- TEACHERS COLLEGE COLUMBIA UNIVERSITY



## Tisch Report

## FoodCorps: Creating Healthy

## School Environments

## Evaluation

 January 2015 to December 2016February 2017


# Laurie M. Tisch Center for Food, Education \& Policy Program in Nutrition Teachers College, Columbia University 

The Center cultivates research about connections between a just, sustainable food system and healthy eating and translates it into recommendations and resources for educators, policy makers, and community advocates. The Center focuses on schools as critical levers for learning and social change.

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# Key Takeaways and Next Steps 

## The goals of this evaluation were to

1. Revise FoodCorps' Healthy School Progress Report to better reflect FoodCorps' programming and evidence from the research literature on creating a healthy school environment to promote fruits and vegetables.
2. Better understand how the presence of a FoodCorps service member in a school changes the school food environment.
3. Explore which aspects of a healthy school food environment are related to higher consumption of fruits and vegetables at school lunch.

The Healthy School Progress Report measures the extent to which schools are conducting activities in FoodCorps' three areas of service; how they are engaging with food policy on a local or district level; and looks for indicators of "staying power"-how people across the school community are supporting a positive food environment for students. The tool offers discrete practices that FoodCorps members and their schools can put into place. Each suggested practice is rooted in evidence that the action leads to improved fruit and vegetable consumption by students.

## Tool Assessment and Creation

## Key Takeaways

- We have confidence in the HSPR: This study both revised FoodCorps' primary measurement tool and evaluated its efficacy. We determined that the Healthy School Progress Report is an evidenced informed tool grounded in theory and does a good job of capturing the range of FoodCorps programming
- The Fruit and Vegetable Recall Survey is a valid and useful tool for measuring consumption: In order to accomplish goal \#3 listed above, the Teachers College team developed a new tool to measure fruit and vegetable consumption. They paired it in several locations with a digital photographic study and were able to confirm that the results are reliable (i.e. That if children are tested in the right way, directly following their meal, they can be relied upon to report fairly accurately what they ate). This tool was used to measure consumption for this past program
year and is now being recommended as a tool our service members-with proper training-could administer going forward.


## Healthy School Progress Report

## Key Takeaways

- Over 75\% of schools were measurably healthier school food environments after a year of FoodCorps presence in their school: These results reflect the HSPR being administered by all service members across all of FoodCorps' schools served at depth. This represents any improvement at all no matter how small or large.
- Students in schools with more handson learning activities are eating triple the amount of fruits and vegetables than students who receive less of that hands-on learning. This suggests a strong association between hands-on learning-often the largest component of FoodCorps service-and increased consumption of fruits and vegetables at school lunch.
- Hands-on learning includes activities such as cooking and gardening, and talking to students about the benefits of eating fruits and vegetables and how to incorporate more of them into their diets
- Schools in the study that started with the lowest scores had the greatest improvements over a oneyear period
- This suggests that it could be good to invest time and resources in schools that have a lot of room to improve
- The reason that schools with higher scores improve less is likely because service members spend a lot of time in these schools maintaining existing programs, leaving less time for new initiatives
- In schools where corps members spent more time, we saw a greater increase in progress report scores.
- This supports our movement towards service members spending more time in fewer schools
Key Takeaways and Next Steps


#### Abstract

- Anecdotal evidence suggests when a service member is focused on only one school, it has benefits to both the service member and the school, and might result in greater improvements to HSPR score.


- The more people and resources there are in place to support the healthy school food environment, the greater the school's ability to increase their
score: Schools with higher "Staying Power" scores had larger changes in their Progress Report scores than those with lower "Staying Power" scores. ["Staying Power" refers to how people across the school community-i.e. Not just the service member-are supporting a positive food environment for students.]
- Support can come from administrators, teachers, school food service staff and/or parents
- Three levels of schools: The data from PY16 was used to categorize schools into three levels of programming. Those with the lowest scores on the HSPR, those making progress, and those functioning at a high level. Through this study we determined a few key learnings about each level:
- Schools coming into FoodCorps without a lot of this programming in place can make tremendous progress within a school year.
- Schools that already have a lot of programming in place will need to dedicate much of their energy into maintaining that programming and making incremental programming additions over time. Expected change on the tool is smaller but for good reason.
- Schools in the highest level of programming may be challenged to improve their score over time. Given the importance that Staying Power showed throughout the three levels of schools, there should be an ever increasing importance on making this high level of programming sustainable. A plan for eventual transition away ( $3-5$ years) from being a FoodCorps school served at depth is suggested.
- While schools with service members had larger score increases than schools that did not, our analysis did not find this to be a statistically significant difference. Given that the trend is going in the right direction, a larger study on this is warranted, with a few tweaks in methodology, including a larger sample size.


## Next Steps

## Short-term

- Investigate the facilitators and barriers to conducting Hands-on Learning activities in schools. This would allow FoodCorps to be more successful in individual schools and also to scale up conducting Hands-on Learning in more schools.
- Administer the Fruit and Vegetable Recall Questionnaire to a sample of students in all PY17 FoodCorps schools. This would allow for a more in-depth analysis of how programming relates to fruit and vegetable consumption.
- Conduct an in-depth qualitative analysis of the goals and action plans identified and tracked in the PY16 Healthy School Progress Reports. This could provide insight into how programming changes occur in schools.
- Explore how the number of years of FoodCorps programming affects baseline Progress Report scores and change overtime.


## Long-term

- Consider conducting a large randomized, controlled trial that investigates if and how fruit and vegetable consumption change as a school's Progress Report score increases. This would allow FoodCorps to have data on the impact of the program.
- Expand to evaluating other outcomes including academic achievement and pro-social behaviors.




## Introduction

There is increasing recognition that healthy children are better learners (ASCD \& CDC, 2014, Basch 2014). Promoting healthy food is an important component of a comprehensive approach to health and learning. FoodCorps works to connect students to food by promoting a healthier food school environment through three areas of service: Hands-on Learning, Healthy School Meals, and a Schoolwide Culture of Health. A primary outcome for FoodCorps is increased fruit and vegetable consumption at school lunch. FoodCorps partnered with the Laurie M. Tisch Center for Food, Education \& Policy to conduct an evaluation of its programming from January 2015 to December 2016. The goals of this evaluation were to:

1) Revise the FoodCorps Landscape Assessment Tool to better reflect FoodCorps' programming and evidence from the research literature on creating a healthy school environment to promote fruits and vegetables.
2) Better understand how the presence of a FoodCorps service member in a school changes the school food environment.
3) Explore which aspects of a healthy school food environment are related to higher consumption of fruits and vegetables at school lunch.
In order to conduct this evaluation, we developed two instruments and completed three studies over a two-year period.

## Instrument Development

Instrument 1: FoodCorps Healthy School Progress Report: Working alongside the FoodCorps national staff, we revised the FoodCorps Landscape Assessment Tool, which was renamed the Healthy School Progress Report (Progress Report). We developed and evaluated five versions each a revision and refinement of the previous version. We collected and analyzed process and outcome data to inform the edits to each version. The final version of the Healthy School Progress Report collects general school information, assesses FoodCorps three areas of service (Hands-on Learning, Healthy School Meals and Schoolwide Culture of Health), and has two additional sections on Staying Power and Policy. (See Executive Summary Box 1).

Executive Summary Box 1

## Healthy School Progress Report

The Progress Report measures the extent to which schools are conducting activities in the FoodCorps three areas of service:

- Hands-on Learning: Classroom and garden activities (before, during, and after school) that support students growing, cooking, and tasting new foods to build their skills and change their food preferences. ( 50 points on PY16 ${ }^{\text {a }}$ version) ${ }^{\text {b }}$
- Healthy School Meals: The cafeteria experiences that steers students toward the healthiest options and gets them excited to try new healthy foods. (25 points on PY16 version)
- Schoolwide Culture of Health: As a whole, the school community and environment-from hallways to classrooms to cafeteria to grounds-that celebrates healthy food. ( 25 points on PY16 version).
The Progress Report also measures the extent to which school have:
- Staying Power: People across the school community supporting a positive food environment for students. (60 points on PY16 version)
- Policy: State, district and school policies that support a healthy school environment. (14 points on PY16 version)
a PY 2016: Program Year 2016 (academic year 2015-16)
b The PY16 version measured Hands-on Learning in two sections: Hands-on Learning-Knowledge, for classroom lessons and Hands-on LearningEngagement, for garden-based activities. The Program Year 2017 (PY17) version merges these into one section.

Instrument 2: Fruit and Vegetable Recall Questionnaire: We modified an existing questionnaire (Paxton, 2011) to measure students' consumption of fruits and vegetables at school lunch and validated the modified questionnaire, now called the Fruit and Vegetable Recall Questionnaire. We developed and evaluated five versions of the questionnaire to assess validity. The final version has four sections: 1) vegetables consumed during school lunch; 2 ) fruit consumed during school lunch; 3) salad bar; and 4) fruits and vegetables brought from home. Likability and intention to eat fruits and vegetables in the future were also assessed.

# Executive Summary <br> (continued) 




## Studies and Methods

Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools. This descriptive study provides data from the FoodCorps Healthy School Progress Report in the 298 FoodCorps schools that completed it in Fall 2015 and Spring 2016.
Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools. This pre-post, intervention-control study, with FoodCorps and control schools. This study compared Healthy School Progress Report scores (from Fall 2015 to Spring 2016) for 12 FoodCorps schools compared to their 12 matched control schools, with a secondary analysis that included 7 of these pairs.
Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch. This cross-sectional study, with 20 representative FoodCorps schools from eight states, examined the associations between Healthy School Progress Report scores and consumption of fruits and vegetables at school lunch by second and third grade students. Students' consumption of fruits and vegetables was measured using before and after meal digital photographs as the primary outcome and the self-report Fruit and Vegetable Recall Questionnaire data as a secondary outcome. We also conducted analyses on which school demographics were correlated with fruit and vegetable consumption at school lunch to help understand and interpret the association found between FoodCorps areas of service and school lunch consumption.

## Results

NOTE: Please note that Healthy School Progress Report score is based on a 100-point scale for the three areas of service (Hands-on Learning, Healthy School Meals, and Schoolwide Culture of Health).
The major results from the development of Instrument 1: FoodCorps Healthy School Progress Report were:

- The Progress Report is an evidence-informed tool. It also has content validity, since it was reviewed by experts who work in school-based nutrition education and gardening, and is sensitive to change. It is reflective of FoodCorps programming. FoodCorps can expect to have a wide range of Progress Report scores on the $0-100$ scale. FoodCorps
can use the three levels of programming of Planting Seeds, Starting to Grow, and Flourishing, as a guide for the level of FoodCorps programming in schools. (See Executive Summary Box 2). Schools can also be encouraged to use the Progress Report as a menu of options for programming ideas. This can help schools understand and appreciate that they are not expected to implement all of the programming ideas that are on the Progress Report.

Executive Summary Box 2

## Levels of Programming in Schools

The data from the PY2016 Healthy School Progress Report were used to develop three levels of Programming:

| Levels | Progress Report Score <br> (Areas of Service,1-100) | Staying Power Score <br> $(0-60)$ |
| :--- | :---: | :---: |
| Planting Seeds <br> laying the foundation | $0-32$ | $0-19$ |
| Staring to Grow <br> making progress | $33-52$ | $20-31$ |
| Flourishing <br> significant strides | $53-100$ | $32-60$ |

The major result from the development of the Instrument 2: Fruit and Vegetable Recall Questionnaire was:

- The Fruit and Vegetable Recall Questionnaire is a valid tool sensitive to change for measuring fruit and vegetable consumption at school lunch and can be used with students as young as second grade. When compared to digital photography in a sample of 20 representative FoodCorps school, the match rate between student selfreport and digital photography for fruits and vegetables on the tray was $89 \%$, which is high. For the amount eaten, match rate was $75 \%$. This is comparable to other studies that have validated self-reported survey data to direct measures of school children's fruit and vegetable consumption.
The major results from Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools were:
- The overall mean score on the Progress Report (range 0-100 for the three areas of service) among the 298 FoodCorps schools was 42.7 (Fall 2015) with an average increase of 8 points at one year (Spring 2016). Over 75\%

of schools made some positive improvement.
- The biggest change scores on the Progress Report were associated with:
- Lower baseline scores: Progress Report data suggests that schools that started with the lowest scores had the greatest changes over a one-year period ( $\mathrm{p}<0.001$ ). As an example, schools that scored in the $0-32$ range ( $\mathrm{n}=70,24.9 \%$ ) in Fall 2015 increased an average of 15.7 points. Schools that scored in the 33-52 range ( $\mathrm{n}=145$, $51.6 \%$ ) in Fall 2015 increased an average of 7.1 points. Schools that scored in the 53-100 range ( $\mathrm{n}=66,23.4 \%$ ) in Fall 2015 only increased an average of 1.1 points.
- More service hours spent per week at school: Schools where service members spent more hours per week were associated with greater changes in the Progress Report score after one year ( $\mathrm{p}<0.01$ ). As an example schools with service members spending 9 or more hours ( $\mathrm{n}=93,29.5 \%$ ) increased an average of 9.2 points, as compared with schools that had service members who spent fewer than 5 hours a week ( $\mathrm{n}=130,41.3 \%$ ) increased only an average of 3 points.
- Being an elementary school: As compared to high schools, elementary schools were associated with greater changes in their Progress Report scores. Increases averaged 8.5 -point increase for elementary schools ( $\mathrm{n}=203,75.5 \%$ ) compared to 5.5 a point for high schools ( $\mathrm{n}=27,10.0 \%$ ).
- Higher Staying Power score: Schools with higher Staying Power scores had larger changes in their Progress Report scores than those with lower Staying Power scores ( $\mathrm{r}=0.60, \mathrm{p}<0.001$ ).
- The Staying Power section (schools' supports to institutionalize practices across the three areas of FoodCorps programming) increased an average of 4 points from 23 to 27 (scale 0-60) after one year, with twothirds of the schools making some positive improvement. More specifically, the largest percentage of schools (about $33 \%$ ) increased teacher support for garden-based activities and integrated garden-based activities with classroom curriculum. In contrast, only $6 \%$ of schools increased parents' support of healthy school meals (e.g., volunteering in the cafeteria during school meals, working with food service staff on how to create healthy meals).

Staying Power had a significantly larger increase when service members spent more hours per week (greater than 9) compared to fewer hours per week (less than 5) ( $\mathrm{p}<0.05$ ).

- Based on data from the Policy section, virtually no schools had changes in state and district policies about nutrition education and garden standards and curriculum. There were, however, schools with modest changes in school wellness policy content addressing healthy eating ( $5 \%$ more schools), school gardens ( $4 \%$ more schools) and food policies ( $8 \%$ more schools). There were also changes in communication of the wellness policy to administration ( $6 \%$ more schools), teachers ( $5 \%$ more schools), and school staff ( $4 \%$ more schools).
- Service members chose goals for programming related to the questions from the Progress Report. These data yielded several results:
- Goals related to Hands-on Learning-Knowledge were chosen $61 \%$ of the time. Goals related to Handson Learning-Engagement were chosen $84 \%$ of time. Goals related to Healthy School Meals were chosen $73 \%$ of the time. And, goals within Schoolwide Culture of Health were chosen $79 \%$ of the time. Thus, it was common for service members to choose goals across all areas of service.
- The specific questions within the areas of service that were most commonly selected as a goal were to increase the number of garden-based activities classes receive (about 47\%) and encourage families to both serve fruits and vegetables at home and get involved in programming at school (about 43\%).
- Choosing a goal did not always lead to changes on the Progress Report related to that goal. The only three that were significant were in the area of service related to Schoolwide Culture of Health: school respected healthy eating ( $\mathrm{p}<0.01$ ), encouraging families to eat more fruits and vegetables ( $\mathrm{p}<0.01$ ), and providing students with additional opportunities, such as fieldtrips to farms ( $\mathrm{p}<0.05$ ). For example, to encourage families to eat more fruits and vegetables the service member might have set a goal to conduct two workshops during the school year that provides families with skills on cooking vegetables and ideas for how to incorporate more vegetables into recipes from their culture.


# Executive Summary <br> (continued) 



The major result from Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and nonFoodCorps Schools was:

- FoodCorps schools did not have significantly higher changes to the Progress Report scores than nonFoodCorps matched-control schools. Although Progress Report change scores were higher overall and for Hands-on Learning, Knowledge, Healthy School Meals, Schoolwide Culture of Health, and Staying Power in the FoodCorps schools compared to non-FoodCorps schools, these differences did not reach statistical significance. The small sample size ( 12 schools each) due to challenges in recruitment for this study may have made it difficult to detect statistically significant differences, if they existed.
- In a secondary analysis, which excluded 5 pairs of schools (one pair due to control school contamination and four pairs due to zero Progress Report change score, possibly due to lack of time to complete the Progress Report). With this analysis, we found that overall change score for the areas of service were significantly higher in the FoodCorps schools as compared to the matched control (FoodCorps increased by 13.7 points and Control increased by 2.7 points, $\mathrm{p}<0.01$ ).

The major results from Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch were:

- Almost all students ( $96 \%$ ) across the 20 FoodCorps schools had fruit or vegetables on their tray.
- Based on digital photography data, higher scores on Hands-on Learning-Knowledge were associated with a higher percentage of students eating any fruits and vegetables, and students eating a larger portion of fruits and vegetables. As compared to students in schools that scored the lowest on Hands-on Learning-Knowledge, students in schools that scored the highest were eating about triple the amount of fruits and vegetables (. 18 cups compared to .61 cups, $\mathrm{p}<0.001$ ). This suggests that schools where students had more Hands-on Learning activities, and those activities included evidence-based bestpractices, were associated with increased consumption of fruits and vegetables at school lunch. Results were similar when using the Fruit and Vegetable Recall Questionnaire instead of digital photography.
- There was no association between Healthy School Meals, Schoolwide Culture of Health, or Staying Power scores and consumption of fruits and vegetables at school lunch.


## Conclusions and Implications

## Two Valid New Instruments: FoodCorps Healthy School Progress Report \& Fruit and Vegetable Recall Questionnaire

The FoodCorps Healthy School Progress Report appears to be a valid tool that can detect change and is reflective of FoodCorps programming. As stated above the Progress Report measures programming in the FoodCorps areas of service and the scoring indicates the level of programming in a school.

The Fruit and Vegetable Recall Questionnaire also appears to be a valid tool, sensitive to change. It is feasible to administer and implement in a classroom setting for a wide range of FoodCorps schools and in students as young as second grade.
We recommend that FoodCorps consider if and how these instruments can be used by other organizations that conduct food-related work in schools.

## Recommend Using the New Instruments for Ongoing Program Evaluation

We believe both the FoodCorps Healthy School Progress Report and the Fruit and Vegetable Recall Questionnaire can be used for ongoing program evaluation in FoodCorps schools in second graders and older. The Fruit and Vegetable Recall Questionnaire can be used to monitor fruit and vegetable consumption change in FoodCorps schools, particularly when more intensive methods such as digital photography are cost prohibitive. We also believe these tools have potential application to others doing similar work. An advantage of the Fruit and Vegetable Recall Questionnaire is that it can be easily adapted to a variety of school lunch settings.

## Several Factors Associated with Bigger Changes on FoodCorps Healthy School Progress Report

Lower baseline Progress Report scores, more FoodCorps service member hours, being an elementary school, and higher Staying Power were associated with the biggest changes in Progress Report scores. We believe these data suggest several things. First, FoodCorps may want to try to

# Executive Summary <br> (continued) 


place more service members in schools that currently have a low level of food-related programming, such as schools that are at the Planting Seeds level with a Progress Report score of $0-32$. These are the schools where service members can have the biggest impact on increasing the level of programming.

On the other hand, when service members are placed in schools with higher levels of programming such as schools at the Flourishing level with a Progress Report score above 53 the role of the service members is different. At such schools, it appears the service member's role is to maintain programming, such as continue to conduct classroom or garden lessons or taste-tests in the cafeteria. The service members interviewed by the evaluation team during PY2016 discussed these differences in the role of service members. Service members in schools new to FoodCorps discussed the process of initiating programming, while service members who were working in schools with previous FoodCorps service members and higher levels of programming discussed spending the majority of their time maintaining programming initiated during previous school years, leaving them much less time to initiate new programming.

Second, FoodCorps should continue moving towards a model in which service members spend more hours in a single school as opposed to few hours in more schools, since there were larger changes on Progress Report scores in schools that had service members for more hours. Of note, only $29.5 \%$ of the schools who completed a Progress Report in PY2016 had service members for more than 9 hours a week, while over $41 \%$ o had a service member for fewer than 5 hours a week. If more schools had service members a higher weekly average, with more service members spending much of their weekly hours in one school, this would allow for a more detailed analysis of the level of programming change that could be possible with service members dedicated time to fewer schools.

Third, we found that bigger changes occurred in elementary schools versus high schools, but the studies conducted in this evaluation were not designed to explore why. Perhaps it is easier to implement programming in elementary schools or it is a function of the Progress Report not capturing the type of programming in high schools. Additionally, some parts of the Progress Report, particularly reporting on how many educational or gardening sessions classes received each week was challenging for high schools since students are not divided into discrete classes as is typically the case in
elementary schools. We believe the challenges with finding changes in high schools warrants further investigation, which could be done by exploring the processes of completing the Progress Report, implementing program and setting goals to compare and contrast the experiences of service members in elementary versus high schools.
Lastly, schools that had more people in the school community supporting programming (higher Staying Power score) were associated with bigger changes in programming (higher Progress Report score). This seems to suggest that service members can work on increasing Staying Power concurrently with developing and implementing programming.

## Some FoodCorps Areas of Service are More Common than Others

Service members most commonly increased programming in the area of Hands-on Learning. Since Hands-on Learning was associated with higher consumption of fruits and vegetables, we recommend service members continue to focus on this area of service. Specifically, the results of this study indicate that FoodCorps may want to provide more resources toward supporting service members to incorporate more of the lesson activities and best practices, as presented in the PY2017 version of the Progress Report (See Executive Summary Box 3). In addition, for those service members not doing Hands-on Learning, we would recommend this be encouraged. We recommend each class receive a minimum of 5 hours, and ideally 10 hours of classroom or garden nutrition education during the year. This could be from service members, teachers, or other educators.

Service members were least likely to make changes towards Healthy School Meals; with this area of service having the lowest change score. In particular, there were very few changes in the salad bar. Further analysis revealed that this was due to both schools not starting salad bars and school with salad bars not improving their score. FoodCorps may want to explore why Healthy School Meals was the area of service with the least change (i.e., did not feel it was feasible to make changes, lacked confidence in ability to work with food service employees, not as interesting to promote as the other areas) and ways to support service members in doing this work. Foodcorps may want to develop resources for service members about how to work with schools to start a salad bar, as well as how to create a salad bar that is well utilized.


