

The Edible Schoolyard

Program Evaluation: Tools and Case Studies



Summary of survey results on evaluation

- **Whatever people say in survey**

Evaluation in a nutshell

Why evaluate?

How to begin?

Partner?

Study design?

What to do with my results?

Why evaluate?

Participants



Staff

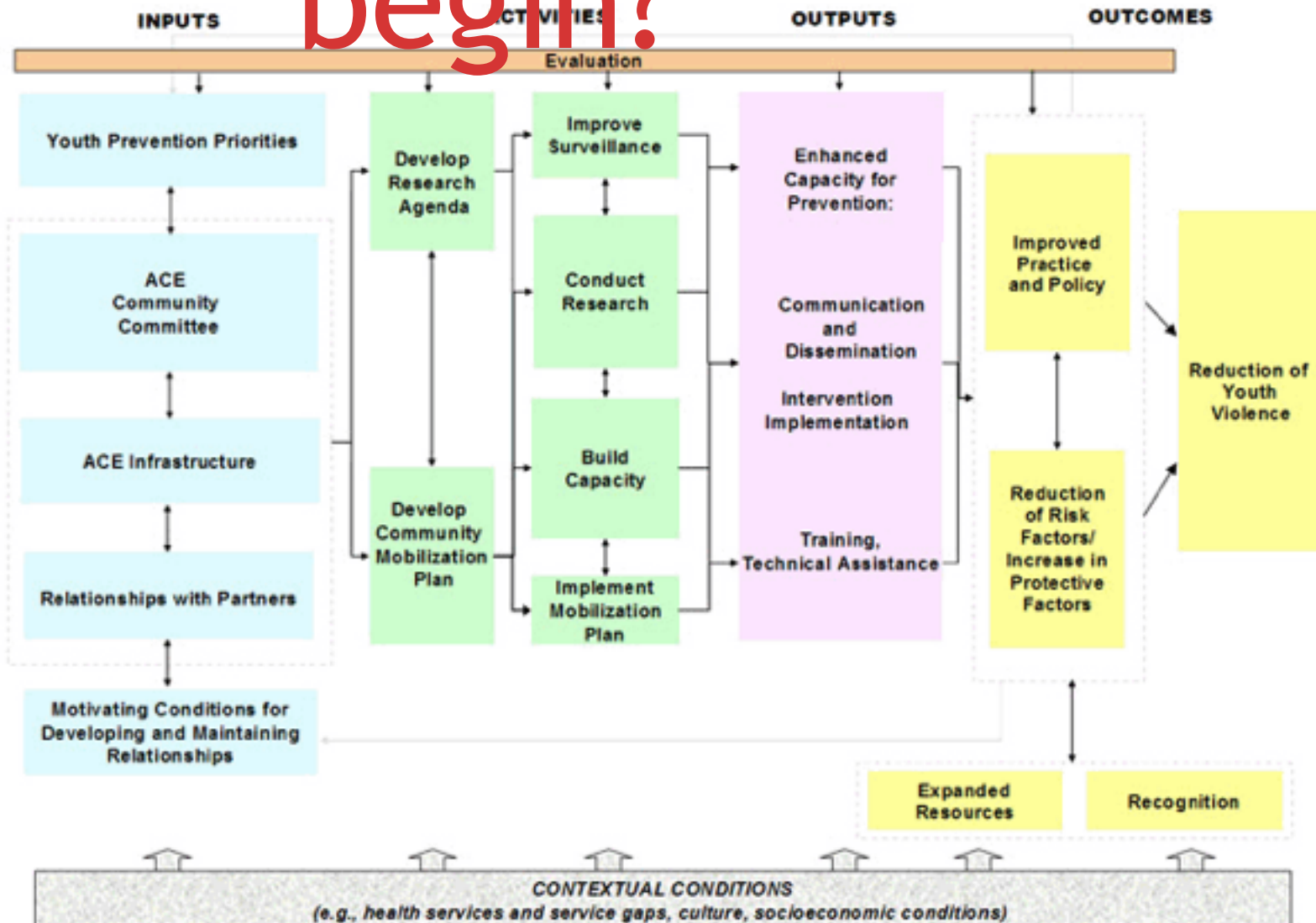


Funders



How do I begin?

National Framework for the Academic Centers of Excellence Program



How do I begin?

