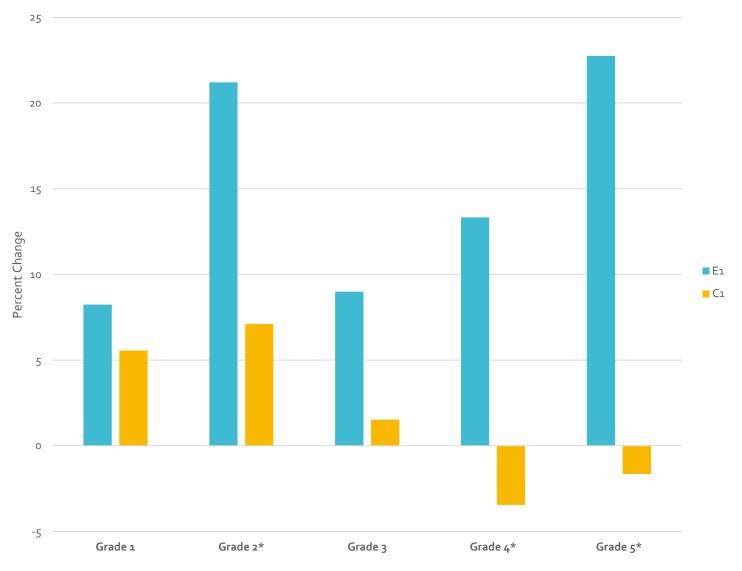
<sup>\*</sup> Reflects the number of students and teachers who took both the pre and post tests/surveys

Student Nutrition Knowledge (grades 1-5)





Student Nutrition Knowledge



 $\hbox{$\star$ denotes statistically significant difference}\\$ 

Teacher Surveys

	Pre	Post			
Self-efficacy					
E1	4.3	4.16			
C1	4.2	3.93			
Health Education Beliefs					
E1	4.41	4.32			
C1	4.33	4.26			

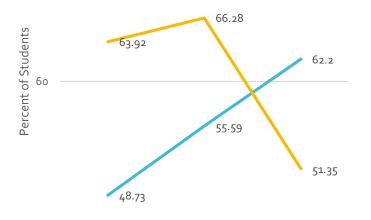
Consumption

### **Vegetable** Consumption greater than 50% of serving

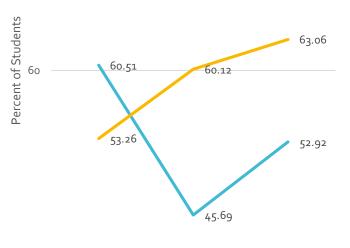
80 —

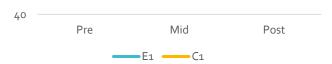
### **Fruit** Consumption greater than 50% of serving

80









### Year 1 Lessons Learned

#### Implementing in Year 2:

- Later start to professional development
- Teacher surveys administered online
- Teacher/staff engagement: pedometer challenge earlier
- Teacher feedback and "observations"
- Enhanced focus on connection to personal health/wellbeing

### Year 2

#### School E1:

- Two booster sessions
- Kit restocking/new kits for new teachers
- Continuing support of the extension activity

#### Addition of E2

#### Dissemination plans

- National: SNEB, FNCE
- Local: DC Food Policy Council, DC School Food Advisory Council
- Manuscript submission

## Discussion Q&A