Executive Summary Box 3

## Best Practices in Hands-on Learning

a. Include opportunities to eat fruits and vegetables through tastings and cooking
b. Create positive social norms that make fruits and vegetables cool
c. Decrease fears of trying new foods
d. Focus on health benefits of eating fruits and vegetables
e. Compare the nutritional value of healthful and less healthful snacks
f. Use MyPlate visual to encourage students to make half their plate fruits and vegetables
g. Promote eating fruits and vegetables at school lunch
h. Help students set personal goals for eating more fruits and vegetables
i. Have students monitor progress toward their goals to eat more fruits and vegetables
j. Share recipes for students to take home to prepare with their family
k. Include activities that build cultural appreciation
l. Create appreciation for plants by exploring what they need to grow and their lifecycle
m . Have students work with plants in the garden
n. Harvest what is grown in the garden
o. Introduce the concept of composting and provide opportunities to compost
p. Teach students how our "farm to plate" food system works
q. Focus on inequity in access to healthy foods and resources that build toward equity

## Hands-On Learning-Knowledge Associated with Fruit and Vegetable Consumption

It was encouraging that almost all students (96\%) had a fruit or vegetable on their tray. This may be a function of the requirement of the National School Lunch Program that reimbursable meals include a fruit or vegetable. Regardless, it suggests that FoodCorps programming can focus on encouraging students to eat fruits and vegetables, not getting fruits and vegetables on their lunch trays. We found that higher Hands-on Learning-Knowledge scores were associated with higher fruit and vegetable consumption (i.e., eating any amount of fruits and vegetables and eating larger portions). The magnitude of the association was meaningful.

Students in schools that scored the highest on Hands-on Learning (Knowledge) were eating about triple the amount of fruits and vegetables (. 61 cups to .18 cups ) as compared to students in schools that scored the lowest. Schools where students had more nutrition education lessons, and those lessons included evidence-based motivational and skillbuilding activities, were associated with students eating more fruits and vegetables at school lunch. We recommend that FoodCorps continue to encourage programming in the area of Hands-on Learning -Knowledge, as stated above with a minimum of 5 hours and ideally 10 hours or more of education for each class. Additionally, we recommend these lessons address the activities and best practices in Box 3. Doing so is particularly important if promoting fruit and vegetable consumption remains a key outcome for FoodCorps. Although we did not see associations with other areas of service (i.e., Hands-on Learning-Engagement, Healthy School Meals, and Schoolwide Culture of Health) with respect to fruit and vegetable consumption at school lunch, it is entirely possible that programming in these areas had other benefits (e.g., consumption of fruits and vegetables outside of school and decreased consumption of snack foods and sweetened beverages, more positive attitudes and beliefs toward healthy, sustainable, local, and fair food [often called "good foods"], students' confidence or self-efficacy in choosing these good foods, and students knowledge about our farm to plate food system) that were not measured in this evaluation but are supported by the literature (Langellotto \& Gupta, 2012, Foster et al, 2008, Roseman, 2011, DiNoia and Byrd-Bredbenner, 2014, Berlin, 2013, Berezowitz et al, 2015).
It is also possible that there are associations with these other areas of service and fruit and vegetable consumption at school lunch, but the sample size of this study was not large enough to detect these smaller associations. Prior research has shown that larger sample sizes are particularly important for detecting change when there is wide diversity among schools, as is the case in the schools with FoodCorps (Tipton, 2013)

Only a few Healthy School Progress Report questions had larger change scores when chosen as a goal

Interestingly, there were only three questions that had larger change scores from fall to spring for schools in which they were chosen as a goal. These were all in the Schoolwide Culture of Health area of service. Perhaps service members see making changes to the Schoolwide Culture of Health

# Executive Summary <br> (continued) 


(e.g., encouraging families, creating respect for healthy food) as more peripheral to their core work and thus making a goal in this area is essential for change to occur.

## Challenges Finding Relationship Between FoodCorps Presence and FoodCorps Healthy School Progress Report

We found that FoodCorps schools did not have significantly higher changes to the Progress Report scores than nonFoodCorps matched-control schools. Although Progress Report change scores were higher in the FoodCorps schools compared to non-FoodCorps schools, these differences did not reach statistical significance. Recruitment for this study was extremely challenging. All FoodCorps service sites received a survey that asked if they had schools ready for a FoodCorps service member, but did not yet have one. Thirty-seven sites responded, and 29 of these were sent initiations to participate. The goal was to enroll 20 pairs of schools in the study. However, only 12 service sites agreed to participate. This may be because it was a lot to ask of service sites to complete the FoodCorps Healthy School Progress Report twice for schools that did not have a FoodCorps service member. If FoodCorps would like to investigate how the presence of a service member changes the school environment, further other study designs may be necessary. One such idea is to allow other groups to use the Healthy School Progress Report and compare the changes achieved by these programs to FoodCorps. Another idea is to work with a few school districts that have FoodCorps service members in some schools and have the school district work with schools without FoodCorps service members to complete the Progress Report.

## Future Directions

## Short-term

The current evaluation generated a variety of interesting questions that we feel warrant further investigation, these include:

- Investigate the facilitators and barriers to conducting Hands-on Learning activities in schools, so that these types of activities can be implemented on a wide scale. This type of investigation would best be accomplished by qualitative interviews with current FoodCorps service members. This could also inform which curricula and resources to share in the FoodCorps Toolshed and training provided to service members, as well as in-
person and virtual training FoodCorps provides to its service members. This may also reveal other changes to the Healthy School Progress report in this area of service, beyond those made between the versions used in PY2016 and PY2017.
- Administer the Fruit and Vegetables Recall Questionnaire to a sample of students in all PY17 FoodCorps schools. This would entail training of the FoodCorps service members (training videos to be created by the Tisch Food Center) on how to administer the brief questionnaire and collect data from one class on two days (to get variety in the menu) during the spring of 2017. This would provide a large dataset to examine the relationship between Healthy School Progress Report PY17 and fruit and vegetable consumption at school lunch across the wide diversity of schools. Analysis of this dataset would inform future changes to the Healthy School Progress Report and also provide additional guidance on the specific areas of service that FoodCorps could develop as resources for their Toolshed.
- An in-depth qualitative analysis of the goals and action plans identified by school teams on the PY2016 Healthy School Progress Report could provide insight as to how Progress Report change occurs, and in which areas of service.
- Explore how the number of years of FoodCorps programming (i.e., 1 to 5 years) affects baseline Progress Report scores, as well as Progress Report change scores over time.


## Long-term

We believe the instrument development and studies provided the foundation for a larger outcome evaluation. First, we believe we demonstrated that the Progress Report, the Fruit and Vegetable Recall Questionnaire, and the digital photography method, were all feasible to implement and acceptable to FoodCorps service members, administrators, and students in FoodCorps schools. We believe a larger controlled study that evaluates the effects of FoodCorps programming on fruit and vegetable consumption is warranted. Other outcomes, such as the effects on FoodCorps programming on academic achievement and pro-social behaviors would also be important to consider given that the link between health and learning is becoming a top priority for schools in the United States.

## Introduction

## Creating Healthy Schools is a National Goal

Healthy children are an important goal for the US government. (White House Report, 2010). Our nation's schools often see the health and well-being of students as separate from their education and learning (ASCD and CDC, 2014). Yet healthy students may be an important component to closing the achievement gap (Basch, 2010). There is renewed interest in connecting the dots between public health and $\mathrm{K}-12$ education. These efforts are encapsulated through the Whole School, Whole Community, Whole Child Model (WSCC) - a combination of the Association for Supervision and Curriculum Development's (ACSD) Whole Child Approach and the Centers for Disease Control's Coordinated School Health Approach. WSCC supports a systematic, integrated, and collaborative approach to health and learning (ASCD and CDC, 2014; and Lewallen, et al, 2015).

One component of WSCC is Nutrition Environment and Services, which encompasses "opportunities to learn about and practice healthy eating through available foods and beverages, nutrition education, and message about food in the cafeteria and throughout the school campus" (Lewallen et al, p. 732). This is important because healthy eating has been linked to improved learning and ensures students can reach their fullest potential (Lewallen et. al, 2015; Bradley et al, 2013). To meet this component of WSCC schools are teaching nutrition education in the classroom, conducting cooking classes, building school gardens, improving school meals and serving local food when possible, and creating a school environment where healthy foods are the norm (Lewallen et al, 2015; Michael et al, 2015; Blank, 2015, and Berezowitz et al, 2015). Research has found that there is strong evidence that the combination of high quality nutrition education with a healthy school food environment leads to higher success in changing eating behavior. (CNPP, 2012, Foster, 2008) There has also been increased interest in connecting education about food and sustainability (Elsden-Clifton and Futter-Puati, 2015).

## FoodCorps' Need For an Evidence-informed Tool to Assess Food and Nutrition Programming in Schools

The WSCC is a framework and not an assessment or implementation tool. Thus, WSCC does not provide guidance on classroom or school practices, programs, or policies that can assess the degree to which a school is meeting the components of WSCC.

To date, there is not a tool specifically devoted to assessing the broad range of food and nutrition education, healthy school meals and a healthy food environment for schools. Tools that do exist have only a few general questions in the area of food as a small part of more general tools to assess health programming in schools. Such an assessment tool is crucial for FoodCorps to achieve its goals of connecting students to healthy food in schools and ultimately creating strategies and priorities that can reach students in our nation's 100,000 schools.

One of the main reasons FoodCorps engaged the Laurie M. Tisch Center for Food, Education and Policy was to revise its Landscape Assessment Tool. FoodCorps had developed this tool and was using it to assess the school environment in order to a) better understand how schools change given their partnership with FoodCorps and through the presence of a service member, and b) inform FoodCorps' goal of scaling its reach. The FoodCorps Landscape Assessment Tool was developed based on the types of programming being conducted by service members, but not based on evidence from the literature on what types of programming have been most successful at increasing students' consumption of fruits and vegetables at school lunch.

## Purpose of this Evaluation

This evaluation had three goals:

1) Revise the FoodCorps Landscape Assessment Tool to better reflect FoodCorps' programming and evidence from the research literature on creating a healthy school environment to promote fruits and vegetables.
2) Better understand how the presence of a FoodCorps service member in a school changes the school food environment.
3) Explore which aspects of a healthy school food environment are related to higher consumption of fruits and vegetables at school lunch.

In order to conduct this evaluation, we developed two instruments and completed three studies over a two-year period.

## Structure of this Report

This report has four major sections: instrument development, studies, discussion, and implications for evaluation and practice.

## Instrument Development

This section presents the methods used to develop two instruments. The first is the Healthy School Progress Report, which measures the healthfulness of the school food environment and was adapted from the FoodCorps Landscape Assessment Tool. The second is a questionnaire for students, called the Fruit and Vegetable Recall Questionnaire, which measures students' fruit and vegetable consumption at school lunch. These instruments are described below.

## Instrument 1: FoodCorps Healthy School Progress Report:

Working alongside the FoodCorps national staff, we revised the FoodCorps Landscape Assessment Tool, which was renamed the FoodCorps Healthy School Progress Report (Progress Report). We developed and evaluated five versions of the tool and collected and analyzed process and outcome data to inform each revision. The final version of the Healthy School Progress Report collects general school information; assesses FoodCorps three areas of service (Hands-on Learning, Healthy School Meals and Schoolwide Culture of Health) and has two additional sections on Staying Power and Policy.

## Instrument 2: Fruit and Vegetable Recall Questionnaire.

This student questionnaire asks students about fruits and vegetables at school lunch (both from the hot meal and the salad bar), and from home. The questionnaire has students report what was on their tray, how much they ate, if they liked it, and if they would eat it again. We conducted a five-phase validation study of this questionnaire.

## Studies

This section presents three studies conducted as part of the evaluation. The Healthy School Progress Report was central to all three studies and the Fruit and Vegetable Recall Questionnaire was used in the third study. These studies are described below.

## Study 1: Description of

 Healthy School ProgressReport Scores in FoodCorps Schools.

This descriptive study provides data from the FoodCorps Healthy School Progress Report in the 298 FoodCorps schools that completed it in Fall 2015 and Spring 2016. The study analyzed how schools scored and how they changed over one year in the three areas of service of Hands-on Learning (measured in two sections, Knowledge and Engagement), Healthy School Meals, and Schoolwide Culture of Health). This study also analyzed how schools changed on the Staying Power and Policy sections of the Progress Report. Finally, this study analyzed how various factors, such as school demographics, service member and service site characteristics, and the specific questions schools chose as goal for programming change influenced scores and the amount of change from the Fall to the Spring assessments.

Study 2: Comparison of Healthy School
Progress Report Scores in FoodCorps and nonFoodCorps Schools.

This pre-post, interventioncontrol study examined difference in changes on the Healthy School Progress Report for FoodCorps schools compared to similar control schools, without a FoodCorps service member. This study included 12 control and 12 FoodCorps schools. A secondary analysis was conducted with 7 pairs, which were true FoodCorps and control schools as intended by the study design.

## Conclusions and Implications

This section presents conclusions from the instruments developed and the studies and provides recommendations for the future direction of evaluation based on this work as well as recommendations for future FoodCorps practice that can be drawn from this evaluation.

## Future Directions

This section presents short- and long-term proposals for next steps related to evaluation and programming.

## Instrument 1: Healthy School Progress Report

This section describes the revisions to the Landscape Assessment Tool, which has been renamed the Healthy School Progress Report. The final version of the Progress Report assesses general school information, the FoodCorps three areas of service (Hands-on Learning, Healthy School Meals, and Schoolwide Culture of Health. It also has two additional sections on Staying Power and Policy.

## Background

Part of the initial Request for Proposals for this evaluation was to revise what was then called the Landscape Assessment Tool that FoodCorps had used to measure school environment. FoodCorps requested a revision that would be based on the research evidence for nutrition education and school environment changes that have the potential to increase students' consumption of fruits and vegetables.

There are several assessments that assess the school environment related to food, such as the Center for Disease Control's School Health Index (CDC, 2014), and the Alliance for a Healthier Generation adaptation of this that reflects their Framework for Best Practices (2016). These cover many school health and wellness topics and as such only has a limited section on nutrition-services. Most of these questions are on menu offerings with very limited questions on nutrition education and gardening or Farm to School activities. A second tool is Smarter Lunchrooms (Just and Wansink, 2010). This tool goes into great depth in the FoodCorps program area of Healthy School Meals but do not cover areas outside of the cafeteria environment. There is also the Healthy Eating Design Guidelines for School Architecture (Huang, 2012) that has questions that touch upon all three FoodCorps areas of service, but particularly for Hands-on Learning and Schoolwide Culture of Health this is more of a check-off of if this is occurring with little details on how it is occurring. Black et al (2015) developed a the School Food Environment Assessment Tools which is specific to sustainability initiatives in schools. Hence this tool also touches upon the FoodCorps areas of service but is not comprehensive.

Therefore, for FoodCorps to be able to assess the full range of programming in their three areas of service, they needed a more comprehensive assessment tool.

To ground the revised tool in the research literature, social cognitive theory (SCT) was used as the organizing framework for the revised tool (Bandura, 1986). Social cognitive theory is the theoretical basis for many nutrition education programs (Contento, 2016) and has been suggested as a good fit for use in Farm-to-School programs (Berlin, 2013). Social cognitive theory helps describe the process of behavior change across 3 factors: personal, behavioral, and environmental. These operate within the context of a social ecological model that has several levels of influence on behavior encompassing intra-personal, inter-personal, institutional, community, and public policy. Having the tool use social cognitive theory and the social ecological model serves two important purposes. First, grounding it in this theory and model that are widely used in the research literature provides a framework to help us to understand why FoodCorps programming is effective at changing students' food consumption behavior, if change occurs. Second this makes the activities done in the three FoodCorps areas of service more likely to be effective at changing students' behavior. More specifically, the tool provides guidance for best practices for Hands-on Learning, how to set up Healthy School Meals, specific programming that create a Schoolwide Culture of Health, how to get people actively involved to enhance Staying Power, and an understanding state, district and local policies that can support programming. (See Box 1)

## Healthy School Progress Report Grounding in Social Cognitive Theory

Social cognitive theory addresses three factors: personal, behavioral, and environmental that influence behavior change. Below describes how these three factors are incorporated into the Progress Report.

## Personal: attitudes and beliefs about the behavior (eating fruits and

 vegetables at school lunch)The Hands-on Learning section of the Progress Report addresses the "personal" social cognitive theory constructs:

- Outcome expectations - believing benefits will come from a healthy behavior.
Examples from the lesson activities and best practices list include discussing benefits, building social norms, and decreasing fears of trying new foods. Visits from farmers, chefs, and local heroes as well as field trips to farms or farmers markets can also increase positive outcome expectations.
- Self-efficacy - confidence in ones ability to do healthy behaviors.

Examples from the lesson activities and best practices include sending home recipes for students to make at home and building cultural appreciation.

- Barriers - understanding obstacles that may make it hard to change behavior and have strategies for how to overcome them.
Examples from the lesson activities and best practices include focusing on how to build equity in access and tastings that build preferences (not liking something is an obstacle to overcome).
- Goal intention - build awareness or intention to do healthy behaviors.

Example from the lesson activities and best practices include promoting fruits and vegetables in school lunch, or using MyPlate to encourage making half the plate fruits and vegetables.

## Behavioral: confidence and skills to perform the behavior (eating fruits and vegetables at school lunch)

The Hands-on Learning section of the Progress Report also addresses some of the "behavioral" social cognitive theory constructs:

- Self-regulation processes - ability to make an action plan to do the behavior and monitor progress on that plan.
Examples from the lesson activities and best practices are setting personal goals for eating more fruits and vegetables and monitoring progress on those goals.
- Food and nutrition skills - information about food, nutrition, cooking,
gardening, etc that can help students do healthy behaviors.
Examples from the from the lesson activities and best practices include comparing nutritional value of healthful and less healthful snacks, learning to work in the garden and how to care for plants, and learning about our farm-to-plate food system.

Environmental: supports and barriers in the environment related to the behavior (eating fruits and vegetables at school lunch)
The Healthy School Meals and Schoolwide Culture of Health sections of the Progress Report address "environmental" social cognitive theory constructs.

- Socio-structural factors - patterned relationships between students and their school environment that promote healthy behaviors.

Examples in the Healthy School Meals section include having tastings of fruits and vegetables in the cafeteria, particularly when food is served by the principal, teachers or students and voting on how students like the food is displayed, role modeling in the cafeteria, and breakfast promotion.
Examples in the Schoolwide Culture of Health section include loudspeaker announcements about and posters about eating fruits and vegetables and opportunities for family, staff and community members to engage in classroom nutrition education, school garden, and the cafeteria.

- Facilitators - structures in the environment that make healthy behaviors easy and acceptable.

Examples in the Healthy School Meals section include setting up appealing lunch lines, displaying fruit in bowls or baskets, making fruits and vegetables the right size, and giving them appealing names.
Examples in the Schoolwide Culture of Health section include class snacks and celebrations with healthy food and fundraisers with healthy food or non-food items

- Impediments - structures in the environment that make healthy behaviors more difficult. These decrease healthy behavior.
Examples in the Schoolwide Culture of Health section unhealthy foods at school events and fundraisers, especially when these are featured.


## Development

We developed 5 versions of the Healthy School Progress Report between April 2015 and July 2016. Below is a timeline followed by an overview, key features, evaluation methods, results, and sample pages from each version.

NOTE: As we developed the Healthy School Progress Report, nomenclature changed. The tool was originally called the Landscape Assessment Tool and had a few other names before becoming the Healthy School Progress Report. Additionally, the Landscape Assessment Tool and first four versions of the Healthy School Progress Report were based on the then FoodCorps three pillars of service (Knowledge, Engagement, and Access). The fifth (PY2017) version transitioned to the FoodCorps three areas of service (Hands-on Learning, Healthy School Meals, and Schoolwide Culture of Health. This section presents the five versions as they were at the time they were developed.

## Timeline

## Version 1: April 2015

Initial update of Landscape Assessment Tool, based on literature review and interviews with service members, FoodCorps board of directors provided feedback. Added "culture" section.

Version 2: June 3, 2015
First full version. Focus groups held by phone with key FoodCorps stakeholders and review by six nutrition education faculty members.

Version 3: June 26, 2015
Revised based on input of version 2. Conducted a pilot test with 22 PY2015 service members, some from "emerging" schools and some from "rockstar" schools.

Version 4: August, 2015
Revised based on comments from pilot test. Used by PY2016 service members. Conducted cognitive and process evaluation with 10 school teams, FoodCorps collected feedback throughout the year, and calculated descriptive statistics on Progress Reports completed in fall 2015 and spring 2016.

## Version 5: July, 2016

Revised based on all data and feedback received during PY2016. Questions were streamlined and presented as statements, to be a menu of options. Used by PY2017 service members as part of the FoodCorps Healthy School Toolkit.

## Version 1: April, 2015

Overview: This is the initial update the FoodCorps Landscape Assessment Tool and provided the concept and not a full version. This revision is based on a review of relevant nutrition education research literature and request from FoodCorps evaluation team to include social cognitive theory and other psychosocial theories in the revision of the Landscape Assessment Tool. (See Appendix A) This revision was also informed by feedback received from interviews with 7 FoodCorps Service Members on their experience with completing the Landscape Assessment tool. (See Appendix B).

## 4 Domains



## Key Features

- Four domains: knowledge, engagement, access, culture
- Each domain had 5 indicators (see image to left)
- The 20 indicator scored on a $0-5$ scale: $0=$ not addressing indicator; $1=$ getting started; 2 = doing more; 3 = getting there; $4=$ implemented; and 5 = fully implemented
- Brief literature review for each indicator
- Proposed policy questions and process questions for knowledge, engagement and access


## Process Evaluation Methods

- Feedback from FoodCorps staff and Board of Directors


## Results

- FoodCorps approved adding "culture" as a 4th domain in addition to the 3 FoodCorps pillars
- Overall positive feedback on having 5 indicators with a 5 point scale for each indicator, for a total of 100 points


## Instrument Development (continued)

## Version 2: June 3, 2015

Overview: This is the first full version and was created to get initial feedback from key FoodCorps stakeholders, nutrition education researchers, and service members to be able to make revisions prior to conducting a pilot test of the instrument (See Appendix C).