<i>metrics</i>	<i>logs</i>	<i>observa- tions</i>	<i>question- naires</i>	<i>audio</i>	<i>video</i>
countables	X	X		X	X
expert judgments		X	X		X
length of turns	X	X		X	X
turn overlap	X			X	
resource costs	X	X	X	X	X
task completion	X	X			
time	X	X			X
tool usage	X	X	X		X
user ratings			X		
conversational constructs	X	X		X	
repair activities	X	X	X		

Who do I partner with?

Social
Scientists



Economist

S



Study Design...and the counterfactual



versus



+



Study Design

Before and after: OXO

+ control: OXO
0 0

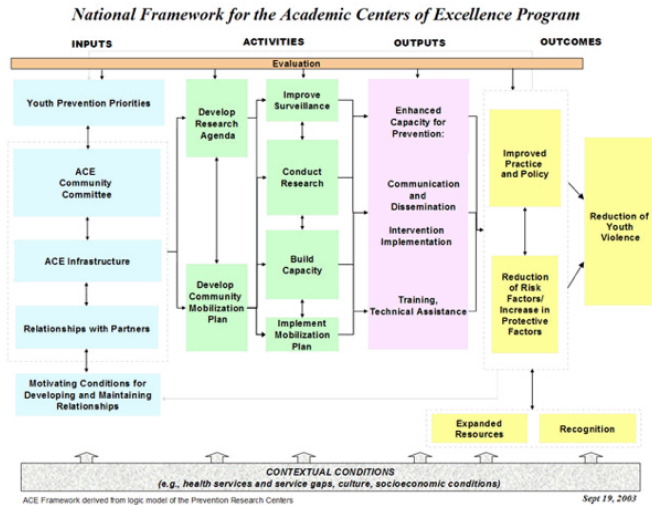
Time series: 0 0 0 X 0 0 0

+ control: 0 0 0 X 0 0 0
0 0 0 0 0 0

Crossover: 0 0 0 X 0 0 0 0 0 0
0 0 0 0 0 0 X 0 0 0

Randomize!

How do I use my results?



Enough theory!

- Why did they evaluate?
- How did they lay the foundation?
- With whom did they partner?
- What study design did they use?
- How did they use their results?



Changing the way children eat, learn and live at
five FirstLine Schools



- **Founded New Orleans' first charter school in 1998**
- **Operates five open-admissions schools:**
 - Samuel J. Green Charter School
 - Arthur Ashe Charter School
 - Langston Hughes Academy
 - Phillis Wheatley Community School
 - Joseph S. Clark Preparatory High School
- **3,102 students**
- **94% African American, 4% Hispanic, 1% Caucasian, 1% Other**
- **88% qualify for free school meals**

Mind – Body - Spirit



ESYNOLA

is

Whole Child Development
ESYNOLA provides a rich variety
of experiences for our students
to nurture character, health,
and active citizenship

ESYNOLA integrates gardening
and cooking into FirstLine
schools' curriculum, culture and
cafeteria.

How ESYNOLA Works in Schools

- Garden and Kitchen classes – 3,500+ per year
- Integration of core academic concepts
- Collaboration with teachers – push-in, pull-out
- Afterschool classes
- Edible events and experiences

Events and Experiences

- **Special Events like Family Food Nights, Open Garden Days, Watermelon Day, Sweet Potato Fest – more than 50 per year**
- **Grade level “edible” experiences like Citrus Pick, Iron Chef, and Market-to-Table**