## Key Features

- Same basic structure as April version, 4 domains, 5 indicators
- Contains 0-5 point scale for each indicator, based on the nutrition education research literature
- Listing of key terms and definitions
- Collects current score as well as retrospective score from previous school year
- Question on confidence for each indicator
- Question on "how obtained answer" for each indicator


## Process Evaluation Methods

- FoodCorps conducted 4 "Office Hour Sessions" sessions with Board Members (2 participants), Donors (about 27 participants along with an additional call with a program officers from Robert Wood Johnson Foundation), State partners and fellows (2 calls: call 1 had 7 participants, call 2 had 5 participants) (See Appendix D)
- Collected feedback on each question from 6 faculty members in nutrition, and 18 FoodCorps Service Members


## Results

- Requests for increased literature review to support each indicator
- Received extensive comments from faculty members and service members across all questions on how to clarify language and make questions clearer and more objective by adding examples and definitions



## Instrument Development (continued)

## Version 3: June 26, 2015

Overview: This version was refined based on feedback received from FoodCorps stakeholders, nutrition education faculty, and service members on version 2 and is the version used conduct a pilot-test with PY2015 service members (See Appendix E).
D. Among the classes that received nutrition education (Question A) did lessons include activities specifically geared toward getting students excited and motivated to eat F\&Vs?

 (check ALL that apply): Increased perceptions shav eating
shared their favorite F V V sand taked about times they eat them) shared their faver F\& V (e.g., learned health benefits of differen Taught health benefits of eating $\mathrm{F} \& \mathrm{~V}$ s (e.g., brain and red for the heart, or colored teaching about "eat the rainbow") Discussed that eating a larger portion of $\mathrm{F} \mathrm{\& V} \mathrm{~V}$, instead of meat and other foods from animals, or processed foods, creates a Discussed strategies for decreasing barriers/fears of trying new eve past) stories about people who started liking foods they
$\square$ Included cooking and eating $\mathrm{F} \& \mathrm{~V}$ s as a grou - $\square$ Other:

Confidence in responses
${ }_{0}^{5}{ }_{0}^{5}$. very confident O confident O somewhat confident - O not so confident

How did y
answers?
$\square$ conducted

- directly observed others doing this education - talked to one or more teachers
a. surveyed all teachers
$\square$ reviewed curriculum/
lesson plans u
a other:
- 



$\square$ None, lessons did not include any of these activities
- "Cooking" means that the students

## Key Features

- Same basic structure as June 3 version.
- Clarifications, examples, and definitions added throughout
- Checklist added for "how obtained answer" for each indicator


## Process and Outcome Evaluation Methods

- Conducted pilot test, Invited 22 service members (11 each from "emerging" and "rockstar" schools. 19 service members participated, 9 from "emerging" schools and 10 from "rockstar" schools (See Appendix F)


## Results

- Service members overwhelmingly requested Knowledge (nutrition education) and Engagement (school garden) information collected by grade level.
- Service members suggested reformatting to make Healthy School Progress Report feel shorter by having more questions per page
- Service members suggested that for some questions in Focus Areas 3 and 4 yes/no responses was not detailed enough, wanted answers with a scaled range of answers (e.g., never, seldom, often, most days)



## Version 4: August, 2015

Overview: This version is revised based on comments and concerns received during the pilot test and was used by FoodCorps service members in PY2016. Service members completed this version for each of their schools in Fall 2015 and Spring 2016. Results from the Fall 2015 administration were used as the basis for recruitment of schools for the study, "Association Between Healthy School Progress Report and Fruit and Vegetable Consumption at School Lunch." Additionally, for the study "Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools" the non-FoodCorps schools completed this version in Fall 2015 and Spring 2016. (See Appendix G).

## Key Features

- Section 1 General Information added
- Formatting changed to landscape and tighter design for more questions per page
- Domain changed to Focus Areas
- Specific changes for each Focus Area:
- Focus Area 1: All questions now answered for each grade level, was what indicators D \& E in Version 3 combined into question D. Contains 4 scored question, A, B \& C 5 points each, D 10 points.
- Focus Area 2: All questions now answered for each grade level, what was indicators I \& J in Version 3 combined into question H. Contains 5 scored questions E, F \& G 5 points, H 10 points.
- Focus Area 3: Sub questions changed from yes/no to 4-point scale (except serving local food, which remained similar to Version 3) Contains 5 scored questions J, L, M, O, \& P, all 5 points.
- Focus Area 4: One out of the five questions on 4-point scale, rest remain yes/no. Contains 5 scored questions, $Q, R, S, T, \& U$ all 5 points.
- "How obtained answer" changed from each question to once for each focus area
- Staying Power section added with 17 questions
- Policy section added with 14 questions
- Contains literature review, with background from the literature for each scored question
- Creating scoring rubric (See Appendix H)


## Cognitive and Process Evaluation Methods

- Conducted cognitive and process evaluation from 9 FoodCorps schools by conducting, transcribing and qualitatively analyzing 4 interviews from each school - 2 with service member, 1 with service site supervisor, and 1 with a school team member (see Appendix I)
- Reviewed feedback FoodCorps received during sessions at Regional Mid-Year Gathering and FoodCorps reviewed with several key stakeholders, such as funders and other organizations (e.g., Center for Ecoliteracy)


## Results

- Service members and others completing the Healthy School Progress Report reported feeling very discouraged when answering "no" to many questions
- Conflicting feedback on whether or not to report Focus Areas 1 and 2 by grade level
- FoodCorps staff received feedback from service members stating grade level information was too burdensome to complete
- However, this was also discussed during the serve member interviews by the Tisch Food Center who were in agreement that the grade level information was necessary to capture details on who was receiving programming
- Service members and others completing the Healthy School Progress Report reported that the sub-questions throughout provided ideas for what the school could work on changing during the coming year
- Specific comments on individual questions as well as other general feedback (see Appendix I)


## Instrument Development (continued)

## Version 4: August, 2015 (continued)


ticipate in any of the following programs? (check all that apply)
$\square$ Coordinated School Health

Breakfast in the classroom (FFVP)
Team Nutrition
HealthierUS Schools Challenge: Smarte After-school programs are configured differe clubs, topic area classes, etc

FoodCorps
School Grant Program
athier Generation Healthy Schools Program

SECTION 2: HEALTHY SCHOOL PROGRESS REPORT

## FOCUS AREA 1: KNOWLEDGE (Nutrition Education)

For each question, answer for each grade that is in your school. Leave the rest of the grades blank.
A. How many classes in each grade received nutrition education lesson
focused on fruits and vegetables?
(if answer is "o" for all grades, skip to Question E)
For these questions lessons are at least For minutes and focused means at least part of the lesson.
B. Among the classes in each grade that received fruit and vegetable-focused nutrition education lessons, how many
lessons did each class get (on average)?
lessons did each class get (on average)?
C. How many of these lessons
(Question B) had opportunities for
eating fruits and vegetables, either
through tastings or cooking (e.g.,
chopping, mixing, adding ingredients)?
D. Did these lessons (Question B) have activities on:

O very confident
O confident

O somewhat
confident
O not confident
O very confident
O confident
O somenthat
confident
${ }^{\text {confident }}$
2. health benefits of eating fruits and vegetables (e.g., some help the brain to think better, red ones good for heart)?
3. learning about eating for a healthy environment and/or about food justice?
4. decreasing fears of trying new fruits and vegetables (e.g., stories about kids liking items they didn't before)?
5. MyPlate's recommendation to make half
their plate fruits and vegetables at every meal?
6. skills for including more fruits and vegetables at school meals (e.g., making a colorful salad at the salad bar)?
comparing the nutritional value of fruits and vegetables versus snack foods?
8. setting goals (personal or group) fo increasing consumption of fruits and vegetables?
9. monitoring progress toward goals for eating more fruits and vegetables?
10. encouraging students to ask their families to buy more fruits and vegetables?
vegetables. Question B: Fill in how many lessons, on average, each of thesel "groups" (from the General Information section, above) had nutrition education focused on fruits and fruits and vegetables (either through tastings or cooking) for each of these afterschool groupps got. Question C: Fill in how many lessons, on average, had an opportunity to eat

## Version 5: July, 2016

Overview: Version 5 incorporates all that was learned from the cognitive and process evaluation as well as feedback collected from FoodCorps. In addition to changes in the Healthy School Progress Report, much was learned about the process of having teams at the schools complete the Progress Report as well on the process of setting goals, creating action plan steps to complete these goals, and implementing their plans throughout the school year. Thus, FoodCorps created the FoodCorps Healthy School Toolkit that is used by school teams (See Appendix J).

## Key Features

- Redesigned using FoodCorps Style Guide
- Questions now phrased as statements, so that they are presented as a menu of suggestions
- Focus Areas renamed Areas
- Focus Areas 1 and 2 combined into Area One: Hand-on Learning
- Focus Area 3 renamed Area Two: Healthy School Meals
- Focus Area 4 renamed Area Three: Schoolwide Culture of Health
- Specific changes
- Hands-on Learning: Area One - Information on number of classes that received hands-on learning and how many lessons they received moved to school information session. Statement A: Ongoing Cooking, Tasting, and Garden-based Lessons incorporates what was asked in questions $D$ and $H$ in version 4. Items that were in Focus Area 4 in version 4 moved up to Statement B: Field trips and Farmers \& Chef visits. Statement C: School Garden Development and Maintenance was added
- Healthy School Meals: Area Two - Lunch line and salad bar combined into Statement D: Salad Bar and Lunch Line Design. Breakfast promotion was added as Statement H.

Schoolwide Culture of Health: Area Three - Overall, reduced and combined. Now has four statements

- Staying Power section reorganized into the following sub-sections: school administrators, food service directors/managers, teacher, parents, champions and teams, and making curriculum connections
- Policy section reorganized into the following subsections: standards and preferred curriculum, district wellness plan or policy, local food procurement
- Working with FoodCorps national staff to creating scoring for PY2017, as well as a scoring guide for comparing PY2016 version with PY2017 version.

SCHOOL INFORMATION


## Instrument Development (continued)

## Version 5: July, 2016 (continued)

in the classroom, in the garden, before, during, and after school, students grow, cook, and taste new foods, which builds their skills and changes food preferences. Below, you'll see a list of best practices and activities that are stent, your school or school community did that practice over the past school yea please read each statement and ball
Ongoing Cooking, Tasting \& Garden-Based Lessons

1) This school dedicates a space to
food-related activities such as cooking,
gardening, and nutrition education.

2) Lessons and activities use best prion. in food- and garden-based edre fruits and a. Include opportunities to vegetables through tasting or cooking b. Have students work in the garden, doing things like planting, weeding, watering, and nurturing plant growth.
c. Harvest what is growing in the garden.
d. Create positive social norms through d. Crivities that make fruits and vegetables activities that make fruits and vegetable
"cool" and allow students to share their favorites.

> JI AREA TWO: HEALTHY SCHOOL MEALS
2) Make lunch a respected part of that a reasonable noise level (e.g., no regular fighting, yelling, or whistle blowing) school and have teachers and administrators present during lunch. 3) Decorate
colorful posters, colorful paint on the walls).
4) The school serves lunch to students.

If so, the school can
a. Set up the meal line so that fruits, vegetables, and meal choices look appealing
b. Pre-plate vegetables to establish
taking and eating them as a social norm.
c. Display fruit in bowls or baskets that are easy for students to reach.
d. Whole vegetables and fruit are the right size for students to eat or cut into halves and auarters.
e. Highlight fruit and vegetable recipes, menu boards, and signs with creative and appealing names.

Did this happen in the past year?
$\bigcirc_{\text {Never }} \bigcirc_{\text {seldom }} \bigcirc_{\text {often }} \bigcirc_{\text {Most or all days }}$ $\bigcirc_{\text {Never }} \bigcirc_{\text {seldom }} \bigcirc_{\text {Moften or all days }}$ $\mathrm{O}_{\text {res }} \mathrm{O}_{\mathrm{no}}$
$\mathrm{O}_{\text {yes }} \mathrm{O}_{\text {no }}$

Did this happen in the past year?
$O_{\text {Never }} O_{\text {seldom }} O_{\text {often }} O_{\text {mostorall days }}$ $O_{\text {Never }} O_{\text {seldom }} O_{\text {offen }} O_{\text {Mostorall days }}$
$\mathrm{O}_{\text {Never }} \mathrm{O}_{\text {seldom }}$ Ooften $\mathrm{O}_{\text {most orall days }}$ $O_{\text {Never }} O_{\text {seldom }} O_{\text {often }} O_{\text {Most orall days }}$ $\mathrm{O}_{\text {Never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {Most orall days }}$

## AREA THREE: SCHOOLWIDE CULTURE OF HEALTH <br> whole, community and environment-from hallways to classrooms to cafeteria to grounds-celebrates healthy food. Below, you'll see a list of best practices and activities that are shown to encourage and support students making healthy food choices. Please read each statement and indicate whether, and/or to what extent, your school or school commaty

Celebrations, Events, Rewards \& Snacks
is the main choice for chacks and meals.

| Onever | Osometimes | Oll or most of the time | OThe school doesn't have these |
| :---: | :---: | :---: | :---: |
| Onever | Osometimes | All or most of the time | Othe school doesn't have these |
| Onever | Osometimes | All or most of the time | OThe school doesn't have these |
| Onever | Osometimes | All or most of the time | The school doesn't have these |

## exime

Onever $\bigcirc_{\text {sometimes }} \bigcirc_{\text {All or most of the time }} \bigcirc_{\text {The school doesn't have these }}$
Vending machines have healthy options as the main choice or are not available.

## Discussion

The FoodCorps Landscape assessment tool is now the Healthy School Progress Report and is encompassed in the FoodCorps Healthy School Toolkit. The original Landscape Assessment tool had 33 items. The PY2016 version had 13 questions on General Information, 18 questions in the three areas of service, many with multiple sub-questions, 17 items in the Staying Power section and 14 in the Policy Section. The PY2017 version has 16 questions on School Information, 8 questions on Hands-on Learning (including one with 17 sub-questions), 13 on Healthy School Meals, 14 on Schoolwide Culture of Health, 35 questions on Staying Power, and 14 on Policy. The PY2017 version reflects FoodCorps programming, informed by FoodCorps stakeholders is evidenceinformed, and measures factors that the research literature has found increase consumption of fruits and vegetables children and youth.

We have shown the FoodCorps Healthy School Progress Report to be a valid tool based on content (input from nutrition education experts, service members, and school personnel), construct (schools who scored high on Landscape Assessment also scored high on this tool), and criterion validity (schools who score high on the nutrition education questions had students who ate more fruits and vegetables).

The version of the Progress Report used during PY2017 is evidence-informed, valid, and reflective of FoodCorps programming.

The tool could also be used by other organizations who are conducting food-related programming in schools. We recommend FoodCorps develop a plan for if and how this instruments can be used by other organization that conduct food-related work in schools.

## Healthy School Progress Report

The Progress Report measures the extent to which school are conducting activities in the FoodCorps three areas of service:

- Hands-on Learning: In the classroom, in the garden, before, during, and after school, students grow, cook, and taste new foods, which builds their skills and changes food preferences. ( 50 points on PY16 version)
Of note, the PY16 version measured Hands-on Learning in two sections: Hands-on Learning-Knowledge, for classroom lessons and Hands-on Learning-Engagement, for garden-based activities. The PY17 version merges these into one section.
- Healthy School Meals: The cafeteria experience steers students toward the healthiest options and gets them excited to try new healthy foods. ( 25 points on PY16 version)
- Schoolwide Culture of Health: As a whole, the school community and environment-from hallways to classrooms to cafeteria to grounds-celebrates healthy food. (25 points on PY16 version).
The Progress Report also measures the extent to which school have:
- Staying Power: People across the school community supporting a positive food environment for students. (60 points)
- Policy: State, district and school policies that support a healthy school environment. (14 points)


## Instrument 2: Fruit and Vegetable Recall Questionnaire

This section describes the development of a survey that asks students about the fruits and vegetables they eat at school lunch that can be used by students as young as second grade.

## Background

Despite the well-established health benefits of following a dietary pattern rich in fruits and vegetables, few American children (2-19y) meet federal dietary recommendations for their consumption (Lorson et al, 2009). Inadequate intake of fruits and vegetables puts children at increased risk for obesity and other chronic diseases (USDA). There is growing interest in school-based interventions to encourage positive attitudes toward and consumption of fruits and vegetables.

The Healthy, Hunger-Free Kids Act has prompted schools participating in the National School Lunch Program to increase fruits and vegetables served at school lunch. Students in grades K through 5 need to be offered at least $1 / 2$ cup for fruit and $1 / 2$ cup of vegetables per day, although, and are required to have either a fruit or vegetable on their tray to be federally reimbursable meal. .

There is increasing interest in evaluating the effectiveness of school-based programs to promote consumption of fruits and vegetables. Several methods have been used in the school lunch setting to overcome this challenge. For example, direct observations or weighed-plate waste of school lunch have been widely used, though these methods are labor-intensive and require highly trained research staff (Taylor et al, 2014). Digital photographs and of school lunch are also considered a gold-standard assessment method, and allow researchers to spend less time in the cafeteria collecting data (Swanson et al, 2008).

While students' self-reports decrease time and resources for data collection, there is concern about accuracy of the data (Subar et. al., 2015). To our knowledge, two previous paper and pencil instruments have been validated for use in measuring fruit and vegetable consumption at school lunch (Wallen et al, 2011; Paxton et al, 2011). The School Lunch Recall Questionnaire -- is administered immediately following school lunch in an attempt to minimize the memory retention period. A previous validation study found that this instrument has modest accuracy in quantifying the consumption of school lunch meal components as compared to direct observations among 3rd to 5th graders in a summer school setting (Paxton et al, 2011). However, little is known about the accuracy of this instrument specific for fruits and vegetables and for use among a younger population of students.

The existence of a valid, self-report instrument for measuring fruit and vegetable consumption in an elementary school-aged population would be of use in evaluating school-based programs in lieu of the aforementioned methods that are more costly and labor-intensive. Thus, the objective of this study was to validate a paper-andpencil questionnaire (modified from the School Lunch Recall Questionnaire described in Paxton et al, 2011) for assessing fruit and vegetable consumption during school lunch among 2nd and 3rd grade students within elementary schools participating in the National School Lunch Program.

## Methods

Overview. This validation study was conducted in 5 phases. The questionnaire was modified after each phase, based on qualitative (e.g. research staff perceptions of what worked well and what didn't) and quantitative results, with the goal of obtaining a level of validity consistent with or greater than that of previous literature (using the study by Paxton et al 2011 as the criterion). All data for this validation study were collected between May 2015 and June 2016. The Institutional Review Boards of Teachers College Columbia University and the New York City Department of Education approved this study.

Participants. In Phases 1 through 4, participants were 2nd grade students from three New York City public elementary schools. These schools were a convenience sample chosen based on their proximity to research staff, prior relationships with the research center, and current participation in the National School Lunch Program. All second grade students present on the day of data collection were eligible to participate, unless parents opted to have their children not participate, and provided written assent in the classroom prior to data collection. School information obtained from rosters and the New York City Department of Education are displayed in Table 1. All three schools followed a similar lunch service procedure, including the use of stand-alone salad bar that is offered after the point-of-purchase and is not counted as part of the federally reimbursable meal. Menu items served on the days of data collection were similar across schools, with only one vegetable item and 1 to 3 fruit items served.

In Phase 5, the participants were 2nd and 3rd grade students from 20 schools participating in the FoodCorps program. These schools were selected to participate in a study to assess the relationship between the school environment and students' fruit and vegetable consumption, but were included in this validation study to ensure that the questionnaire performs similarly in different sociodemographic and school lunch service contexts. School information obtained from rosters and the Common Core of Data are displayed in Table 1. The school food service procedure was different in each school, but all schools adhered to the National School Lunch Program nutritional requirements for this age group. Given that salad bars were not used in a similar fashion across all these schools, we asked about each item separately and did not use the "salad bar" section of the questionnaire.

Procedure. The data collection process was the same for all phases and the data collection staff included up to 8 graduate-level students in nutrition and/or adult volunteers. Before lunch, research staff visited 2nd and 3rd grade classrooms and students were each given a unique identifying code, written on both a wristband and sticker (attached to the student's back), which was used to match digital photos and questionnaires. No individual sociodemographic information was collected during this study.

Before and After Meal Digital Photos. We used a digital photography protocol as the criterion method for this validation study, adapted from Swanson et al, 2008 and Taylor et al, 2014. Prior to students arriving in the cafeteria, research staff set up photo stations and participated in a 1-hour training on the data collection protocol. We used up to four digital cameras (Cyber-shot DSC-W800, Sony Corp., USA) attached to a 13 -inch tripod affixed at a 60-degree angle on a folding table. The table with cameras was placed directly after the serving line to capture before-meal photos. As the students left the lunch line in the cafeteria, the sticker was removed from the back of the student and placed on the lunch tray. Lunch trays were placed in a marked area on the table and the photographer conducted a visual inspection of the tray to assure all foods, as well as the sticker with the code number, were fully visible before taking the photo. The table was moved nearer to the tray disposal area once all students had exited the line in order to capture post-meal photos; each photo was taken once the student completed their meal, but before discarding their tray. In order to capture fruits and vegetables brought

## Instrument Development (conitued)

from home, one member of the research staff circulated the lunchroom with a camera to obtain photos at the lunch table. (Due to staff and logistical constraints, we did not capture foods from home during Phases 1 and 3. Furthermore, across all Phases, we were unable to verify the amounts consumed of foods from home given that foods were often packed away in lunch boxes and not consistently present in both before- and after-meal photographs).

Fruit and Vegetable Recall Questionnaire (FVRQ). We used the School Lunch Recall Questionnaire (described in Paxton et al, 2011) as the basis for our Fruit and Vegetable Recall Questionnaire (FVRQ), a group administered paper-and-pencil questionnaire. To make the student version understandable and "studentfriendly", it is titled, Fruits and Vegetables at School Lunch. For each fruit and vegetable served at school lunch, the FVRQ asked students: (1) Did you have [insert menu item] on your tray? "Yes" or "No" (2) How much of [insert menu item] did you eat? " (3) How much did you like [insert menu item]? (4) Would you eat [insert menu item] next time at school lunch? "Yes," "Maybe," "No." For salad bar, the FVRQ asked students: (1) Did you have any food from the salad bar on your tray? "Yes" or "No" (2) How much of the salad did you eat? (3) How much did you like the salad? (4) Would you eat the salad next time at school lunch? Fruits and vegetables brought from home were captured by the FVRQ through 4 additional questions: (1) Did you bring any fruit from home? "Yes" or "No" (2) How much of the fruit from home did you eat? (3) Did you bring any vegetables from home? "Yes" or "No" (4) How much of the vegetables from home did you eat?

The FVRQ was administered by research staff in all 2nd and 3rd grade classrooms directly following lunch or recess (not more than 30 minutes following the meal). Students used the unique code from the wristband to identify themselves on the questionnaire. Staff administering the questionnaire guided students through each question, and had the students fill in the food options served for lunch on that day. Typically the FVRQ took classes about 15 minutes to complete.

Data analysis. Digital photos were exported onto a desktop computer, renamed, and matched using the unique code number from sticker affixed to the tray visible in the photograph. One analyst reviewed each photo for food items present and, by comparing the before-meal and after-meal photos, amounts consumed using a scale consistent with that of the questionnaire (the reviewer was blinded to the students' response options on the questionnaire) During Phase 5, six undergraduate-level students coded the photos using an 11-point scale ( 0 to $100 \%$, in $10 \%$ increments), which were collapsed to be consistent with the questionnaire responses. Every tenth photo, as well as any photo in which there were uncertainties (i.e., missing or occluded food items), was reviewed by a team of three researchers who came to a consensus on the coding scheme for that photo. We assumed a standard portion size for fruit and vegetable options at school lunch based on the National School Lunch Program requirements for K-5th grade students: 1 NSLP serving of fruit is 0.5 cups and one serving of vegetables is 0.75 cups. Amount consumed for salad bar was judged relative to the self-served portion visible in the beforemeal photo.

We then matched each student's questionnaire and before- and/or after-meal lunch tray photographs using the unique identification code to create "sets". We used a protocol adapted from previous studies to categorize the accuracy of the FVRQ as compared to the digital photographs (Paxton et al, 2011). We conducted our analyses on the first two items on the questionnaire: on tray and amount eaten. For the on tray analysis, we included all sets for which we could match a questionnaire with a before-meal photo (cases with only an after-meal photo were excluded). For the amount eaten analysis, we included sets for which we could match the questionnaire with a both a before- and after-meal photograph.

## Instrument Development (continued)

Instrument 2: Fruit and Vegetable Recall Questionnaire
If the photograph and the FVRQ agreed on the presence of a menu item on the tray, then it was deemed a "match". If the photo showed an item present on the tray, but it was not reported on the FVRQ, it was called an "omission." If the photograph did not show an item present on the tray but it was reported on the FVRQ it was called an "intrusion". The total number of matches, omissions, and intrusions were tallied for each item category (fruit, vegetable, salad, home vegetable, home fruit) present.

The same protocol was followed to establish accuracy for amount eaten of each menu item. We also calculated a quantitative estimation of amount consumed by converting each response option to a serving size: Phase 1 - I didn't eat any $=0$ servings, I tasted it $=0.10$ servings, $I$ ate a little bit $=0.25$ servings, I ate half $=0.50$ servings, I ate most $=0.75$ servings, and I ate all $=1$ serving. Phases $2-5-$ none $=0$ servings, a little $=0.33$ servings, half or most $=0.66$ servings, and all $=1$ serving. Serving size inaccuracy per item was the difference between what was reported on the FVRQ and what was observed in the photo. We summed the absolute value of serving size inaccuracy for each fruit and vegetable item to obtain an estimate of total inaccuracy.

We converted the response options for amount eaten to cup equivalents for quantitative interpretation. For Phase 1 : I didn't eat any $=0$ servings, $I$ tasted it $=0.10$ servings, $I$ ate a little bit $=0.25$ servings, $I$ ate half $=0.50$ servings, I ate most $=0.75$ servings, and $I$ ate all $=1$ serving. For phases 2 to 5 : "I didn't eat any" $=0$ cup equivalents, "A little" $=0.15$ cup equivalents, "Half or most" $=0.30$ cup equivalents, and "All" $=0.5$ cup equivalents (to match with NSLP guidelines for fruit and vegetable items served to students).

Then, we calculated total inaccuracy for each student, which was a measure that summed the inaccuracy for reporting across all fruit and vegetable items asked of each student on a given day, minus the estimate obtained from the digital photographs. This method was used so as to be consistent with the study by Paxton et al (2010) and can be interpreted as the degree of inaccuracy expected when quantitatively interpreting the responses on the Questionnaire in a cup equivalent amount as compared to the criterion method.

We calculated these variables (match rate, omission rate, intrusion rate for foods on the tray, match rate and total inaccuracy for amount eaten) for each phase separately. Given that the changes to the questionnaire were minimal between Phase 3 and 4 (only the reduction of the training exercise from 3 to 2 pages), we also present the results of these phases combined to estimate the overall validity of the instrument in its final stages. Data were analyzed using SPSS version 23.

## Results

Table I2.1 describes the school characteristics and menus for all five phases. In Phase 1, we collected questionnaires from 46 students and photographs of 42 students' lunch trays, of which $\mathrm{n}=1$ were post-only and were excluded from further analysis. A total of 41 questionnaires could be matched with a before meal photo and 36 cases could be matched with both a before-and after-meal photo. In Phase 2, we collected questionnaires from 135 students and photos of 112 students lunch trays, of which 50 after-meal photos were excluded because we did not collect a before-meal photo. The remaining 62 cases had could be matched with a before-meal photo; of these, 50 cases had both a before-and after-meal photo. In Phase 3, we collected photos of 80 students lunch trays. Of these, $\mathrm{n}=2$ were post-only and were excluded from further analysis. We collected0 questionnaires from 96 students, of which $\mathrm{n}=71$ could be matched with a before-meal photo. For $\mathrm{n}=60$ cases we were able to match a questionnaire to a before-and after-meal photo. In Phase 4, we collected photos of 66 students lunch

## Instrument Development (continued)

Instrument 2: Fruit and Vegetable Recall Questionnaire
trays. Of these, $\mathrm{n}=2$ were post-only and were excluded from further analysis. We collected questionnaires from 69 students, of which $n=63$ could be matched with a before-meal photo. For $n=44$ cases we were able to match a questionnaire to a before-and after-meal photo. In Phase 5, we collected questionnaires from a total of 1323 students, of which $\mathrm{n}=976$ could be matched to a matched set of before and after-meal photographs.

Table I2.1. School characteristics and lunch menu for five phases of the validity study of the Fruit and Vegetable Recall Questionnaire as compared to digital photographs among 2nd and 3rd grade students in 23 public elementary schools in the U.S., 2015-2016

|  | Phase 1 |  | Phase 2 | Phase 3 | Phase 4 | Phase 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School characteristics | School A * |  | School AA * | School AA * | School B * | Schools C-V † |
| Male (\%) | 53.5\% |  | 49.1\% | 49.1\% | 49.5\% | 51.4\% |
| Free/reduced price lunch eligible (\%) | 100.0\% |  | 89.4\% | 89.4\% | 49.8\% | 74.6\% |
| Black (\%) | 30.1\% |  | 0.7\% | 0.7\% | 13.2\% | 40.1\% |
| Hispanic (\%) | 61.6\% |  | 96.5\% | 96.5\% | 42.2\% | 22.1\% |
| White (\%) | 3.8\% |  | 2.4\% | 2.4\% | 37.9\% | 29.4\% |
| English language learners (\%) | 12.4\% |  | 29.3\% | 29.3\% | 9.8\% | -- |
| Date(s) | 5/11/2015 | 5/20/2015 | 1/25/2016 | 3/8/2016 | 3/23/2016 | $\begin{gathered} 4 / 2016- \\ 6 / 2016 \end{gathered}$ |
| Items served |  |  |  |  |  |  |
| Vegetable(s) | Broccoli | Broccoli | Cucumbers | French fries | Broccoli | See Table S3.7. |
| Fruit(s) | Peach cup (Sunrise Growers®) | Peach cup (Sunrise Growers®) | Strawberry fruit cup (Sunrise Growers), Apple | Apple, banana, orange | Banana, pear | See Table S3.7. |
| Salad bar items | Lettuce, peppers, cucumbers, carrots | Lettuce, peppers, cucumbers, carrots | Lettuce, cucumbers, carrots, broccoli | Lettuce, cucumbers, tomatoes, spinach | Carrots, lettuce, tomatoes, cucumbers, peppers | See Table S3.7. |

* School characteristics were obtained from New York City Department of Education for the 2015-16 school year.
$\dagger$ School characteristics were obtained from the National Center for Education Statistics Common Core of Data for the 2013-14 school year.

Summary of participating schools (Table 12.1):

- The schools in Phases 1 through 4 were all in New York City, making the structure of the lunches similar across all schools. The schools in Phase 5, which are the 20 schools participating in the Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch had wide variability in school characteristics and also in the structure of how lunch was served.
- All schools took part in the National School Lunch Program (NSLP) and lunches met the nutritional standards requirements for NSLP.

Throughout the development of the FVRQ, we made modifications to the instrument based on research staff qualitative reports. Table I2.2 describes how the FVRQ was refined for each phase of the validation study with respect to page orientation, font size, inclusion of a training activity or not, response options for amount eaten, preference and salad bar items, and visuals on the questionnaire (e.g., icons to orient the student to each question and smiley faces to reinforce response options).

## Instrument Development (continued)

Instrument 2: Fruit and Vegetable Recall Questionnaire
Table I2.2. Summary of the refinement of the Fruit and Vegetable Recall Questionnaire across each of the five phases of this validity study as compared to digital photographs across 2nd and 3rd grade students in 23 public elementary schools in the U.S., 2015-16

| Instrument characteristics | Phase 1 | Phase 1 | Phase 2 | Phase 3 | Phase 4-5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Orientation | Landscape | Landscape | Landscape | Portrait | Portrait |
| Font size | 12pt | 12pt | 12pt | 14pt | 14pt |
| Training activity | No | No | No | 3 pages (1"on tray," 2 "amount eaten") | 2 pages (1"on tray," <br> 1 "amount eaten) |
| Fruit and vegetable options | Options are prefilled | Students write in option 5 times | Students write in option 1 time | Students write in option 1 time | Students write in option 1 time |
| Amount eaten response options | 6 amount eaten response options: <br> - I didn't eat any <br> - I tasted it <br> - I ate a little bit <br> - I ate half <br> - I ate most <br> - I ate all | 6 amount eaten response options: <br> - I didn't eat any <br> - I tasted it <br> - I ate a little bit <br> - I ate half <br> - I ate most <br> - I ate all | 4 amount eaten response options: <br> - None <br> - A little <br> - Most <br> - All | 4 amount eaten response options: <br> - None <br> - A little <br> - Most <br> - All | 4 amount eaten response options: <br> - None <br> - A little <br> - Most <br> - All |
| Salad bar response options | Salad bar response options: yes, no | Salad bar response options: yes, no | Salad bar response options are numeric (for number of items taken): 0, 1, 2, 3 | Salad bar response options: yes, no | Salad bar response options: yes, no |
| Preference response options | Preference response options: <br> - I didn't eat any <br> - I loved it <br> - I liked it <br> - I didn't like it | Preference response options: <br> - I didn't eat any <br> - I loved it <br> - I liked it <br> - I didn't like it | Preference response options: <br> - I didn't eat any <br> - I loved it <br> - I liked it <br> - I didn't like it | - Preference question response options: <br> - I didn't eat any <br> - I didn't like it <br> - It was okay <br> - I liked it <br> - Includes smiley faces following words | - Preference question response options: <br> - I didn't eat any <br> - I didn't like it <br> - It was okay <br> - I liked it <br> - Includes smiley faces following words |
| Icons for each item | No | No | No | Yes | Yes |

Summary of the main refinements of the Fruit and Vegetable Recall Questionnaire through Phases 1-5. (Table 12.2):

- Changes in page orientation and font size made the instrument visually easier to understand.
- Training activity taught students what was meant by "on tray." Students learned how to determine the "amount eaten" through pictures of an apple on a lunch tray that showed what the apple would look like if none, a little, half or most, and all was consumed.
- The number of "amount eaten response options" decreased from 6 in Phase 1 to 4 in all other phases.
- For "salad bar response options," in Phase 2, students were asked to report how many items they had on the salad bar. This did not work. Phases 4 and 5 went back to the yes and no responses.
- The "preferences response options" were changed to go from negative to positive, since the amount eaten was from least to most. Additionally, smiley phases helped to provide a visual cue for liking in addition to the words.
- Adding an "icon," that is added a simple image such as a star, triangle, sun, house, at the top of the set of questions about each food helped students with place finding and focus on the instrument. For example, next to the first question is a star. The questionnaire administrator has each students place his or her index finger on the star, to assure everyone is in the same place.

Table I2.3 describes the match, omission and intrusion rates for items on the tray across the four phases of the validity study. From Phase 1 to Phase 4, the overall match rate for items present on the tray increased, from $77.4 \%$ to $81.9 \%$ to $90.6 \%$ to $91.9 \%$. Across all days, the overall intrusion rate was greater than the omission rate. In Phase 1 the lowest match rate was observed for salad bar items and the highest match was observed for fruit. In Phase 2, the lowest match rate was observed for items from the salad bar and the highest match rate was

## Instrument Development (conitued)

Instrument 2: Fruit and Vegetable Recall Questionnaire
observed for vegetables from home. In Phase 3, the lowest match rate was observed for items from the salad bar and the highest match rate was observed for vegetables. In Phase 4, the lowest match rate was observed for vegetables from home and the highest match was observed for vegetables. In Phase 5, across the sample of 20 schools, the match rates for both fruit and vegetables exceeded $88.3 \%$.

Examining findings of what students reported on their tray in relation to refinements to the instrument (Table I2.3, see next page):

- The changes in formatting from Phases 2 to 3 appear to have increased students' ability to match what they reported was on their lunch tray with what we saw in the photos. The changes to the instrument between phases 2 and 3 included the addition of a training activity that provided pictorial examples of what was on the tray. Also the students had an icon (e.g., star, triangle) for each question, which may have helped students with place finding and focus while completing the recall.
- In the 20 schools in Phase 5 that had different structures for lunch, exact match rates decreased 3 percentage points from about 92 to about 89. Compared to other similar tools reported in the research literature, this match rate is considered high and acceptable for the tool to be used for research studies.

Table I2.4 describes the match, overestimation and underestimation rate for amount consumed across the four phases of the validity study. Exact match refers to students who reported on the FVRQ the same amount eaten as was judged from the digital photographs. The exact match rate was lower in Phase 1 than it was in Phases 2,3 and 4. The exact match rates in Phase 4 were above $81.2 \%$ for all fruit and vegetable items. Generally, rates of overestimation were higher than underestimation for all items. Additionally, we calculated total inaccuracy, which as described above is a calculation of how inaccurate students' estimations were in cups. For phase 5, across all 20 FoodCorps schools, the match rates for the amount consumed of fruits was $73.4 \%$ and the amounts consumed for vegetables was $78.1 \%$, with a total inaccuracy of 0.41 servings and since a standard serving is 0.5 cups, this is an inaccuracy of 0.21 cups.

Examining findings of amount students reported eating in relation to refinement to the instrument (Table I2.4, see two pages ahead):

- Prior to the training exercise for "amount eaten" exact matches in phases 1 and 2 were about $67 \%$. The exact match rate was $83 \%$ for phases 3 and 4 when students had the training. The match rate was about $76 \%$ for Phase 5 , which is the 20 schools in the Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch study. We speculate that the reason for this decrease in accuracy in Phase 5 is in the Phases 1 to 4 all students were eating from the New York City School Food Menu. The New York City menu is fairly simple and has few fruit and vegetable options each day. Whereas, in Phase 5, students were from around the country and there was much more variability in the structure of lunch service. For example, some schools allowed students to self-serve their fruits and vegetables from many options, other schools had more options available to students, or pre-plated multiple fruits and vegetables on the tray.
- Most of the increase in exact matches can be contributed to fewer students overestimating how much they ate, when compared to how much we assessed students at through analysis of the photos. Since the inaccuracy appeared to decrease in Phase 3, it appears that the training contributed to the increase.

Please see Appendix K for the final Fruit and Vegetable Recall Questionnaire.

## Instrument Development (continued)

Instrument 2: Fruit and Vegetable Recall Questionnaire
Table I2.3. Results of Fruit and Vegetable Recall Questionnaires validation compared to matched sets of digital photos for food on the tray among 2nd and 3rd grade students in 23 public elementary schools, 2015-2016

|  | Total count | Matches |  | Omissions item in photo but NOT reported on survey |  | Intrusions <br> item reported on survey but NOT in photo |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | count | \% | count | \% | count | \% |
| PHASE 1 ( $\mathrm{n}=46$ ) |  |  |  |  |  |  |  |
| Fruit | 32 | 25 | 78.1 | 2 | 6.3 | 5 | 10.9 |
| Vegetables | 42 | 36 | 85.7 | 6 | 14.3 | 0 | 0.0 |
| Salad | 41 | 33 | 71.7 | 1 | 2.4 | 7 | 17.1 |
| Total* | 115 | 94 | 81.7 | 9 | 7.8 | 12 | 10.4 |
| PHASE 2 ( $\mathrm{n}=62$ ) |  |  |  |  |  |  |  |
| Fruit | 124 | 104 | 83.9 | 5 | 4.0 | 15 | 12.1 |
| Vegetables | 62 | 53 | 85.5 | 6 | 9.7 | 3 | 4.8 |
| Salad | 62 | 46 | 74.2 | 1 | 1.6 | 15 | 24.2 |
| Home veggies | 62 | 55 | 88.7 | 0 | 0.0 | 7 | 11.3 |
| Home fruit | 61 | 52 | 85.2 | 0 | 0.0 | 9 | 14.8 |
| Total | 248 | 203 | 81.9 | 12 | 4.3 | 33 | 13.3 |
| PHASE 3 ( $\mathrm{n}=71$ ) |  |  |  |  |  |  |  |
| Fruit | 212 | 191 | 90.1 | 6 | 2.8 | 16 | 7.5 |
| Vegetables | 70 | 68 | 97.1 | 2 | 2.9 | 0 | 0.0 |
| Salad | 70 | 60 | 85.7 | 1 | 1.4 | 9 | 12.9 |
| Total | 352 | 319 | 90.6 | 9 | 2.5 | 25 | 7.1 |
| PHASE 4 ( $\mathrm{n}=63$ ) |  |  |  |  |  |  |  |
| Fruit | 125 | 116 | 92.3 | 2 | 1.6 | 7 | 5.6 |
| Vegetables | 62 | 58 | 93.5 | 0 | 0.0 | 4 | 6.5 |
| Salad | 60 | 55 | 91.7 | 3 | 5.0 | 2 | 3.3 |
| Home veggies | 55 | 49 | 89.1 | 0 | 0.0 | 6 | 10.9 |
| Home fruit | 54 | 49 | 90.7 | 0 | 0.0 | 5 | 9.3 |
| Total | 356 | 327 | 91.9 | 5 | 1.4 | 24 | 6.7 |
| PHASE 3 AND 4 COMBINED ( $\mathrm{n}=134$ ) |  |  |  |  |  |  |  |
| Fruit | 337 | 307 | 91.1 | 8 | 2.4 | 23 | 6.8 |
| Vegetables | 132 | 126 | 95.5 | 2 | 1.5 | 2 | 1.5 |
| Salad | 130 | 115 | 88.5 | 4 | 3.1 | 15 | 11.5 |
| Total | 599 | 548 | 91.5 | 14 | 2.3 | 40 | 6.7 |
| PHASE 5 ( $\mathrm{n}=976$ ) |  |  |  |  |  |  |  |
| Fruit | 1,909 | 1,686 | 88.3 | 46 | 2.4 | 177 | 9.3 |
| Vegetables | 2,213 | 1,974 | 89.2 | 71 | 3.2 | 168 | 7.6 |
| Home veggies | 918 | 847 | 92.3 | 0 | 0.0 | 71 | 7.7 |
| Home fruit | 934 | 797 | 85.3 | 6 | 0.6 | 131 | 14.0 |
| Total | 4,122 | 3,660 | 88.8 | 117 | 2.9 | 345 | 8.4 |

[^0]
## Instrument Development (continued)

Table I2.4. Results of Fruit and Vegetable Recall Questionnaires validation compared to matched sets of digital photos for amount eaten among 2nd and 3rd grade students in 23 public elementary schools, 20152016

|  | Total | Exact match | Overestimation <br> of amount eaten | Underestimation <br> of amount eaten | Total <br> inaccuracy |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | count | count | $\%$ | count | $\%$ | count | $\%$ | Servings * |

[^1]
## Discussion

This validation study suggests that the Fruit and Vegetable Recall Questionnaire meets the needs for a simple and accurate evaluation instrument for use in schools participating in the National School Lunch Program. This instrument is feasible and efficient to implement, low-cost, and valid for capturing children's fruit and vegetable intake at school lunch.

Overall, the match rate we observed throughout each phase of our validation study rivals that from other instruments. For example, the previous validation study of the School Lunch Recall Questionnaire (Paxton et al, 2011) found an overall match rate of $84 \%$ for all items served at school lunch. Although the match rate we observed in the final phases of this study was higher, there are three important differences. First, direct observations of school lunch intake were used as the reference method in the original validation study, whereas we used digital photography. A previous validation study found the digital photography method accurate relative to weighed plate waste, with only a slight improvement in accuracy when digital photography method is combined with direct observations (Taylor et al, 2014). Second, the study sample in the original validation of the School Lunch Recall included 3rd through 5th grade students, which is in contrast to the sample of 2nd grade students in this study. This was purposeful in that we were looking to create an instrument that was valid with second graders as they are the focus of the FoodCorps evaluation study. Third, the original validation study reported the match rate for all items served at school lunch (entrée, beverage, sides) and used a subjective statistical weighting technique to place more importance on errors in reporting the main entrée relative to sides or drinks. In our study we intentionally focused only on fruits and vegetables, which is a main focus for evaluating farm to school programs. For these three reasons, our results are not directly comparable to those of Paxton et al (2011).

Another more recent study has explored a similar instrument, the Day In The Life Questionnaire, for use in elementary school-age children. Wallen et al (2011) compared the questionnaire to weighed plate waste in school cafeterias among 4th and 5th graders and observed match rates of $87 \%$ and $88 \%$ for fruit and vegetables, respectively. Regarding amount eaten, the Day In The Life Questionnaire had low agreement with the plate waste measure for fruits (58\%) and vegetables (47\%) using the same four-point scale as used in the FVRQ. As above, there are important differences in the methods used which makes our studies not directly comparable, including the use of a different referent method and different study population.