PREVENTION RESEARCH CENTER
at TULANE UNIVERSITY

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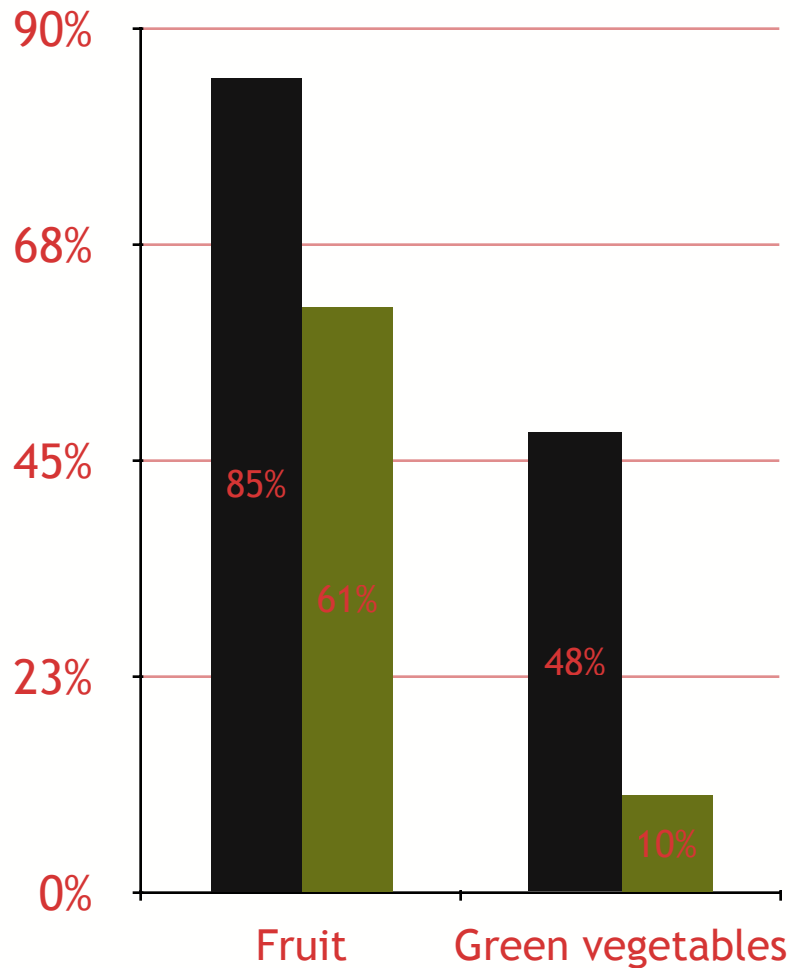
Tulane Prevention Research Center Evaluation Methods, 2013-14

Describe student, parent, and teacher attitudes and behaviors toward healthy eating and cooking

- **Student and parent surveys**
- **Student, parent, and teacher focus groups**
- **Student height and weight measurements**



Key Results: FFV Consumption



- Fruit and vegetable consumption among ESYNOLA students is higher than the national average
- Salty and sweet snack consumption among ESYNOLA students is lower than the national average



“What I like is that I get to taste and learn different things. And you know try different things from all around the world. And what I like is at school...they give us fruit for breakfast and lunch...and healthy choices. And I love salads.”

-Student from

Ashe

Key Results: Habits and Skills

- Dietary decisions are mostly influenced by family and personal tastes; peer pressure is also a factor at school
- Ability to cook and follow a recipe is high among students who attend ESYNOLA classes





“My son, who was in Edible Schoolyard last year, said it was his resolution to cook one meal a week for his family, and he’s kept that up. And of course, my younger son had to follow him. So now, they both have a night each week that they cook. And they either find the recipe or they tell me what they’re interested in and we find the recipe and then cook.”

-Parent from Wheatley

Physical Fitness



- Parents want their children to be healthy and are interested in ESYNOLA programming
- Overweight and obesity prevalence is in line with state level (around 40%), though higher than national average (33%)
- Parents, teachers, and students want more physical education

ESYNOLA Program Value

Value of ESYNOLA Program seen by all focus group participants:

- Experiential learning
- Exposure to new foods
- Skill transfer from classroom to home
- Modeling of healthy behaviors
- Integrated learning
- Social emotional well-being

ESYNOLA

“ *...helps our students be more open minded about things, they are more willing to try more fruits and vegetables, anything that the garden teachers give them, they'll try it. This translates to other things in life and provides a positive message.*”

-Teacher from Green

“ *...is planting a seed that will help the kids down the road, in terms of having a healthy diet.*”

-Teacher from Ashe

Recommendations

- 1. Garden and kitchen classes should be available to all students in all schools**
- 2. Students should be empowered to make decisions about the ESYNOLA classes**
- 3. Continue to develop healthier recipes of favorite and traditional dishes**

More Recommendations

4. **Communication to parents is critical for their involvement in ESYNOLA events and classes**
5. **Create a strong connection between what is taught in ESYNOLA classes and what is being served in the cafeterias**
6. **Increase physical activity opportunities at school**

Even More Recommendations

7. Replicate methods used to encourage fruit consumption to encourage vegetable consumption
8. Send students home with tools to make healthy meals
9. Help the students make the connection between unhealthy dietary habits and lack of energy
10. Facilitate collaboration between ESYNOLA staff and classroom teachers