Given the high match rates for fruits, vegetables, and salad bar items observed in this validity study, we can conclude that the FVRQ is accurate to measure students' intakes of fruits and vegetables at school lunch as compared to digital photography. To our knowledge this is the first questionnaire to directly assess fruit and vegetable items obtained from the salad bar and brought from home. Importantly, these results suggest that use of this paper-and-pencil questionnaire is acceptable in lieu of the resource-intensive digital photography method. Future research should explore the sensitivity of the instrument to assess changes in fruit and vegetable consumption resulting from school-based interventions.

We also compared our rates of students inaccuracy to other research. The study by Paxton et al (2010) reported a total inaccuracy of 0.63 cup equivalents per student across all items at school lunch. Although our results are favorable in comparison, they are not directly comparable because all school lunch items were queried in that study (including entrée and milk) and the authors used a technique to weight the items (with the entree more heavily weighted than the fruits and vegetables). Given the quantitative results for total inaccuracy, our suggestion for future use the Questionnaire is not to facilitate individual student interpretation, but instead to compare groups on students on their mean fruit and vegetable intake at school lunch.

## Instrument Development (continued)

There are several limitations to our study. The first is in our chosen sample of schools, which may only be representative of similar urban elementary schools with a majority of students who qualify for free/reduced price lunch and/or a racial or ethnic minority. Second, while this validation study affirms that accuracy of the instrument for measuring fruit and vegetable consumption among 2nd and 3rd grade students, it does not focus on the sensitivity of the instrument to detect change. Wallen et al (2011) tested the sensitivity of the DILQ-Co instrument by comparing students' responses from schools participating or not in the USDA Fresh Fruit and Vegetable Program, which provides an additional serving of fruit or vegetable in schools. Future research should examine the sensitivity of the instrument to measure change prior to use within a program evaluation. Third, we could not directly assess the accuracy of the questionnaire for amounts consumed of fruits and vegetables brought from home, given that our protocol was developed to capture students directly after the lunch meal service line, and not necessarily items brought from home. Future protocol adaptations could be developed to ensure that both before and after meal photos are captured from students who brought lunch from home.

Fruit and Vegetable Recall Questionnaire "Training Pages"



## Studies

## Overview

We conducted three studies as part of this evaluation.
Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools. This descriptive study provides data from the FoodCorps Healthy School Progress Report in the 298 FoodCorps schools that completed it in Fall 2015 and Spring 2016.

Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools. This pre-post, intervention-control study, with 12 FoodCorps and 12 control schools, examined differences in changes (from Fall 2015 to Spring 2016) on the FoodCorps Healthy School Progress Report for FoodCorps schools compared to their matched control schools, with a secondary analysis that included 7 of these pairs.

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch. This cross-sectional study, with 20 representative FoodCorps schools from eight states, examined the associations between FoodCorps Healthy School Progress Report scores and consumption of fruits and vegetables at school lunch by second and third grade students. Students' consumption of fruits and vegetables was measured using before and after meal digital photographs as the primary data and the self-report Fruit and Vegetable Recall Questionnaire as secondary data. We also conducted analyses on how school demographics are correlated with fruit and vegetable consumption at school lunch to help understand and interpret the association found between FoodCorps areas of service and school lunch consumption.

# Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools 

## Background

When a new tool is developed, it is important to conduct a pilot test. For the Healthy School Progress Report, the pilot test can help to understand how the teams that completed the Progress Report at the schools answered individual questions, all questions in three areas of FoodCorps programming: Hands-on Learning (measured in two sections as Knowledge and Engagement), Healthy School Meals, Schoolwide Culture of Health, as well as overall scores. Additionally, conducting analyses that compared Fall scores Progress Report with Spring scores could determine how much change occurred during the school year, and in which areas there was the most change.

The objective of this study was to describe the school food environment of schools currently participating in FoodCorps as well as to assess changes over the course of one school year.

## Methods

Participants: This is a pre-post study among all FoodCorps schools during PY2016. In Fall 2015, service members were invited via email to complete the Healthy School Progress Report and Action Plan for all schools in which they served. They received training that provided an overview of this new tool and details on how to complete it. Specifically service members received in-person training at the FoodCorps national orientation. Service members also received written instructions on how to complete the Progress Report as well as follow-up emails. Service members worked with stakeholder teams at the schools that included at least the service member, a school staff member, and the service site supervisor to complete the Progress Report. Service members also were instructed to conduct the FoodCorps national staff if they had specific questions as they completed the Progress Report. The evaluation team reviewed all Progress Report data and looked for data that seemed to be implausible. For example reporting there were 100 first grade classes in a school with 400 students. Out of 312 Progress Reports received in the fall of 2015, approximately 30 had data that was questioned. The evaluation team drafted emails explaining the question about the Progress Report data and FoodCorps national staff sent emails to the service members asking for clarification. In Spring 2016, they were again invited via email to complete the Progress Report, and were sent a template with their responses pre-populated for each school obtained in the Fall.

We collected school-level sociodemographic information for each school that completed the Healthy School Progress Report through a search by name and location in the National Center for Educational Statistics Common Core of Data for the 2013-14 school year.

FoodCorps provided additional information, including: service member tenure, hours per school, site type, and multiple service members placed in each site.

## Studies (continued)

Data Analysis: For the school general information, we calculated descriptive statistics (Table S1.1). For the FoodCorps areas of service, there are four outcomes: Hands-on Learning-Knowledge, Hands-on Learning Engagement, Healthy School Meals, and Schoolwide Culture of Health, with each being a 25 -point scale, for a total of a 100-point scale. This is referred to as the Progress Report score. The scoring was calculated according to the scoring protocol (Appendix H). We calculated descriptive statistics (mean, standard deviation, percentage of schools that increased, decreased and stayed the same). We also conducted paired samples t-tests for each area and each question within the areas (Table S1.2). This tested for statistically significant changes in score from fall to spring.

For the Staying Power section, we conducted descriptive statistics, paired sample t-tests for each question (Table S1.3). We also conducted a correlation test to determine if there was an association with Fall or Spring Staying Power score and Spring Progress Report score (Table S1.4).

The questions in the Policy section had several answer options for each of the 14 questions. We conducted descriptive statistics with the percentage of schools that chose each option (Table S1.5). We also calculated descriptive statistics whether or not policy existed for each question, that is "no policy or yes policy." Then, we conducted linear regression to examine the association between answers on the Policy questions and score on the appropriate areas of service (e.g., we compared whether or not there was a standard nutrition education curriculum to score on Hands-on Learning-Knowledge) as well as overall score (Table S1.6).

We also calculated descriptive statistics for the sources service members used to obtain their answers for each area of service, Staying Power, and Policy (Table S1.7).Additionally, service members were asked to record the confidence in their answers for the 18 questions in on areas of service both Fall and Spring. We calculated descriptive statistics for confidence level (Table S1.8).

We calculated descriptive statistics for the change in score from fall to spring. Data is presented for total change score, each area, and Staying Power. The schools are divided into groups based on several criteria: school urbanicity, school type, service member year, organization type, selected for goal (whether or not any question in that area was selected for a goal), and Fall Progress Report score categories; this shows how the level of programming at the beginning of the school year was related to the change that was seen from fall to spring (Table S1.9). We conducted linear regression to examine the association between school factors and Progress Report Change Score from fall to spring (Table S1.10).

We conducted descriptive statistics for the 18 questions on areas of service to show which were selected as goals. This table also has a statistical analysis to see if schools who had a goal related to each question had more change than schools who did not have a goal related to the question (Table S1.11). Finally, we investigated association between each Progress Report question in the areas of service and each Staying Power question.
$\mathrm{P}<0.05$ was set as the level of significance for all tests.

## Results

In Fall 2015, completed Progress Reports for 314 schools were received. In Spring 2016, completed Progress Reports for 309 schools were received. We were able to match responses from Spring and Fall for a total of 298 schools. These schools were from across all the FoodCorps states, with a wide range of demographics. Table S1.1 provides more details.

## Studies (continued)

Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools
Table S1.1. Number of schools and school characteristics in FoodCorps Healthy School Progress Report Fall and Spring PY2016 matched ( $\mathrm{n}=298$ )

| Grade | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  | 9 | 10 | 11 | 1 | 12 | AS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n | 212 | 212 | 215 | 212 | 212 | 206 | 119 | 99 | 93 |  | 43 | 44 | 43 |  | 45 | 144 |
| \% | 71.1 | 71.1 | 72.1 | 71.1 | 71.1 | 69.1 | 39.9 | 33.2 | 31.2 |  | 4.4 | 14.8 | 14.4 |  | 5.1 | 48.3 |
| State | AR | AZ CA | CT | DC | GA | HI IA | MA | ME | MI | MS | MT | NC | NJ | NM | NY | OR |
| n | 10 | 923 | 23 | 12 | 17 | 1119 | 13 | 22 | 17 | 12 | 18 | 19 | 25 | 13 | 15 | 20 |
| \% | 3.4 | 3.07 .7 | 7.7 | 4.0 | 5.7 | 3.76 .4 | 4.4 | 7.4 | 5.7 | 4.0 | 6.0 | 6.4 | 8.4 | 4.4 | 5.0 | 6.7 |
|  |  |  |  |  |  |  |  |  |  |  |  | $n$ |  |  | \% |  |
| Level ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | mary | (low grade: | : PK | rough | 03; hig | gh grade: | PK th |  |  |  |  | 203 |  |  | 68.1 |  |
|  | ddle (low | ow grade | 04 th | ugh 0 | 7; high | grade: 0 | 4 throu | gh 11) |  |  |  | 39 |  |  | 13.1 |  |
|  | h (low | grade: 07 | 7 thro | gh 12 | high g | grade: 12 | only) |  |  |  |  | 27 |  |  | 9.1 |  |
|  | her/mis | ssing |  |  |  |  |  |  |  |  |  | 12 |  |  | 4.0 |  |
| Location | ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cit |  |  |  |  |  |  |  |  |  |  |  | 135 |  |  | 45.3 |  |
|  | burb |  |  |  |  |  |  |  |  |  |  | 33 |  |  | 11.1 |  |
|  | wn |  |  |  |  |  |  |  |  |  |  | 40 |  |  | 13.4 |  |
| Ru | ral |  |  |  |  |  |  |  |  |  |  | 73 |  |  | 24.5 |  |
|  | ssing |  |  |  |  |  |  |  |  |  |  | 17 |  |  | 5.7 |  |
|  |  |  |  |  |  |  |  |  |  | Mean | S | td. Devid | iation |  | Rang |  |
| Eligible | for free | ee/reduce | price | lunch | (\%) ${ }^{\text {a }}$ |  |  |  |  | 74.9 |  |  | . 1 |  | 0.0-1 | 0.0 |
| White (\%) | \%) ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  | 36.5 |  |  | . 9 |  | 0.0-1 | 0.0 |
| Black (\%) | \%) ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  | 26.5 |  |  | . 0 |  | 0.0-1 | 0.0 |
| Hispan | (\%) ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  | 27.8 |  |  | . 2 |  | 0.0-1 | 0.0 |
| Native | Americ | can (\%) ${ }^{\text {a }}$ |  |  |  |  |  |  |  | 3.8 |  |  | . 1 |  | 0.0 | 98.0 |
| Total en | rollme | ent ${ }^{\text {a }}$ |  |  |  |  |  |  |  | 496 |  |  | 43 |  | 38-2 | 916 |
| Hours p | per wee | ek served |  |  |  |  |  |  |  | 9.0 |  |  | . 4 |  | 1.0 | 35.8 |

${ }^{2}$ Source: National Center for Education Statistics, 2013-14
${ }^{\text {b }}$ Provided by FoodCorps
Highlights of some of the specific findings from Table S1.1 include:

- About $70 \%$ of the schools had grades K through $5,40 \%$ grade 6 , a third had grades 7 and 8 , and about $15 \%$ grades 9 to 12 . About half of the schools had after school programs.
- The modal location for schools was New Jersey (8.4\%) followed by California (7.7\%), Connecticut (7.7\%).
- A majority of these schools were elementary schools ( $68.1 \%$ ), which is defined as serving any combination of grades from PK through 8th grade.
- On average, schools had $74.9 \%$ of students eligible for free/reduced price lunch, which ranged from 0 to $100 \%$.
- The average enrollment in these schools was 496 , with a range from 38 to 2916.

Next, we analyzed for statistically significant differences from fall to spring for the scored section on the Progress Report ( $0-100$ point scale). There was a significant increase on the overall score, for each area of service, as well as for 17 of the 18 questions (all $\mathrm{P}<0.002$ ). Table $\mathbf{S 1 . 2}$ provides more details.

Highlights of the specific finding from Table S1.2 (see next page) include:

- On the 100-point scale the mean score in the fall was 42.7. In the spring the mean score increased to 50.5 . Over $75 \%$ of schools increased their score from Fall to Spring.
- There was statistically significant improvement in all areas. Hands-on Learning—Knowledge had the largest increase of 2.65 points, with Healthy School Meals making the smallest increase of 0.85 points.
- Interestingly, for each area of service, over $20 \%$ of schools stayed the same, and a sizable percentage of schools had a decrease in score, this was almost $21 \%$ for Hands-on Learning—Engagement. Whereas, Schoolwide Culture of Health had only $12 \%$ decrease.
- For the individual questions, 17 of the 18 questions within the three areas of service had significantly positive changes from Fall to Spring, except the question about salad bar, Question L. The results of question K which asked if a salad bar existed (yes/no) found that about half of the schools did not have a salad bar in the fall or the spring. When the data were analyzed for only schools that had a salad bar (row on table - L: Salad Bar (0-5) [schools with salad bar), there was still no statistically significant increase. However, the school with salad bar were scoring at almost 4 on the 5 point scale.
- Overall score was relatively low on the total 100 point scale. This may be explained by the breadth of questions that cover the full range of what FoodCorps programming could be. Very few schools may be able to do everything across all of the questions asked within the three Areas.
- Hands-on Learning—Knowledge had the highest mean for Fall and Spring and also the largest increase from Fall to Spring. The mean was 12.45 in the Fall and increased to and 15.10 in the Spring. This may be due to several factors, including FoodCorps having a focus on service members conducting education, service members having an interest and desire to conduct education, and schools requesting service members conduct education.
- For each area of service over $50 \%$ of schools had positive change.
- Yet, there was also, several schools that had decreases. More specifically for each area of service the percentage of schools that decrease were: Hands-on Learning—Knowledge 18\%, Hands-on Learning—Engagement 21\%, Healthy School Meals 19\%. and Schoolwide Culture of Health $12 \%$. Some of this may represent a true decrease in programming in this area. This may be because the service member was spending time in other areas of service. However, some of this decrease is probably also contributed to service members having more full knowledge at the end of the school year so the decrease represents a correction of over-reporting in the fall. This seems likely since service members' confidence in their answers increased from fall to spring. Additionally, in our interviews with service members, many discussed learning that programming they were told was happening by the school team members when they completed the fall Progress Report was not happening at the level reported.


## Levels of Programming in Schools

The data from the PY2016 Healthy School Progress Report were used to develop three levels of Programming:

| Levels | Progress Report Score <br> (Areas of Service,1-100) | Staying Power Score <br> $(0-60)$ |
| :--- | :---: | :---: |
| Planting Seeds <br> laying the foundation | $0-32$ | $0-19$ |
| Staring to Grow <br> making progress | $33-52$ | $20-31$ |
| Flourishing <br> significant strides | $53-100$ | $32-60$ |

The questions on the three areas of service represented menu of options for schools and it was not expected that a school would be able to answer yes to all questions. Therefore it was important to be able to assess school's score for the level of programming. To develop these levels, we used two sources of information. First the descriptive data on the fall and spring Progress Report scores presented in Table S1.2. These data are "normally distributed" which means that fewer schools were scoring very low or very high and the majority of schools were scoring around the average. Second, we tried to estimate the level of programming that would be sufficient to lead to increases in fruit and vegetable consumption. However, literature that compares program levels with consumption is limited. An additional consideration was to make these levels realistic for FoodCorps schools and also to be presented in a way that would motivate schools to want to continue to improve. A similar strategy was used for staying power. However, these is little in the literature about what level of Staying Power is necessary to maintain programming. Since, the mean score being 23 in the fall and 27 in the spring, it was assumed that this was at a middle level of staying power and the levels were set around these mean scores.

## Studies (continued)

Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools
Table S1.2. Score changes in the Progress Report between Fall and Spring and results of paired samples t-tests for the three areas of service (Hands-on Learning*, Healthy School Meals and Schoolwide Culture of Health)

|  | Fall | Spring | Change |  |  | Sign. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (SD) | Mean (SD) | Inc. $\%$ | Dec. \% | $\begin{gathered} \text { Same } \\ \% \end{gathered}$ | $p^{* *}$ |
| Hands-on Learning-Knowledge (0-25) | 12.45 (6.34) | 15.10 (4.88) | 61.4 | 18.1 | 20.5 | <0.001 |
| A: Classes have nutrition education (0-5) | 2.69 (1.91) | 3.27 (1.67) | 44.3 | 12.4 | 43.3 | <0.001 |
| B: Number of nutrition education lessons (0-5) | 2.69 (1.70) | 3.13 (1.45) | 39.6 | 19.5 | 40.9 | <0.001 |
| C: Opportunities for tasting during nutrition education (0-5) | 1.87 (1.65) | 2.44 (1.60) | 44.6 | 15.4 | 39.9 | <0.001 |
| D: Kinds of activities included in nutrition education (0-10) | 5.20 (2.96) | 6.27 (2.21) | 50.7 | 17.1 | 32.2 | <0.001 |
| Hands-on Learning-Engagement (0-25) | 10.31 (6.93) | 12.82 (5.70) | 56.4 | 20.8 | 22.8 | <0.001 |
| E: Classes have garden-based activities (0-5) | 1.96 (1.87) | 2.61 (1.77) | 50.8 | 12.1 | 37.0 | <0.001 |
| F: Number of garden-based activity lessons (0-5) | 2.26 (1.79) | 2.76 (1.60) | 40.9 | 20.1 | 38.9 | <0.001 |
| G: Opportunities for tasting during garden-based activities (0-5) | 1.39 (1.54) | 1.61 (1.48) | 37.9 | 20.5 | 41.6 | 0.001 |
| H : Kinds of activities included in garden-based activities (0-10) | 4.70 (3.20) | 5.84 (2.58) | 46.0 | 15.4 | 38.6 | <0.001 |
| Healthy School Meals (0-25) | 10.64 (4.57) | 11.49 (4.72) | 53.4 | 18.5 | 28.2 | <0.001 |
| I: Serve Lunch [n (\%)] | 312 (96\%) | 307 (94.5\%) | - | - | - | - |
| J : Lunch line set-up (0-5) | 2.63 (1.10) | 2.72 (1.09) | 26.5 | 12.4 | 61.1 | 0.002 |
| K: Salad Bar exists [ n (\%)] | 148 (45.5\%) | 149 (45.8\%) | - | - | - | - |
| L: Salad bar (0-5) [all schools] | 1.86 (2.02) | 1.90 (2.03) | 14.8 | 8.4 | 76.8 | 0.384 |
| L: Salad bar (0-5) [schools with salad bar] | 3.95 (0.64) | 3.99 (0.57) | 26.1 | 14.2 | 59.7 | 0.210 |
| M: Cafeteria atmosphere (0-5) | 3.38 (1.10) | 3.48 (1.06) | 28.2 | 12.4 | 59.4 | 0.001 |
| N : Tastings in cafeteria exists [ $\mathrm{n}(\%)$ ] | 112 (34.5\%) | 166 (51.1\%) | - | - | - | - |
| O: Tastings (0-5) [all schools] | 0.48 (0.80) | 0.76 (0.91) | 34.9 | 8.1 | 57.0 | <0.001 |
| O: Tastings (0-5) [schools with tastings] | 1.34 (0.82) | 1.56 (0.83) | 42.3 | 15.5 | 42.3 | 0.001 |
| P: Local food served (0-5) | 2.30 (2.00) | 2.62 (1.91) | 20.1 | 5.4 | 74.5 | <0.001 |
| Schoolwide Culture of Health (0-25) | 9.26 (4.28) | 11.11 (4.24) | 62.1 | 12.1 | 25.8 | <0.001 |
| Q: Healthy food the dominant choice (0-5) | 2.63 (1.43) | 2.77 (1.31) | 27.6 | 15.0 | 57.5 | 0.010 |
| R : Respecting healthy eating (0-5) | 1.50 (0.87) | 1.73 (1.00) | 23.5 | 6.4 | 70.1 | <0.001 |
| S : Encouraging families (0-5) | 1.60 (1.39) | 2.08 (1.47) | 33.6 | 5.7 | 60.7 | <0.001 |
| T: Additional opportunities (0-5) | 1.92 (1.45) | 2.47 (1.52) | 42.3 | 9.4 | 48.3 | <0.001 |
| U: Physical space set up (0-5) | 1.62 (1.33) | 2.10 (1.32) | 35.6 | 6.7 | 57.7 | <0.001 |
| Overall (0-100) | 42.66 (14.45) | 50.45 (13.07) | 75.5 | 14.4 | 11.1 | <0.001 |

## Studies (continued)

Staying Power, measured a school's capacity to maintain food-related programming. Questions were asked about supported for each of the areas of service. The Staying Power section had a $0-60$ point scale. Scores increased significantly on the overall scale, as well as on all but one individual questions. Specifically, school administration did not increase in their support for a Schoolwide Culture of Health. Table S1.3 provides descriptive statistics on Staying Power. We statistically compared if higher Spring Progress Report scores, which mean a higher level of programming, were associated with higher Staying Power when the school year started (Fall) and when the school year ended. Both associations were statistically significant. Table S1.4 provides more details.

Highlights of the specific finding from Table S1.3, next page, include:

- Staying Power increased from 23 to 27 on the 60-point scale, with two-thirds of schools having an increase from Fall to Spring. While this was a statistically significant increase, overall Staying Power scores were low indicating that most of the FoodCorps schools were not at a level of institutional support that they could sustain programming if the FoodCorps service member was not present. Future studies could investigate the Staying Power score needed for schools to be successful at continuing programming without FoodCorps. From the literature, administration support, having multiple champions, and an active wellness committee with member from across the sectors in the school community are most important for programming to continue. In all areas of service, there was room for administrative support to be higher. More specifically, teacher support needs to be higher for Hands-on Learning to continue and support from food service staff for Healthy School Meals.
- All individual questions, with the exception of school administration support in the area of Schoowide Culture of Health. However, for most questions about $60 \%$ to $90 \%$ of schools did not have any change. Also, the change in the score from Fall to Spring was relatively small for most questions.
- Overall, Staying Power questions related to Hands-on Learning-Engagement had the largest increases in score from Fall to Spring as well as the largest percentage of schools who had a positive change.