Changes in Methodology for 2015-16

- Obtain active consent for student surveys from parents (not just opt out)
- Compare 5th and 6th graders from two FirstLine schools to a control group at a school with same food service provider but no ESYNOLA programming
- Account for the minutes of programming (dosage) that each student receives to more accurately evaluate the impact of ESYNOLA programming and changes in student knowledge and behavior



ESYNOLA



Edible Schoolyard

New Orleans

**A SIGNATURE PROGRAM
OF FIRSTLINE SCHOOLS**



ESYNOLA 

The Edible Schoolyard

Edible Schoolyard NYC





**EDIBLE
SCHOOLYARD
NYC**

Evaluation Process and Tools

Andrew Barrett
Program Director

What do we want to do?

- Began participatory strategic planning process that included staff and board (October 2013, approved October 2014)
- Identified program goals, expansion opportunities, and target outcomes



Mission

Transforming the hearts, minds, and eating habits of young New Yorkers through an integrated seed to table education.



What do we want to do?

For Students

- Grade appropriate proficiency in **knowledge, skills, attitudes and preferences** related to growing, preparing, cooking and eating plant-based foods
- Increase in **growing, preparing and consuming plant-based foods**
- Increase in **sharing and advocacy behaviors** related to growing, preparing, and consuming plant-based foods in the school environment & beyond

For Educators

- Educators demonstrate increased **knowledge, skills and attitudes** related to building, maintaining and teaching from a garden/kitchen classroom
- Educators are able to **plan, build and successfully maintain** a garden and kitchen program



What should we measure?



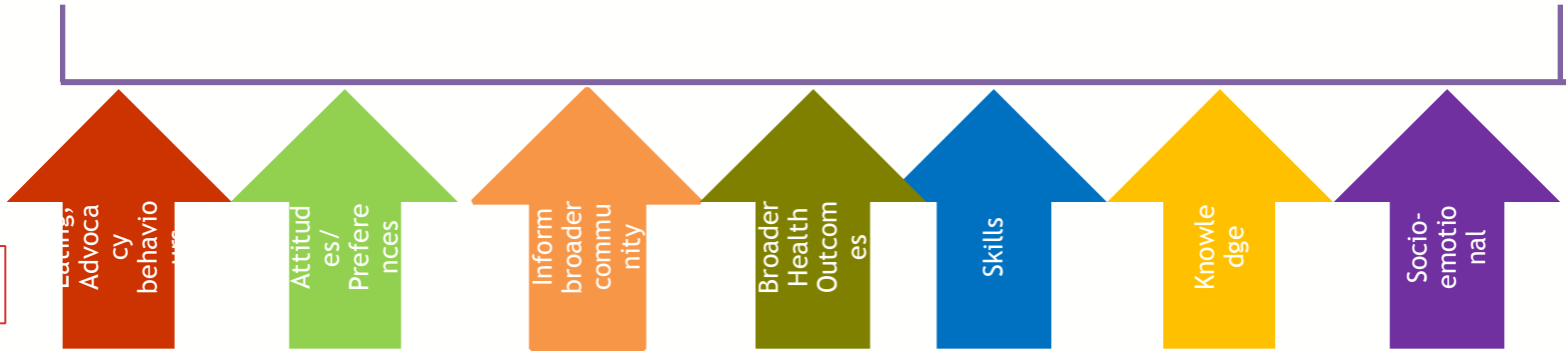
- Taproot Grant (October 2014-March 2015)
- Prioritized Macro and Micro Outcomes we want to measure



Outcomes Ranking

Most Important

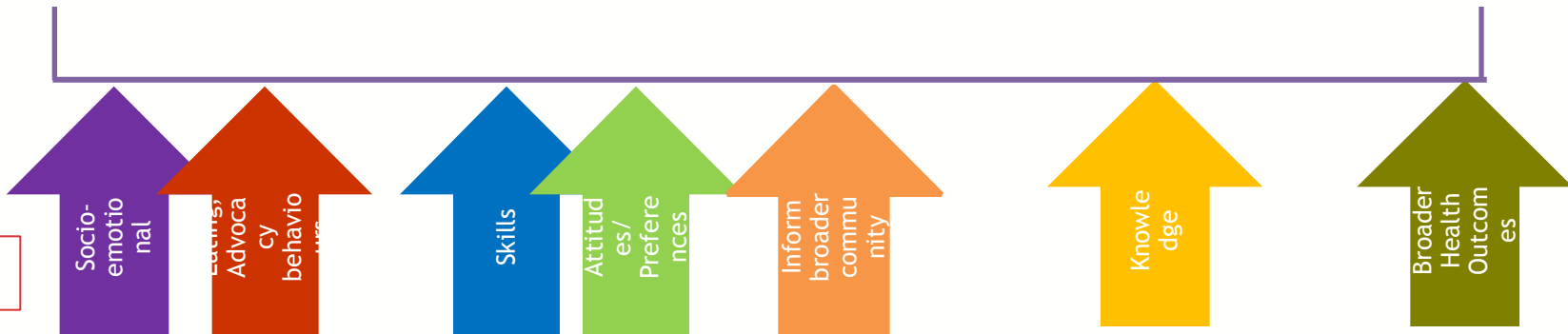
Least Important



Funders

Most Important

Least Important



Teachers

37

37

How do we measure it?

- Determined specific metrics for each outcome
- Reviewed existing evaluation instruments (Plate Waste Study and Student Survey with Columbia Teachers College, in-class observation)
- Identified areas for development as well as necessary instruments (Expand Parent Survey, Add in-class projects to test knowledge and skills)



Attitudes and Preferences

Outcome	Metric	Data Source	Frequency
Appreciation for growing and cooking healthy food.	Preference/behavioral intention for cooking related activities	Student Survey	1x/year 2014-15 2x/year 2015-16
Confidence in one' own capacity for cooking	Self-efficacy for cooking	Student Survey	1x/year 2014-15 2x/year 2015-16
Willingness to try plant based foods	Willingness to try plant based foods at home	Parent Survey	1x/year 2013-15 2x/year 2015-16
	Willingness to try tastings in classes	Teacher observation	8-10x/year (every class)
Attitude/intention to eat plant based outside of the classroom	Choosing plant based foods in cafeteria	Plate Study	1x/year 2014-15 2x/year 2015-16
	Child requests for plant based food at home	Parent Survey	1x/year 2013-15 2x/year 2015-16
	Preference for taste of plant based foods	Student Survey	1x/year 2014-15 2x/year 2015-16

Eating Behavior

Outcome	Metric	Data Source	Frequency
Eating more plant based food	Eat more plant based foods at school	Plate Study	1x/year 2014-15 2x/year 2015-16
	Eat more plant based food at home	Parent Survey	1x/year 2013-15 2x/year 2015-16
Cooking plant based food	Cooking plant based food at home	Parent Survey	1x/year 2013-15 2x/year 2015-16
Desire to share mastery and experience	Desire to share cooking knowledge and skills at home	Parent Survey	1x/year 2013-15 2x/year 2015-16