## Studies (continued)

Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools
Table S1.3: Score changes between Fall and Spring in the Staying Power section supports and practices that indicate how much the school has institutionalized work in the three areas of service of the Progress Report and results of paired samples t-tests

|  | Fall | Spring | Change |  |  | Sign. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (SD) | Mean (SD) | $\begin{gathered} \text { Inc. } \\ \% \end{gathered}$ | $\begin{gathered} \text { Dec. } \\ \% \end{gathered}$ | $\begin{gathered} \text { Same } \\ \% \end{gathered}$ | $p$-value |
| Hands-on Learning-Knowledge |  |  |  |  |  |  |
| SP1: School administration support for nutrition education (0-3) | 1.00 (1.02) | 1.21 (1.05) | 19.1 | 3.0 | 77.2 | <0.001 |
| SP2: Teacher support for nutrition education (0-3) | 1.17 (1.02) | 1.41 (0.99) | 20.5 | 2.0 | 77.5 | <0.001 |
| SP3: Nutrition education connected to curriculum (0-5) | 2.40 (1.51) | 2.84 (1.44) | 23.9 | 2.4 | 73.7 | <0.001 |
| SP4: Parent support for nutrition education (0-4) | 0.50 (0.84) | 0.65 (0.94) | 13.4 | 1.3 | 85.2 | <0.001 |
| Hands-on Learning-Engagement |  |  |  |  |  |  |
| SP5: School administration support for gardenbased activities (0-3) | 1.08 (1.03) | 1.34 (1.06) | 21.8 | 3.7 | 74.5 | <0.001 |
| SP6: Teacher support for garden-based activities (0-4) | 1.57 (1.35) | 2.06 (1.03) | 31.9 | 3.0 | 65.1 | <0.001 |
| SP7: Garden-based activities connected to curriculum (0-5) | 2.39 (1.64) | 3.05 (1.46) | 35.4 | 3.7 | 60.9 | <0.001 |
| SP8: Parent support for garden-based activities (0-3) | 0.58 (0.90) | 0.75 (1.00) | 15.8 | 2.7 | 81.5 | <0.001 |
| Healthy School Meals |  |  |  |  |  |  |
| SP9: School administration support for healthy school meals (0-3) | 0.58 (0.90) | 1.87 (0.99) | 15.4 | 4.7 | 79.9 | <0.001 |
| SP10: Food service director support for healthy school meals(0-7) | 2.81 (2.30) | 3.04 (2.33) | 21.1 | 8.4 | 70.5 | <0.001 |
| SP11: Teacher support for healthy school meals (0-3) | 1.49 (1.02) | 1.69 (1.01) | 17.4 | 2.7 | 79.9 | <0.001 |
| SP12: Parent support for healthy school meals (0-2) | 0.19 (0.44) | 0.24 (0.48) | 6.0 | 1.0 | 93.0 | 0.001 |
| Schoolwide Culture of Health |  |  |  |  |  |  |
| SP13: School administration support a healthy food environment (0-3) | 0.82 (0.93) | 0.86 (0.82) | 8.7 | 5.4 | 85.9 | 0.103 |
| SP14: School staff support a healthy food environment ( $0-2$ ) | 1.24 (0.48) | 1.29 (0.50) | 8.2 | 2.7 | 89.0 | <0.001 |
| SP15: School has healthy food, nutrition and gardening "champions" (0-3) | 2.27 (0.81) | 2.46 (0.74) | 16.6 | 3.1 | 80.3 | <0.001 |
| SP16: Wellness committee (0-2) | 0.70 (0.74) | 0.84 (0.76) | 12.3 | 3.1 | 84.6 | <0.001 |
| SP17: Wellness committee members (0-5) | 1.34 (1.66) | 1.83 (1.82) | 21.8 | 2.0 | 76.2 | <0.001 |
| Overall (0-60) | 23.24 (9.60) | 27.35 (9.53) | 66.7 | 6.4 | 26.9 | <0.001 |

## Studies (continued)

Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools
Table S1.4. Associations between Staying Power scores and overall Progress Report score outcomes

|  | B | SE | p-value |
| :--- | :---: | :---: | :---: |
| Outcome: Spring Progress Report Score (0-100) |  |  |  |
| Staying Power Score Fall (0-60) | 0.732 | 0.066 | $<0.001$ |
| Staying Power Score Spring (0-60) | 0.835 | 0.063 | $<0.001$ |

Highlights of the specific finding from Table S1.4, include:

- Schools that had higher Staying Power scores also had higher Spring Progress Report scores. For every 1 point increase on the Spring Staying Power score, Progress Report score increased by 0.8 point. Both fall and spring Staying Power Scores had about the same level of association with Spring Progress Report score. This indicates that schools can build capacity.

FoodCorps service members cannot advocate for policy changes. However, state, district and school level policies related to nutrition education curriculum, gardening, school food and policies about food at school events may be a support to programming. Table S1.5 has details descriptive statistics on the Policy section. Table S1.6 presents the 14 Policy section questions indicating if the schools had any policy in the area asked on the question. That is, answering "yes" to any part of the question. This table also presents statistical comparison between the scores in the areas of service and the policy section scores. These determined if there were statistical associations between the presence of policy and higher Spring Progress Report scores.

Highlights of the specific finding from Table S1.5, next 3 pages, include:

- For schools which have state or district standards, over $38 \%$ offer no support for these standards.
- The majority of schools did not use a template when they developed their wellness policy.
- Healthy eating and nutrition was the most common content addressed in wellness policies.
- Preferred nutrition education curriculum ( $\mathrm{n}=62 \mathrm{in}$ Spring) are more common than preferred garden curriculum ( $\mathrm{n}=26$ Spring)
- States with a local food procurement policy appeared to increase ( $12 \%$ to $31 \%$ ) while districts with local food procurement policies appeared to decrease (( $26 \%$ to $15 \%$ ). However, the majority of schools did not have a local food policy.
- About $40 \%$ of schools are using garden produce in school meals. Of note is that schools that marked "unsure" increased from $16 \%$ to $42 \%$ from Fall to Spring.


## Studies (continued)

Table S1.5. Descriptive statistics for the Policy section (school, district, and state-level policy supports for the three areas of service) of the Progress Report

|  | Fall |  | Spring |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $n$ | \% | $n$ | \% |
| P1: State- or district-level nutrition education standards |  |  |  |  |
| State-level | 184 | 61.7 | 191 | 64.1 |
| District-level | 92 | 30.9 | 99 | 33.2 |
| No known standards | 91 | 30.5 | 91 | 30.5 |
| P2: Support for nutrition education standards |  |  |  |  |
| District offered guidance and monitored compliance | 53 | 17.8 | 55 | 18.5 |
| Teacher offered guidance and monitored compliance | 42 | 14.1 | 44 | 14.8 |
| Standards but no support offered | 116 | 38.9 | 115 | 38.6 |
| Not applicable or no standards | 97 | 32.6 | 97 | 32.6 |
| P3: Meeting nutrition education standards |  |  |  |  |
| Met (fully or mostly) by all grades | 54 | 18.1 | 56 | 18.8 |
| Met (fully or mostly) by some grades | 40 | 13.4 | 42 | 14.1 |
| Met (fully or mostly) by one grade | 4 | 1.3 | 4 | 1.3 |
| Partially met by one or more grades | 43 | 14.4 | 48 | 16.1 |
| Not met | 16 | 5.4 | 15 | 5.0 |
| No way to know | 62 | 20.8 | 66 | 22.1 |
| Not applicable or no standards | 84 | 28.2 | 83 | 27.9 |
| P4: Preferred nutrition education curriculum |  |  |  |  |
| Yes | 60 | 20.1 | 62 | 20.8 |
| No | 234 | 78.5 | 236 | 79.2 |
| P5: Preferred nutrition education curriculum used |  |  |  |  |
| All grades, fully implemented | 15 | 5.0 | 13 | 4.4 |
| All grades, partially implemented | 10 | 3.4 | 10 | 3.4 |
| Some grades (fully or partially) | 17 | 5.7 | 19 | 6.4 |
| One grade (fully or partially) | 5 | 1.7 | 6.0 | 2.0 |
| Not used | 6 | 2.0 | 7 | 2.3 |
| Unknown | 23 | 7.7 | 22 | 7.4 |
| No preferred curriculum | 204 | 68.5 | 213 | 71.5 |

## Studies (continued)

Table S1.5. Descriptive statistics for the Policy section (school, district, and state-level policy supports for the three areas of service) of the Progress Report (continued)

|  | Fall |  | Spring |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $n$ | $\%$ | $n$ | $\%$ |
| P6: District wellness policy |  |  |  |  |
| Yes | 224 | 75.2 | 241 | 80.9 |
| No | 62 | 20.8 | 53 | 17.8 |
| P7: Wellness policy template |  |  |  |  |
| Yes, followed exactly | 37 | 12.4 | 42 | 14.1 |
| Yes, modified | 71 | 23.8 | 83 | 27.9 |
| No template used | 176 | 59.1 | 166 | 55.7 |
| P8: Wellness policy content addressed |  |  |  |  |
| Healthy eating and nutrition | 195 | 65.4 | 211 | 70.8 |
| School garden | 62 | 20.8 | 75 | 25.2 |
| Food policies | 145 | 48.7 | 168 | 56.4 |
| Local foods | 67 | 22.5 | 79 | 26.5 |
| Unknown | 42 | 14.1 | 42 | 14.1 |
| Not applicable/no wellness policy | 62 | 20.8 | 50 | 16.8 |
| P9: Wellness policy communicated |  |  |  |  |
| School administrators | 165 | 55.4 | 182 | 61.1 |
| Teachers | 118 | 39.6 | 135 | 45.3 |
| School staff | 107 | 35.9 | 120 | 40.3 |
| Food service workers | 114 | 38.3 | 129 | 43.3 |
| Parents | 73 | 24.5 | 83 | 27.9 |
| Students | 48 | 16.1 | 57 | 19.1 |
| Don't know/not applicable | 119 | 39.9 | 110 | 36.9 |
| P10: Preferred garden curriculum | 25 | 8.4 | 26 | 8.7 |
| Yes | 266 | 89.3 | 269 | 90.3 |
| No |  |  |  |  |

## Studies (continued)

Table S1.5. Descriptive statistics for the Policy section (school, district, and state-level policy supports for the three areas of service) of the Progress Report (continued)

|  |  | Fall | Spring |  |
| :--- | :---: | :---: | :---: | :---: |
| P11: Preferred garden curriculum use | $n$ | $\%$ | $n$ | $\%$ |
| All grades, fully implemented |  |  |  |  |
| All grades, partially implemented | 8 | 2.7 | 7 | 2.3 |
| Some grades (fully or partially) | 2 | 0.7 | 3 | 1 |
| One grade (fully or partially) | 6 | 2.0 | 7 | 2.3 |
| Not used | 1 | 0.3 | 0 | 0 |
| Unknown | 7 | 2.3 | 9 | 3 |
| No preferred curriculum | 6 | 2.0 | 7 | 2.3 |
| P12: State or district local food procurement policy | 248 | 83.2 | 254 | 85.2 |
| Yes, state |  |  |  |  |
| Yes, district | 36 | 12.1 | 92 | 30.9 |
| No known policy | 77 | 25.8 | 46 | 15.4 |
| P13: Local food procurement policy implementation | 190 | 63.8 | 185 | 62.1 |
| Local products regularly requested or sought |  |  |  |  |
| Local products sometimes requested or sought | 40 | 13.4 | 48 | 16.1 |
| Local products supplied, but not specified in orders | 21 | 7.0 | 27 | 9.1 |
| Policy existed, but was not implemented | 25 | 8.4 | 29 | 9.7 |
| No local procurement policy | 5 | 1.7 | 4 | 1.3 |
| P14: School garden produce use in meals | 188 | 63.1 | 175 | 58.7 |
| Yes |  |  |  |  |
| No | 120 | 40.3 | 121 | 40.6 |
| Not sure | 117 | 39.3 | 46 | 15.4 |

## Studies (continued)

Table S1.6. Proportions of schools established each Policy Section and associations between Policy Section and the three areas of service of the Progress Report ( $\mathrm{n}=298$ )

|  | No <br> $(\%)$ | Yes <br> $(\%)$ | Spring areas of service <br> comparison (Range) | b | p |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- |

Highlights of the specific finding from Table S1.6 include:

- Schools that had a state or district policy nutrition education standards (about 70\% of schools) scored 1.81 points higher on the 25-point Hands-on Learning-Knowledge scale.
- Schools that had some support for nutrition education standards (about 17\% of schools) scored 1.16 points higher on the 25-point Hands-on Learning—Knowledge scale.
- Schools that had a district or school preferred garden curriculum (about 9\% of schools) scored 3.3 points higher on the 25-point Hands-on Learning-Engagement scale.
- Schools that had a policy to use school garden produce in school meals (about $49 \%$ of schools) scored 4.23 points higher on the 25-point Healthy School Meals scale.
- For every 1 point increase on the Policy Section (14-point scale) there was a 1 point increase on overall score for the areas of service (100-point scale). This can be interpreted to mean that policy has some influence on areas of service, but does not seem to be a strong driving factor.


## Studies (continued)

Service members use a wide variety of sources to complete the Healthy School Progress Report. For each Area most service members used multiple sources. Descriptive data are presented in Table S1.7.

Table S1.7. Descriptive statistics for information sources to obtain answers

|  | Fall |  | Spring |  |
| :---: | :---: | :---: | :---: | :---: |
|  | n | \% | n | \% |
| Hands-on Learning-Knowledge |  |  |  |  |
| Conducted themselves | 122 | 40.9 | 232 | 77.9 |
| Directly observed | 88 | 29.5 | 138 | 46.3 |
| Talked to teachers, administration, staff or parents | 243 | 81.5 | 246 | 82.6 |
| Surveyed all teachers | 10 | 3.4 | 12 | 4.0 |
| Reviewed curriculum/lesson plans | 72 | 24.2 | 91 | 30.5 |
| Other | 43 | 14.4 | 21 | 7.0 |
| Hands-on Learning-Engagement |  |  |  |  |
| Conducted themselves | 134 | 45.0 | 230 | 77.2 |
| Directly observed | 80 | 26.8 | 143 | 48.0 |
| Talked to teachers, administration, staff or parents | 221 | 74.2 | 235 | 78.9 |
| Surveyed all teachers | 11 | 3.7 | 13 | 4.4 |
| Reviewed curriculum/lesson plans | 60 | 20.1 | 82 | 27.5 |
| Other | 43 | 14.4 | 33 | 11.1 |
| Healthy School Meals |  |  |  |  |
| Spent time in cafeteria | 172 | 57.7 | 222 | 74.5 |
| Talked to food service staff | 165 | 55.4 | 197 | 66.1 |
| Talked to teachers, administration, staff or parents | 213 | 71.5 | 219 | 73.5 |
| Surveyed food service staff | 36 | 12.1 | 33 | 11.1 |
| Other | 91 | 30.5 | 25 | 8.4 |
| Schoolwide Culture of Health |  |  |  |  |
| Participated in these activities | 91 | 30.5 | 190 | 63.8 |
| Directly observed | 139 | 46.6 | 201 | 67.4. |
| Talked to teachers, administration, staff or parents | 255 | 85.6 | 259 | 86.9 |
| Surveyed school administrators, teachers, or other school staff | 35 | 11.7 | 43 | 14.4 |
| Other | 20 | 6.7 | 12 | 4.0 |
| Staying Power |  |  |  |  |
| Talked to one or more administrators | 210 | 70.5 | 227 | 76.2 |
| Talked to one or more teachers | 212 | 71.1 | 234 | 78.5 |
| Attended teacher meetings | 52 | 17.4 | 80 | 26.8 |
| Talked to one or more parents | 59 | 19.8 | 79 | 26.5 |
| Attended parent teacher association meetings | 27 | 9.1 | 50 | 16.8 |
| Talked to other school staff | 134 | 45.0 | 157 | 52.7 |
| Reviewed school handbook | 38 | 12.8 | 55 | 18.5 |
| Observed supportive practices | 113 | 37.9 | 164 | 55.0 |
| Attended wellness or garden committee meetings | 75 | 25.2 | 114 | 38.3 |
| Other | 31 | 10.4 | 22 | 7.4 |
| Policy |  |  |  |  |
| Talked with school administrators | 174 | 58.4 | 180 | 60.4 |
| Talked with district curriculum administrator | 16 | 5.4 | 21 | 7.0 |
| Talked with district food service administrator | 118 | 39.6 | 142 | 47.7 |
| Talked with state-level administrator | 14 | 4.7 | 16 | 5.4 |
| Talked with host site staff | 58 | 19.5 | 65 | 21.8 |
| Talked with state FoodCorps fellow | 37 | 12.4 | 46 | 15.4 |
| Reviewed state-level policy | 70 | 23.5 | 81 | 27.2 |
| Reviewed district-level policy | 92 | 30.9 | 107 | 35.9 |
| Attended district-level policy meeting | 12 | 4.0 | 23 | 7.7 |
| Attended different meeting | 13 | 4.4 | 13 | 4.4 |
| Other | 53 | 17.8 | 56 | 18.8 |

## Studies (continued)

Study 1: Description of Healthy School Progress Report Scores in FoodCorps Schools
Highlights of the specific finding from Table S1.7 include:

- For all areas of service as well as Staying Power, participating in or observing activities increased from Fall to Spring, which is to be expected.
- For all Areas, "talked to teachers, administration, staff or parents" was the most common source and was over 70\% in both the Fall and the Spring. Whereas, conducting surveys was less common. Surveying all teachers for Hands-on Learning was under $5 \%$ in both Fall and Spring. Survey were used more in Healthy School Meals with about $12 \%$ of service members reporting surveying food service staff in the Fall and 11\% in the Spring.

Overall confidence ratings for answers on the FoodCorps Healthy School Progress Report trended upward for all questions from Fall to Spring. Descriptive statistics are presented in Table S1.8.

Table S1.8. Descriptive statistics service member confidence in their answers

|  | Fall | Spring |
| :---: | :---: | :---: |
|  | Mean (SD) | Mean (SD) |
| Hands-on Learning-Knowledge | 1.90 (0.71) | 2.33 (0.68) |
| A: Classes have nutrition education (0-3)* | 2.04 (0.81) | 2.35 (0.73) |
| B: Number of nutrition education lessons (0-3) | 1.83 (0.90) | 2.20 (0.82) |
| C: Opportunities for tasting during nutrition education (0-3) | 1.84 (0.87) | 2.19 (0.81) |
| D: Kinds of activities included in nutrition education (0-3) | 1.88 (0.83) | 2.19 (0.80) |
| Hands-on Learning-Engagement | 2.00 (0.74) | $2.26{ }_{(0.65)}$ |
| E: Classes have garden-based activities (0-3) | 2.12 (0.84) | 2.37 (0.73) |
| F: Number of garden-based activity lessons (0-3) | 1.86 (0.87) | 2.19 (0.80) |
| G : Opportunities for tasting during garden-based activities (0-3) | 1.86 (0.89) | 2.14 (0.82) |
| H: Kinds of activities included in garden-based activities (0-3) | 2.14 (0.79) | 2.36 (0.67) |
| Healthy School Meals | 2.30 (0.59) | 2.40 (0.53) |
| J : Lunch line set-up (0-3) | 2.33 (0.72) | 2.43 (0.64) |
| L: Salad bar (0-3) | 2.42 (0.67) | 2.49 (0.59) |
| M: Cafeteria atmosphere (0-3) | 2.37 (0.69) | 2.46 (0.61) |
| O: Tastings in cafeteria (0-3) | 2.42 (0.66) | 2.53 (0.59) |
| P: Local food served (0-3) | 2.19 (0.86) | 2.28 (0.83) |
| Schoolwide Culture of Health | 2.23 (0.56) | 2.31 (0.53) |
| Q: Healthy food the dominant choice (0-3) | 2.19 (0.75) | $2.30{ }^{(0.68)}$ |
| R : Respecting healthy eating (0-3) | 2.31 (0.65) | 2.37 (0.62) |
| S : Encouraging families (0-3) | 2.13 (0.71) | 2.22 (0.70) |
| T: Additional opportunities (0-3) | 2.21 (0.68) | 2.32 (0.63) |
| U: Physical space set up (0-3) | 2.29 (0.66) | $2.33{ }^{(0.61)}$ |

Highlights of the specific finding from Table S1.8 include:

- In the Fall, confidence was lowest for opportunities for tastings and number of lessons in both the Knowledge and Engagement sections of Hands-on Learning. Also low was the kind of activities conducted for Hands-on Learning-Knowledge, but for the similar question in kinds of activities in Hands-on Learning-Engagement confidence was higher.
- Confidence was highest for salad bar and tasting in the cafeteria in the Healthy School Meals Area. These scores were low in both Fall and Spring (See Table S1.2), which seems to be indicative that there is high confidence when something is not present or occurring at the school.

Next we looked at that data to see how changes in the areas of serve were influence by several school factors. There are: urbanicity, school type (elementary, middle, high), service member year, service members hours in the school, service site type, selected for a goal, and fall level of programming. The data on which questions were chosen as a goal is difficult to interpret. The questions within an area of service are all related. For example, if a service member chooses as a goal to have more classes receive education, the total number of classes taught and also the types of activities done in those classes will also increase. Therefore, for this analysis, we looked at total change score within an area of service if any question in that area was chosen as a goal.