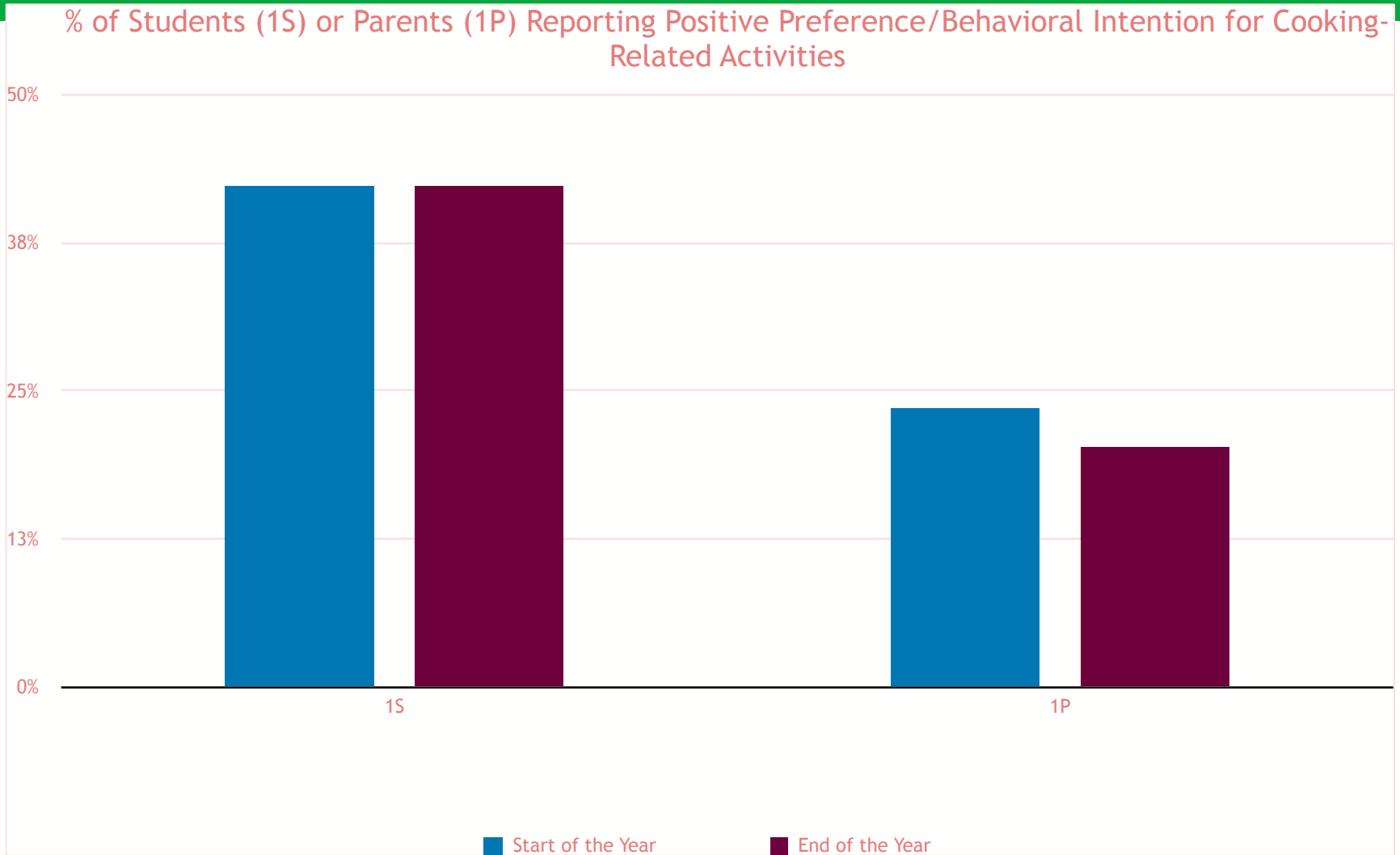
Skills

Outcome	Metric	Data Source	Frequency
Cooking skills and techniques, safety skills, basic tool usage	Cooking skills at in the classroom	Teacher observation with rubric	2x/year
Autonomous use of tools and techniques, teamwork	Independent use of techniques learnt for classroom projects	Teacher observation with rubric	2x/year

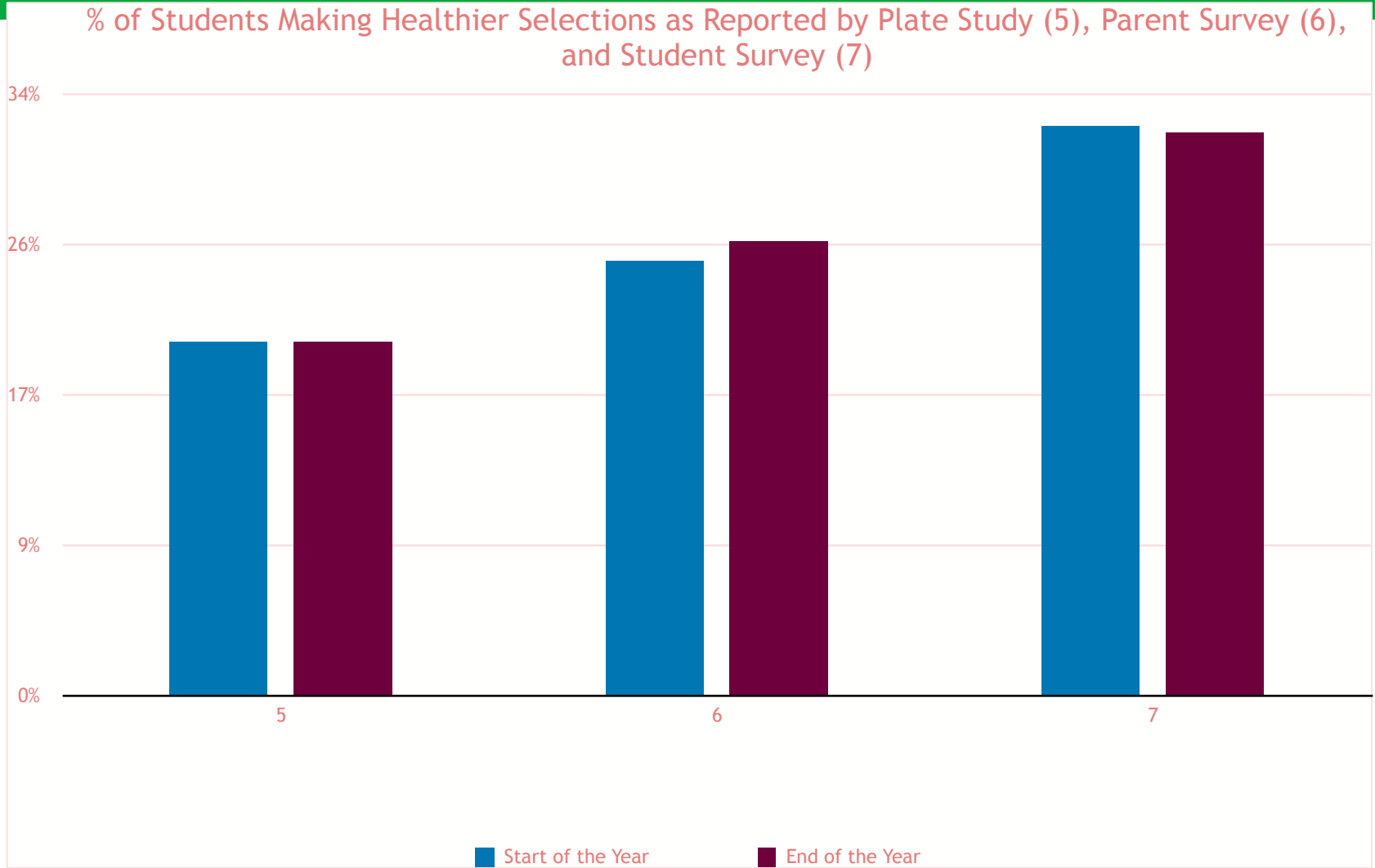
Knowledge

Outcome	Metric	Data Source	Frequency
Role in the food system and how to affect it	Knowledge about food system	Teacher graded project/activity	2x/year
Knowledge about plant based food and where it comes from	Knowledge about plant based food	Teacher graded project/activity	2x/year

Examples



Examples



The Edible Schoolyard Berkeley



Evaluations

- **School Lunch Initiative**
- **Alumni Interviews**
- **YPQI**

School Lunch Initiative

One of the first comprehensive program in the nation, connecting school lunch with student learning in school gardens, kitchens classrooms, and academic classrooms.



Key Findings

- **Edible Education changes student knowledge about healthy food choices!**
- **Edible Education changes student preference for fruits and vegetables, especially leafy green ones!**
- **Edible Education changes student attitudes towards the school eating experience!**

Alumni Interviews

Ms. Tanner had things she always did in the garden. Like keeping the insect log and having activities about learning how we grow food and the earth in general. Definitely opened me up to a new kind of science, because we had never done anything outside with science. It started me being interested in science, especially in conservation....She talked to us about things in the garden that were affected by global warming. It brought science to be a more applicable thing in my life.

- Izumi De Los Rios Kobara(2009 - 2012)

Alumni Interviews

It forced students and teachers into different roles. Teachers were still teachers, but they were having conversations with you...felt like the playing field was equal. Students were teaching students things. I remember that feeling really empowering.

- Clara Williams (1998 - 2001)

YPQI

- Partnership with the Horner Foundation and the David P. Weikart Center for Youth Program Quality.
- Assesses:
 - Safe Environment
 - Supportive Environment
 - Interaction
 - Engagement
 - Youth Centered policies and practices
 - High expectations for youth and staff
 - Access

Recap

Why did they evaluate?

How did they lay the
groundwork?

With whom did they partner?

What study design did they use?

How did they use their results?

The Edible Schoolyard

THANK YOU!



COMMUNITY



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