Table S1.9 presents descriptive statistics. Table S1.10 presents a linear regression model, which is an analysis to determine if there are statistically significant associations between the school factors and the level of change in the areas of service. Highlights for these tables are presented together

Highlights of the specific finding from Tables S1.9 and S1.10, next two pages, include:

- The factor that appears to have the most notable influence on changes in the areas of service was the fall score. This is represented on the table as "Fall Levels of Programming." Schools that were Planting Seeds (scored 0-32, Fall 2015) had a mean increase of about 16 points. Schools in Starting to Grow (scored 33-52, Fall 2015) had a 7 point increase. Schools in Flourishing (scored 53100, Fall 2015) had a 1 point increase. We also divided the sample into deciles and the same trend held true (data not shown). The lowest decile scoring $0-24$ points and having change score of 21 points and the highest decide scoring 62-100 had a mean change of 0.4 points. This means that schools that start out with less programming have an easier time adding on more programming than schools that were already doing a substantial amount of programming. This means that FoodCorps can influence more change in schools that start out with a lower level of programming. However, from our interviews with service members, many discussed how much time it took to continue to conduct programming (e.g., classroom or garden lessons, tastings in the cafeteria). Therefore it might be that once a school reaches the level of programming that can be maintained by the service member and school staff, a service member's time is spent on implementing the programming more than increasing programming.
- The second factor that influenced change in this statistical model was Staying Power, with higher Staying Power spring score being associated with higher change score. This can be interpreted that higher levels of school support seemed to be associated with being able to make more change. This along with the data from Table S1.4 shows that higher levels of school support are associated with both total score in the areas of service as well as ability to increase score in the areas of service.
- The third factor associated with change score was the number of hours service members spent in a school per week. As the service member spent more hours per week at the school, Change Score increased more. For every additional hour a service member spent in the school Change Score increased by 0.25 . This result seems to support FoodCorps decision to have service members spend more time in one to three schools instead of fewer hours in more schools.
- The final factor Elementary schools had larger change scores ( 8.55 points) than middle schools ( 7.44 points) and high schools ( 5.52 points). This may be due to the FoodCorps having more experience in elementary schools as well as that the literature has more programs in elementary schools. Thus, the types of programming within the areas of service may be more geared to what is done in elementary schools. A qualitative study of the types of programming that are being conducted in middle and high schools would help to understand why they are not experiencing as much change as elementary schools.
- Total enrollment, percent students eligible for free/reduced priced lunch eligible, percentage of students who are Native American, number of service members in schools, service site type, urbanicity, and service member tenure were not associated with change score. This is promising, as it indicates that these school characteristics do not appear to be associated with FoodCorps ability to change programming in schools. There was concern that larger schools may be more challenging for service members to make changes; it is encouraging that this is not the case. There was also concern that level of poverty, which percent of students who qualify for free/reduced priced lunch is a proxy, may make it harder to implement programming. Additionally, FoodCorps staff shared concerns with us that schools with higher percentage of Native American students may find the Progress Report less applicable to how they are organized and work and less appropriate to their programming. It is encouraging to see that percent Native American was not associated with Progress Report change score. It is also reassuring that number of service members, type of service site, urbanicity and service member tenure were not associated with change score.


## Studies (continued)

Table S1.9. Descriptive statistics for FoodCorps Healthy School Progress Report change score and Staying Power change score for school factors

|  | Overall Progress Report Change Score (0-100) | Hands-on LearningKnowledge Change Score (0-25) | Hands-on LearningEngagement Change Score (0-25) | Healthy School Meals Change Score (0-25) | Schoolwide Culture of Health Change Score (0-25) | Staying <br> Power Change Score (0-60) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) |
| Urbanicity |  |  |  |  |  |  |
| City ( $\mathrm{n}=135$ ) | 8.36 (11.41) | 2.99 (5.77) | 2.65 (5.35) | 0.84 (2.23) | 1.91 (2.73) | 3.64 (4.52) |
| Suburb ( $\mathrm{n}=33$ ) | 8.30 (11.99) | 2.36 (6.75) | 2.53 (5.18) | 1.19 (1.75) | 2.05 (2.59) | 6.00 (8.33) |
| Town ( $\mathrm{n}=40$ ) | 5.18 (8.82) | 1.32 (3.57) | 0.25 (1.57) | 0.25 (1.57) | 1.46 (3.51) | 3.02 (4.60) |
| Rural ( $\mathrm{n}=73$ ) | 8.55 (10.36) | 3.03 (5.62) | 1.26 (2.22) | 1.26 (2.22) | 2.10 (3.27) | 4.56 (5.06) |
| School Type |  |  |  |  |  |  |
| Elementary ( $\mathrm{n}=203$ ) | 8.55 (11.68) | 2.81 (6.11) | 2.76 (5.38) | 0.98 (2.16) | 2.00 (3.08) | 4.34 (5.58) |
| Middle ( $\mathrm{n}=39$ ) | 7.44 (8.92) | 2.88 (4.47) | 2.25 (4.70) | 0.48 (1.98) | 1.81 (3.24) | 3.59 (4.10) |
| High ( $\mathrm{n}=27$ ) | 5.52 (8.34) | 2.39 (3.82) | 1.49 (4.05) | 0.96 (1.52) | 1.52 (1.90) | 2.85 (4.94) |
| Service Member Year |  |  |  |  |  |  |
| 1st year ( $\mathrm{n}=219$ ) | 8.41 (11.48) | 2.93 (5.94) | 2.63 (5.42) | 0.93 (2.24) | 1.94 (3.29) | 4.29 (5.23) |
| 2nd year ( $\mathrm{n}=78$ ) | 6.08 (8.49) | 1.90 (4.34) | 2.12 (4.01) | 0.63 (1.56) | 1.62 (2.27) | 3.57 (5.74) |
| Service Site Type |  |  |  |  |  |  |
| Education ( $\mathrm{n}=113$ ) | 7.05 (10.65) | 2.56 (5.25) | 2.00 (4.77) | 0.75 (1.97) | 1.86 (3.27) | 3.26 (4.78) |
| Foundation ( $\mathrm{n}=18$ ) | 12.33 (9.27) | 6.15 (6.55) | 2.89 (4.13) | 1.41 (1.83) | 1.97 (2.73) | 8.44 (7.52) |
| Government ( $\mathrm{n}=3$ ) | -2.33 (16.26) | -1.94 (6.17) | 1.98 (3.44) | 1.00 (3.60) | -3.33 (4.93) | -1.33 (4.16) |
| Non-profit ( $\mathrm{n}=152$ ) | 7.78 (10.79) | 2.15 (5.46) | 2.90 (5.40) | 0.89 (2.16) | 1.88 (2.74) | 4.32 (5.25) |
| Selected for goal |  |  |  |  |  |  |
| Selected* | -- | 2.98 (6.24)-- | 2.58 (5.16) | 0.96 (2.15) | 2.13 (3.11) | -- |
| Not selected* | -- | 2.11 (4.25)-- | 2.17 (4.74) | 0.57 (1.87) | 0.79 (2.56) | -- |
| Levels of Programming |  |  |  |  |  |  |
| Planting Seeds ( $\mathrm{n}=70$ ) $[0-32]$ | 15.66 (12.42) | 6.28 (7.42) | 5.65 (5.89) | 0.81 (2.04) | 2.88 (3.18) | 5.81 (6.95) |
| Starting to Grow ( $\mathrm{n}=145$ ) ${ }_{[33-52]}$ | 7.06 (8.83) | 2.20 (3.84) | 2.07 (4.73) | 1.04 (2.05) | 1.90 (3.03) | 3.64 (4.70) |
| Flourishing $(\mathrm{n}=66)[53-100]$ | 1.08 (7.66) | -. 05 (4.41) | -. 13 (2.75) | 0.59 (2.05) | 0.70 (2.64) | 2.97 (4.53) |
| Hours of Service |  |  |  |  |  |  |
| Low $(\mathrm{n}=130) \text { [0-4.9 hours] }$ | 5.17 (9.46) | 1.24 (4.50) | 2.18 (5.45) | 0.43 (1.76) | 1.31 (2.86) | 2.96 (4.39) |
| Medium ( $\mathrm{n}=92$ ) [5-8.9 hours] | 9.72 (9.52) | 4.37 (6.00) | 2.08 (4.07) | 1.34 (2.15) | 1.96 (2.67) | 4.89 (6.03) |
| High ( $\mathrm{n}=93$ ) [9 or more hours] | 9.20 (12.97) | 3.02 (6.19) | 2.99 (5.24) | 0.83 (2.23) | 2.62 (3.58) | 4.74 (5.80) |
| Total Sample | 7.79 (10.87) | 2.66(5.55) | 2.44 (5.10) | 0.88 (2.05) | 1.86 (3.07) | 4.03 (5.40) |

* various n's see table 9
${ }^{\wedge}$ square brackets are range for fall Progress Report Score


## Studies (continued)

Table S1.10. School factors associated with FoodCorps Healthy School Progress Report change score (Spring-Fall) for 298 schools participating in FoodCorps during the 2015-16 school year

| School Factors | Beta | S.E. | $p$-value |
| :---: | :---: | :---: | :---: |
| Fall Progress Report Score (0-100) | -0.590 | 0.041 | <0.001 |
| Total Enrollment | 0.001 | 0.002 | 0.910 |
| Spring, Staying Power (0-60) | 0.466 | 0.063 | <0.001 |
| Free/Reduced Price Lunch Eligible (\%) | -2.021 | 2.680 | 0.452 |
| Native American (\%) | -0.440 | 3.551 | 0.902 |
| Hours Served Per Week | 0.249 | 0.072 | 0.001 |
| Service Members In School |  |  |  |
| One ( $\mathrm{n}=281$ ) | ref | ref | ref |
| Two ( $\mathrm{n}=17$ ) | -0.659 | 2.130 | 0.757 |
| Service Site Type |  |  |  |
| Non-School (n=226) | ref | ref | ref |
| School ( $\mathrm{n}=72$ ) | 0.377 | 1.333 | 0.778 |
| School Level |  |  |  |
| Elementary ( $\mathrm{n}=203$ ) | ref | ref | ref |
| Middle ( $\mathrm{n}=39$ ) | -2.920 | 1.537 | 0.059 |
| High ( $\mathrm{n}=27$ ) | -7.241 | 1.954 | <0.001 |
| Other ( $\mathrm{n}=12$ ) | -3.779 | 2.815 | 0.181 |
| Urbanicity |  |  |  |
| Rural ( $\mathrm{n}=73$ ) | ref | ref | ref |
| City ( $n=135$ ) | -0.619 | 1.355 | 0.648 |
| Suburb ( $\mathrm{n}=33$ ) | -1.241 | 1.911 | 0.517 |
| Town ( $\mathrm{n}=40$ ) | -2.446 | 1.718 | 0.156 |
| Service Member Tenure |  |  |  |
| One Year ( $\mathrm{n}=220$ ) | ref | ref | ref |
| Two Years ( $\mathrm{n}=78$ ) | -1.391 | 1.200 | 0.247 |

## Studies (continued)

Table S1.11 show that all questions were chosen as goals and also shows if schools who had a goal related to a specific question had greater change scores than schools who did not have a goal.

Highlights of the specific finding from Table S1.11, next page, include:

- Goals were frequently chosen for at least one of the questions in Hands-on Learning—Engagement (84\%), Healthy School Meals ( $73 \%$ ), and Schoolwide Culture of Health ( $79 \%$ ). Whereas for Hands-on Learning-Knowledge $61 \%$ chose it as a goal.
- Questions that were most frequently selected as a goal were increasing number of garden based lessons classes receive (47\%), conducting activities to increase family engagement (43\%), increasing the number of classes who receive garden based lessons ( $35 \%$ ), increasing number of nutrition education lessons ( $26 \%$ ), and initiating tastings in the cafeteria (26\%).
- Schools reported a total of 886 goals linked to one of the Progress Report questions. With 298 schools reporting goals, this means schools made an average of 3 goals linked to one of the Progress Report questions.
- Only three questions had a larger change for schools that selected it as a goal when compared to schools that did not select it as a goal. These were all in the Schoolwide Culture of Health section: R: Respect Healthy Eating, S: Encouraging Families; and T: Additional Supports.


## Studies (continued)

Table S1.11. Number of schools selected each area of service and results of independent samplest-tests of change scores for selected for goal versus not selected for goal in FoodCorps Healthy School Progress Report areas of service

|  | Selected |  |  | Not Selected |  |  | p-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% | Change Score | n | \% | Change Score |  |
|  |  |  | Mean (SD) |  |  | Mean (SD) |  |
| Hands-on Learning-Knowledge | 183 | 61.4 |  | 115 | 38.6 |  |  |
| A: Classes have nutrition education | 31 | 10.4 | 0.19 (1.38) | 267 | 89.6 | 0.63 (1.57) | 0.110 |
| B: Number of nutrition education lessons | 76 | 25.5 | 0.41 (1.70) | 222 | 74.5 | 0.45 (1.54) | 0.857 |
| C: Opportunities for tasting during nutrition education | 58 | 19.5 | 0.80 (1.45) | 240 | 80.5 | 0.51 (1.57) | 0.181 |
| D: Kinds of activities included in nutrition education | 45 | 15.1 | 1.67 (2.77) | 253 | 84.9 | 0.96 (2.40) | 0.076 |
| Hands-on Learning-Engagement | 250 | 83.9 |  | 48 | 16.1 |  |  |
| E: Classes have garden-based activities | 104 | 34.9 | 0.78 (1.60) | 193 | 64.8 | 0.58 (1.28) | 0.236 |
| F: Number of garden-based activity lessons | 141 | 47.3 | 0.63 (1.62) | 157 | 52.7 | 0.37 (1.39) | 0.143 |
| G: Opportunities for tasting during garden-based activities | 20 | 6.7 | 0.47 (1.22) | 278 | 93.3 | 0.21 (1.18) | 0.350 |
| H : Kinds of activities included in garden-based activities | 56 | 18.8 | 1.46 (2.54) | 242 | 81.2 | 1.07 (2.54) | 0.306 |
| Healthy School Meals | 217 | 72.8 |  | 81 | 27.2 |  |  |
| I: Serve lunch | 8 | 2.7 |  | 290 | 97.3 |  |  |
| J: Lunch line set-up | 19 | 6.4 | 0.03 (0.68) | 279 | 93.6 | 0.10 (0.50) | 0.606 |
| K: Salad bar exists | 10 | 3.4 |  | 288 | 96.6 |  |  |
| L: Salad bar desirability | 25 | 8.4 | 0.22 (1.53) | 273 | 91.6 | 0.03 (0.84) | 0.321 |
| M: Cafeteria atmosphere | 53 | 17.8 | 0.26 (0.78) | 245 | 82.2 | 0.07 (0.49) | 0.029 |
| N : Tastings in cafeteria exist | 76 | 25.5 |  | 222 | 74.5 |  |  |
| O: Tastings | 45 | 15.1 | $0.35{ }_{(1.00)}$ | 253 | 84.9 | 0.27 (0.68) | 0.476 |
| P: Local food served | 53 | 17.8 | 0.47 (1.07) | 245 | 82.2 | 0.29 (1.13) | 0.269 |
| Schoolwide Culture of Health | 236 | 79.2 |  | 62 | 20.8 |  |  |
| Q: Healthy food the dominant choice | 52 | 17.4 | 0.35 (0.94) | 242 | 81.2 | 0.10 (0.88) | 0.062 |
| R : Respecting healthy eating | 41 | 13.8 | 0.59 (0.95) | 257 | 86.2 | 0.18 (0.79) | 0.012 |
| S: Encouraging families | 129 | 43.3 | 0.74 (1.11) | 169 | 56.7 | 0.28 (0.86) | $<0.001$ |
| T: Additional opportunities | 49 | 16.4 | 0.86 (1.40) | 249 | 83.6 | 0.48 (1.13) | 0.04 |
| U: Physical space set up | 68 | 22.8 | 0.50 (0.84) | 230 | 77.2 | 0.47 (0.99) | 0.801 |

## Studies (continued)

In Table S1.12 we analyzed for associations between each Progress Report questions in the areas of service and each individual Staying Power Question.

## Table S1.12. Correlations between Staying Power scores and areas of service scores in FoodCorps Healthy School Progress Report



Highlights of the specific finding from Table S1.12 include:

- Total Staying Power scores substantially correlated with the overall Progress Report score (Purple highlight).
- Total Staying Power scores had strong positive correlations with the area of School Community in the Progress Report (purple highlight).
- Staying Power section "How nutrition education connected to the curriculum" was significantly correlated with Knowledge (Hands-on Learning) light orange color highlight.
- Staying Power section "Parents support nutrition education" was significantly correlated with the area of School Community in the Progress Report (orange highlight).
- Staying Power section "How garden-based activities connected to the curriculum" was highly correlated with Engagement (light green highlight).
- Staying Power section "School administration supports healthy school meals" was significantly correlated with the area of Access in the Progress Report (blue highlight).
- Staying Power section "School administration implements practices around healthy eating" was significantly correlated with the School Community in the Progress Report (green highlight).


## Discussion

The FoodCorps Healthy School Progress Report was based on a score of $1-100$. A score of 0 to 32 suggested the school was laying the foundation, a score of 33 to 52 suggested the school was making progress, and a score of 53 to 100 suggested the school making significant strides toward a healthy school environment. The overall mean score among the 298 FoodCorps schools was 42.7 (Fall 2015) with an average increase of 8 points at one year (Spring 2016). Over $75 \%$ of schools made some positive improvement. At the same time, $14 \%$ of schools decreased their score over the year and $11 \%$ stayed the same. From our interviews with service members, sometimes scores on individual questions decreased due to the service member realizing programming they thought was happening in the school was not really happening.

The overall mean score among the 298 FoodCorps schools on the Staying Power section was 23.2 out of 60 (Fall 2015) with an average increase 4 point at one year (Spring 2016). Two-thirds of the schools made some positive improvement.

The overall mean among the 298 FoodCorps schools on the Policy section was 5.1 out of 14 , with virtually no schools that changed state or district policies about nutrition education or garden standards and curriculum. There were, however, schools with modest positive changes in wellness policy content and communication of that content.

We found that lower baseline Progress Report scores, more FoodCorps service member hours, being an elementary school, and higher Staying Power were associated with the biggest changes in Progress Report scores from Fall 2015-Spring 2016. We believe this data suggests several things. First, FoodCorps may want to try to place more service members in schools that currently have a low level of food-related programming, such as schools that are at the Planting Seeds level with a Progress Report score of 0-32. These are the schools were service members can have the biggest impact on increasing the level of programming. On the other hand, when service members are placed in schools with higher levels of programming such as schools at the Flourishing level with a Progress Report score above 53 is different. At such schools, it appears that the role of service member is to maintain programming, such as continue to conduct classroom or garden lessons or taste-tests in the cafeteria. Additionally, FoodCorps should continue movement towards service members spending more hours in a single school as opposed to few hours in more schools. Third, we found that bigger changes occurred in Elementary schools versus High Schools, but we did not explore why. Perhaps it is easier to implement programming in elementary schools or it is a function of the Progress Report not capturing the type of programming being conducted in High Schools. We believe this warrants further investigation, which could be done by exploring the schools' goals and action plans in elementary versus high schools and how they were similar and different. Lastly, schools that had the most supports in place for institutionalization of programming (i.e., Staying Power) were associated with biggest changes. This may suggest that service members can work on programming, as well as building supports for institutionalization of programming, simultaneously.

Increasing programming in the area of Hands-on Learning was most commonly done by service members. More specifically, service members were most likely to conduct motivational and skill-building activities and have more classes do garden-based activities. Since Hands-on Learning was associated with higher consumption of fruits and vegetables (see Study 3), we recommend service members continue to lesson activities and best practices, using the list that is in the Hands-on Learning section of the PY2017 Healthy School Progress Report. Additionally, w, e recommend each class receive a minimum of 5 hours of classes and ideally 10 hours of classes each school year. These classes can be led by the service member, classroom teachers or other in the school

## Studies (continued)

community. Service members can take on the role of providing workshops and supports for others to teach lessons. This may be particularly important in schools with larger enrollment. In addition, for those service members not focusing on Hands-on Learning activities, we would recommend this be encouraged. Service members were least likely to make changes in the Healthy School Meals program area. In particular, there were very few changes in the salad bar. About half of the schools did not have salad bars and these schools did not start salad bars over the one-year of programming. Schools that had salad bars were scoring fairly high, 4 out of 5 points. The high scores may be why there was not a change. Further, it appeared activities falling under the Healthy School Meals programming area were not a focus for many service members. FoodCorps may want to explore why this occurred (e.g., did not feel it was feasible to make changes, lacked confidence in ability to work with food service employees, not as interesting to promote as the other areas) and ways to support service members in doing this work.

In conclusion, the Healthy School Progress Report seems to be reflective of FoodCorps programming, as almost all questions made statistically significant increases. Additionally, the wide breadth of questions allows schools autonomy to choose the programming they would like to implement.

We recommend FoodCorps use the Fruit and Vegetable Recall Questionnaire (Instrument 2) to collect consumption data across all schools. This could be done in PY2017, or if that is not possible than in PY2018. Collecting these data would provide a large dataset for more in-depth investigations of how different kinds and levels of programming relate to fruit and vegetable consumption at school lunch. Additionally, as FoodCorps has multiple years of data from the Healthy School Progress Report, further investigations can help to understand the process of changes in programming in the three areas of service and how these relate to the questions in the Staying Power and Policy sections of the Progress Report.

## Best Practices in Hands-on Learning

a. Include opportunities to eat fruits and vegetables through tastings and cooking
b. Create positive social norms that make fruits and vegetables cool
c. Decrease fears of trying new foods
d. Focus on health benefits of eating fruits and vegetables
e. Compare the nutritional value of healthful and less healthful snacks
f. Use MyPlate visual to encourage students to make half their plate fruits and vegetables
g. Promote eating fruits and vegetables at school lunch
h. Help students set personal goals for eating more fruits and vegetables
i. Have students monitor progress toward their goals to eat more fruits and vegetables
j. Share recipes for students to take home to prepare with their family
k. Include activities that build cultural appreciation
I. Create appreciation for plants by exploring what they need to grow and their lifecycle
$m$. Have students work with plants in the garden
$n$. Harvest what is grown in the garden
o. Introduce the concept of composting and provide opportunities to compost
p. Teach students how our "farm to plate" food system works
q. Focus on inequity in access to healthy foods and resources that build toward equity

# Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools 

## Background

The objective of this study is to better understand the effect of a FoodCorps service member on the school environment to support healthy eating among students. We compared matched FoodCorps schools to nonFoodCorps schools on changes to the Progress Report score from Fall to Spring PY16. FoodCorps schools were selected from the population of schools participating in the program during the 2015-16 program year; matched control schools were selected from a pool of schools that were identified as "next in line" for FoodCorps programming and matched on a set of observable sociodemographic indicators. Each school completed a Progress Report in the Fall and again in the Spring, which were scored according to the Progress Report Scoring protocol (see Appendix H). We observed greater increases in the scores of FoodCorps schools than matched control schools overall, in Staying Power and in Hands-on Learning-Knowledge, Healthy School Meals, and Schoolwide Culture of Health, although these did not reach statistical significance ( $\mathrm{P}<0.05$ ). The results of this study suggest that schools with a FoodCorps service member may produce greater changes in the school environment that support healthy eating, though future research should ensure a larger sample size and should track changes over a longer duration to determine if the changes we observed are replicable.

## Methods

Design. This is a quasi-experimental pre-post study conducted during the 2015-16 school year. We aimed to select an adequate number of FoodCorps schools and matched control schools to determine if schools with FoodCorps (e.g., the presence of a service member) have greater increases in scores on the Healthy School Progress Report than non-FoodCorps schools. In order to select appropriate matched-controls for FoodCorps schools, we sought to identify schools that are as similar on several important observable indicators. Because both interest in farm-to-school programming and location are two potential confounders, we suggested selecting matches within the same region (defined as schools that were geographically near and affiliated with the service site organization) and that are "next in line" for FoodCorps programming.

Recruitment. Between August and September 2015, FoodCorps sent out a survey to all enrolled service sites to collect information regarding schools within the vicinity of the service site that have "unmet need," i.e., the absence of a service member in a school that has previously displayed interest in the program (assessed with the question, "Are there other schools in your community that are ready for and interested in partnering with you via FoodCorps but that you are not yet able to serve by placing a service member there?"). The survey asked service site supervisor to list the names of any such schools, the type (e.g., elementary, middle or high), their ZIP code, and to provide any comments about why they were identified as potential future FoodCorps schools. Respondents from 37 service sites identified 140 schools that could be considered as matched controls for this study.

At the same time, FoodCorps provided us with a list of schools that were confirmed as participating in the program during PY16. This database listed the school name, location, type, and if the service site plans to work within this school in "depth," meaning hat the service member would spend at least 8 hours per week, on average, throughout the school year.

School Demographics. We obtained school-level information on all schools in the sample (both FoodCorps and non-FoodCorps) from the most recent National Center for Education Statistics Common Core of Data (2013-14) through a search by name and location. The following indicators were obtained for use in this study: enrollment size, ethnic makeup (Black, Hispanic and White), free/reduced price lunch eligible percent and urbanicity (rural, town, suburban or urban).

Sample Selection. To begin the matching process, we first excluded schools that did not contain elementary school grades, had less than $50 \%$ free/reduced price eligible students, were not listed in the Common Core of Data and/or FoodCorps schools that were not scheduled to be served in depth by a service member (removing $\mathrm{n}=8$ service sites from the matching process). A team of five researchers then came to consensus on the best matching pair at each site using the following indicators: percent eligible for free/reduced price lunch (FRPL), percent Black, percent Hispanic, percent White, enrollment size and urbanicity. This process involved considerable discussion and attempted to minimize the differences between each FoodCorps and nonFoodCorps school selected from each service site on the aforementioned indicators. We wished to select only one pair per service site to minimize the response burden for each site.

We identified 29 pairs of FoodCorps and matched control schools, to which invitation letters were sent to participate in this aim of the evaluation. One additional follow-up email was sent to schools for participation in instances of non-response. Service sites were offered an incentive from FoodCorps for their participation in this study. Our estimation was that a sample of 40 school would provide us with statistical power to detect change, if there was a difference between the FoodCorps and control schools. In total, we received 24 Progress Report submissions in the Fall, representing 12 matched pairs of FoodCorps and control schools (response rate $=41.3 \%)$. Each of these pairs submitted Progress Reports in the Spring for each FoodCorps and matched control school.

Data Analysis. Progress Reports were scored according to the previously defined Progress Report Scoring Protocol, with each Area ranging from $0-25$ points, the overall score ranging from 0 to 100 points and the Staying Power section ranging from 0 to 60 . A paired samples $t$-test was used to compare change in scores (Fall subtracted from Spring) on each Area, the overall score and the Staying Power section. The significance level was set at $\mathrm{p}=0.05$, with an additional Bonferoni adjustment for multiple comparisons. We conducted an primary analysis that included all 12 pairs of schools. This is called an "intent-to-treat analysis" since it includes all data from the 12 pairs of schools enrolled in the study. We also conducted a secondary analysis that excluded five pairs of schools. One pair was excluded because the matched control school appeared to have been "contaminated" with programming from the service site that was equivalent to that of a FoodCorps service member working in the school, thus making them an inappropriate matched control. The other four pairs were excluded due to uncertainty about change that occurred during the school year. One school in each of these pairs submitted a Progress Report with identical scores to what was submitted in the fall. This included 3 FoodCorps schools and 1 control school. Since we could not verify if there was indeed no programming changes or if there was lack of time to complete the Progress Report in the Spring, these schools were excluded for the secondary analysis.

## Studies (continued)

## Results

In Fall 2016, we received completed Progress Reports for 12 matched pairs of schools. In Spring 2016, all 12 matched pairs of schools completed an end of year Progress Report. Thus, the final sample for this analysis was 24 schools. The results of our analyses are presented for all 12 pairs in Table S2.1 and for the 7 pairs deemed to be appropriate FoodCorps and control schools, as described above, in Table S2.2.

In the primary analysis with all 12 matched pairs, none of the Healthy School Progress Report indicators we assessed were statistically different in the FoodCorps schools as compared to their matched controls. Over the course of PY16, FoodCorps schools had an increase in the overall Progress Report Score of 8.3 (SD=9.6) points, whereas matched control schools had an increase of 4.7 ( $\mathrm{SD}=9.3$ ) points. Although the FoodCorps schools had a greater increase in the overall Progress Report score than matched control schools, this was not statistically significant ( $\mathrm{p}=0.290$ ). With the exception of Hands-on Learning-Engagement, FoodCorps schools had greater increases on each Area section than matched control schools, although, similarly, these were not statistically significant. In addition, FoodCorps schools had a greater increase in the score on the Staying Power section than matched control schools, but this was not statistically significant ( $\mathrm{p}=0.288$ ).

In the secondary analysis that excludes 5 pairs of schools, the FoodCorps schools had a greater increase in their Progress Report scores than matched control schools. The FoodCorps schools had a 13.7 (8.6) change score while the matched Control schools increased 2.7 (6.6) ( $\mathrm{p}=0.003$ ). FoodCorps schools also had greater increases in the Schoolwide Culture of Health area of service with 5.3 (2.8) change score for FoodCorps and 0.8 (1.9) change score for the control schools ( $\mathrm{p}=0.002$ ).

## Studies (continued)

Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools.
Table S2.1. Effects of FoodCorps programming: Comparison of FoodCorps ( $\mathrm{n}=12$ ) and matched control ( $\mathrm{n}=12$ ) schools on scores on the FoodCorps Healthy School Progress Report at two time points, 2015-2016 (intent-to-treat)

|  |  |  |  | Independent Samples |  | Paired Samples |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fall | Spring | Change | t | p | t | p |
| Overall Score (0-100) |  |  |  |  |  |  |  |
| FoodCorps | 41.3 (10.3) | 49.6 (11.3) | +8.3 (9.6) | 0.942 | 0.356 | 1.111 | 0.290 |
| Control | 34.9 (11.2) | $39.5{ }_{\text {(17.5) }}$ | +4.7 (9.3) |  |  |  |  |
| Hands-on Learning-Knowledge (0-25) |  |  |  |  |  |  |  |
| FoodCorps | 14.1 (5.5) | 16.8 (3.7) | +2.6 (5.7) | 1.322 | 0.210 | 1.328 | 0.211 |
| Control | 14.0 (7.5) | 14.4 (8.0) | +0.4 (1.4) |  |  |  |  |
| Hands-on Learning-Engagement (0-25) |  |  |  |  |  |  |  |
| FoodCorps | 10.4 (7.1) | 11.6 (7.8) | +1.2 (2.8) | -0.920 | 0.368 | -0.902 | 0.386 |
| Control | 3.7 (5.0) | 6.8 (8.4) | +3.1 (6.6) |  |  |  |  |
| Healthy School Meals (0-25) |  |  |  |  |  |  |  |
| FoodCorps | 8.7 (2.7) | 10.1 (4.3) | +1.4 (1.7) | 2.095 | 0.048 | 1.891 | 0.085 |
| Control | 9.7 (2.6) | 9.7 (2.7) | 0.0 (1.6) |  |  |  |  |
| Schoolwide Culture of Health (0-25) |  |  |  |  |  |  |  |
| FoodCorps | 8.1 (3.4) | 11.1 (3.0) | +3.1 (3.4) | 1.657 | 0.112 | 1.699 | 0.117 |
| Control | 7.5 (3.5) | 8.6 (4.2) | +1.2 (2.1) |  |  |  |  |
| Staying Power (0-60) |  |  |  |  |  |  |  |
| FoodCorps | 20.5 (9.4) | 25.6 (7.1) | +5.1 (6.8) | 1.364 | 0.186 | 1.117 | 0.288 |
| Control | 18.8 (10.6) | 20.3 (7.1) | +1.4 (6.4) |  |  |  |  |

* Bonferoni adjustment for multiple comparisons $\mathrm{P}<0.0083$

Highlights of the specific finding from Table S2.1 include:

- The 12 FoodCorps schools in the sample appear to have scored similarly to the 298 schools which completed Progress Reports in Fall 2015 and Spring 2016. The mean Fall scores were 42.66 for to total sample and 41.3 for the 12 schools in this study. The Spring scores were 50.45 for the total sample and 49.6 for the 12 schools in this study (See Table S1.2)
- The non-FoodCorps schools' mean was lower at 34.9 , and had a mean increase of 4.7 points, which was less than the 12 FoodCorps schools in this sample ( 8.3 points) and the total sample of 298 (7.79) points.
- FoodCorps schools did not have significantly higher changes to the Progress Report scores than non-FoodCorps matched-control schools.


## Studies (continued)

Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools.
Table S2.2. Effects of FoodCorps programming: Comparison of FoodCorps ( $\mathrm{n}=7$ ) and matched control ( $\mathrm{n}=7$ ) schools on scores on the FoodCorps Healthy School Progress Report at two time points, 2015-2016 (excludes one pair for contaminated control school and 4 pairs due to zero Progress Report change score)

|  |  |  |  | Paired Samples |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fall | Spring | Change | t | p |
| Overall Score (0-100) |  |  |  |  |  |
| FoodCorps | 40.6 (8.9) | 54.3 (7.9) | +13.7 (8.6) | 4.715 | 0.003 |
| Control | 35.3 (13.9) | 38.0 (18.5) | +2.7 (6.6) |  |  |
| Hands-on Learning-Knowledge (0-25) |  |  |  |  | 0.126 |
| FoodCorps | 12.8 (6.1) | 17.0 (3.0) | +4.2 (6.8) | 1.777 |  |
| Control | 12.5 (8.4) | 12.3 (8.5) | -0.2 (1.0) |  |  |
| Hands-on Learning-Engagement (0-25) |  |  |  |  | 0.934 |
| FoodCorps | 13.0 (5.8) | 15.4 (6.2) | +2.4 (3.2) | -0.09 |  |
| Control | 5.5 (5.7) | 7.7 (8.2) | +2.2 (3.8) |  |  |
| Healthy School Meals (0-25) |  |  |  |  | 0.147 |
| FoodCorps | 8.5 (3.7) | 10.3 (4.1) | +1.8(1.7) | 1.66 |  |
| Control | 9.8 (2.2) | 9.6 (2.2) | -0.12 (2.1) |  |  |
| Schoolwide Culture of Health (0-25) |  |  |  |  |  |
| FoodCorps | 6.4 (1.8) | 11.7 (2.4) | +5.3 (2.8) | 5.24 | 0.002 |
| Control | 7.6 (4.2) | 8.4 (5.0) | +0.8(1.9) |  |  |
| Staying Power (0-60) |  |  |  |  |  |
| FoodCorps | 18.3 (9.0) | 26.0 (5.5) | +7.7 (7.8) | 1.66 | 0.148 |
| Matched | 21.9 (11.6) | 21.4 (10.8) | +0.4 (6.1) |  |  |

Highlights of the specific finding from Table S2.2 include:

- This secondary analysis found the FoodCorps schools change score for the overall Healthy School Progress Report and Schoolwide Culture of Health was significantly higher than for the control schools. However, this small sample of FoodCorps schools had a larger change score on the Healthy School Progress Report than the full sample of 298 schools.


## Discussion

FoodCorps schools did not have significantly higher changes to the Progress Report scores than non-FoodCorps matched-control schools. Although Progress Report change scores were higher overall and for Hands-on Learning-Knowledge, Healthy School Meals, Schoolwide Culture of Health, and Staying Power in the FoodCorps schools compared to non-FoodCorps schools, these differences did not reach statistical significance. This study was compromised due to challenges in recruitment. Initially, we hoped to enroll 20 pairs of schools in the sudy, but were able to collect data from 12 pairs. As a result, the small sample size made it difficult to detect statistically significant differences, if they existed. It was encouraging to see trends that suggested schools with a FoodCorps service member had higher change scores, but future studies are needed with larger sample sizes.

One important outcome from Study 1 was that lower baseline Progress Report scores had significantly larger change scores after one school year. Therefore, if this study was repeated in the future, we recommend that the FoodCorps schools enrolled in the study are in their first year of programming. This would increases changes that the FoodCorps and the control schools would start with a low Progress Report score.

## Studies (continued)

Study 2: Comparison of Healthy School Progress Report Scores in FoodCorps and non-FoodCorps Schools.
We projected how much increase the control schools in this sample would have been predicted to have if they performed on the Progress Report as the FoodCorps schools did. Before we review the prediction, we need to explain the what the association between fall Progress Report score and expected change score. The mean fall score for the FoodCorps schools was 42.66 points, and the mean increase was 7.79 points. For every point a school was below the sample mean, the prediction is that the school would increase 0.59 points more than the average increase. For example, if a school scored 32.66 in the fall ( 10 points below the mean), the prediction is that school would increase $7.79+(0.59 \mathrm{X} 10)$, or 13.69 points. Similarly, for every point above the mean, it would be predicted that the increase would be 0.59 points less than the average increase.

Using this association, FoodCorps schools with a Fall mean of 34.9 (the mean of the 12 control schools)would be expected to increase 12.36 points. The formula is: expected change $=[(42.66-34.90) \mathrm{X} .59]+7.79$. The expected change score is close to three times the change score that was achieved by the control schools (4.7 points).

However, this also shows the statistical caution of excluding 5 of the pairs from the sample, as was done in the secondary analysis. The FoodCorps schools that remained in the sample all had positive change, and indeed they had a larger change than would have been expected, based on the sample of 298 FoodCorps schools. The expected change score for the 7 FoodCorps schools is: expected change $=[(42.66-40.6) \mathrm{X} .59]+7.79=9.01$ (actual change was 13.7 points).

Finally, while the trends in the primary analysis as well as the secondary analysis are promising and warrant further investigations, the conclusions from this study is that there was no difference between the FoodCorps and control schools on changed in Progress Report score.

Recruitment for this study was extremely challenging. Despite all FoodCorps service sites being invited to participate, service sites were eligible if they conducted had a relationship with a schools which was ready for a FoodCorps service member but did not currently have a service member. Thirty-seven sites expressed interest and 29 sites of these sites had schools that would be an appropriate match and were invited to participate in the study. FoodCorps national staff followed up with these service sites and they received a financial incentive for participating. Despite this, only 12 pairs of schools completed this study. This was less than the 20 we estimated that would be needed to find statistical difference, if a difference existed. The low enrollment may be due to the extra work service sites needed to do to be part of this study. The service sites needed to complete the FoodCorps Healthy School Progress Report twice for schools that did not have a FoodCorps service member. If FoodCorps would like to investigate this further other study designs may be necessary. One such idea is to allow other groups to use the Healthy School Progress Report and compare the changes achieved by these programs to FoodCorps. Another idea is to work with a few school districts that have FoodCorps service members in some schools and have the school district work with schools without FoodCorps service members to complete the Progress Report.

# Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch 

## Background

In the United States, few children meet federal recommendations for the daily consumption of fruits and vegetables (Dietary Guidelines Advisory Committee, 2015). This puts them at increased risk for obesity and chronic disease, both during childhood and later in life (Boeing et al., 2012; Slavin \& Lloyd, 2012; Van Duyn \& Pivonka, 2000; World Cancer Research Fund, 2007; Mikkilä et al., 2004). The Institute of Medicine suggests that schools are uniquely positioned to encourage youth to engage in healthy eating patterns, to reduce the prevalence of obesity and associated risk factors, and to mitigate health disparities (IOM, 2007). The potential benefits of interventions delivered via the school are well established, including an expanded reach and an educational setting where successful interventions can be institutionalized (Center for Nutrition Policy and Promotion, 2012). Reaching children in early childhood is important given that lifelong healthy eating and physical activity habits are often established during this period of life.

The National School Lunch Program (NSLP) has epitomized a growing policy momentum for promoting healthy dietary behaviors among children in public schools. This program began in 1946 with the passage of the National School Lunch Act. Today, the NSLP serves lunch to approximately 30.3 million students each day and the program is offered in 99,000 public and non-profit private schools (grades $\mathrm{K}-12$ ) and residential child care institutions (United States Department of Agriculture, 2016). Recent regulatory changes in the form of nutrition standards and accompanying promotion programs have drastically expanded the potential reach and impact of the program on participating students nutritional status. The Healthy Hunger Free Kids Act, the child nutrition policy passed in December 2010, mandated several changes to the service of school lunch meals, including greater consistency in the amount of fruits and vegetables offered to students (at least $1 / 2$ cup of fruit and/or $1 / 2$ cup of vegetables). These changes have been made to the school lunch program over the last several years, with a high level of compliance by schools across the country. .

There is a growing evidence base that the nutrition standards implemented as part of the Healthy Hunger Free Kids Act are having positive impacts on what students eat at school lunch (Schwartz, et. al, 2015). However, there is limited understanding about how the overall school environment is related to students' eating behaviors.

## Methods

Overview. This is a cross-sectional study conducted within elementary schools participating in the FoodCorps program during the 2015-16 school year. The objective of this study was to quantify the relationship between the Healthy School Progress Report score and consumption of fruits and vegetables at school lunch among 2nd and 3rd grade students. We used two methods to assess students' consumption of fruits and vegetables: digital photographs of students' lunch trays and a self-report questionnaire instrument.

School selection. In consultation with FoodCorps evaluation staff, we aimed to select a sample of schools with a wide range of scores on the Progress Report and representative of the population of all FoodCorps schools. We used a stratified sampling methodology in which the stratification is based on the use of a prospective propensity score matching technique (Tipton, 2011) and, simultaneously, a power calculation to determine an adequate

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
sample size. That is, how many schools we would need in the study in order to find a statistically significant difference if a change existed.

Stratification technique. In November 2015, FoodCorps service members were asked to complete the Healthy School Progress Report for each school they serve in-depth, meaning that the service members spend at least 8 hours each week in the school throughout the school year.. Service members completed the Healthy School Progress Report for 313 schools. We used FoodCorps schools with 2nd or 3rd grade students ( $\mathrm{n}=144$ ) as the inference population for this study. The strata were then defined using observable covariates believed to explain the treatment effect, which were informed by a previous study within New York City public elementary schools (Gray et al, 2015) and existing literature: locale (city, suburb, town, or rural), total school enrollment, percent non-white students, percent of students eligible for free and reduced price lunch. These data were obtained from the National Center for Educational Statistics for the 2013-14 school year. We also used the school's score on the Healthy School Progress Report (from 0-100) within our stratified sample selection. We aimed for a sample with 8 schools from the highest quintile of scores, 4 from the middle, and 8 from the lowest.

Power calculation. An a priori power analysis was conducted to inform the sample size of this study for the primary outcome of fruit and vegetable consumption. Given that schools are the cluster or sampling units from which students are recruited, the evaluation of the intervention effect required the use of a hierarchical model. Within Optimal Design Software Version 3.01, the following estimates were used for our power calculation: the minimum detectable effect size (MDES); the intra-class correlation (ICC); and the number of schools (m) and number of students within each school. Assuming moderate ICCs for consumption of for fruit (0.069) and vegetables ( 0.154 ), we estimated that a sample of 100 students from 20 schools would attain $80 \%$ power to detect an effect size of 0.37 for fruit and 0.48 for vegetables.

Participants. We invited 26 schools to participate in the current study and 6 declined to participate, resulting in the final sample of 20 schools (Figure 1). All second and third grade students in these schools were eligible to participate in this study; based on school rosters, there were a total of 2,424 second and third students enrolled in these schools during the 2015-16 school year. Research staff visited up to 6 classrooms in each school on each day of data collection. In schools where there were more than six second and third grade classrooms, which occurred in 7 of the 20 schools, we randomly selected 6 classrooms to visit on the first day of data collection and purposeful visiting the remaining classrooms on the second day. In one school, one classroom was not sampled over the course of the two days of data collection. This sampling technique allowed us to obtain and often exceed the 100 students needed from each school and also allowed the research team, typically with two members from the Tisch Food Center, the service member, and about two to three other volunteers to be able to manage all of the data collection tasks.

Prior to data collection, parents received a consent form, which allowed them to opt their child out of the study (we received $n=38$ opt outs during this study). Students present on the days of data collection whose parents did not choose to opt them out of the study and who provided written assent were included in this study. In the classroom, students were informed that this is a study to learn what 2nd and 3rd graders eat at school lunch. Missing data were the result of student absenteeism from the classroom during the assent and/or absenteeism from the cafeteria during the data collection. All data were collected anonymously and without any individual sociodemographic information such as gender, age, race, or ethnicity. In the classroom prior to the lunch period, students signed the assent form, and we provides assented students with a unique identification number via a sticker and wristband and were instructed to retain them both for the duration of the lunch period. The identification numbers were used to identify the school, the day of data collection, and the class of each student, as well as connect each student's pre-photos and post-photos.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Figure S3.1. Study Enrollment Flow Chart


Digital photographs of school lunch trays. Students' consumption of fruits and vegetables during lunch was assessed on two consecutive days among second and third graders from each school using a digital photography method using a protocol informed by previous authors (Taylor et al, 2014; Swanson et al, 2008; BontragerYoder et al, 2014a and 2014b). The dates of data collection were chosen in consultation with school staff, but no consideration was given to the lunch menu for that day prior to data collection.

Research staff set up photography stations in the cafeteria before the lunch period. We used up to four digital cameras (Cyber-shot DSC-W800, Sony Corp., USA) attached to a tripod affixed at a 60 -degree angle on folding tables. A station with three cameras on tripods was placed directly following the serving line to capture pre-photos. Students' school lunch trays were placed in a marked area on the table to take the photos. The photographer conducted a visual inspection of the tray to assure all foods, as well as the label with the unique code, were fully visible before taking the photo, and used a marker and/or rubber band to denote the contents consumed from opaque food containers (such as bags of chips, milk containers, etc.). The photo station was moved near the tray disposal area once all students had exited the line to capture post-meal photos. This protocol was adapted for one school in which meals were served family-style by students at individual tables by using digital cameras at tables without the tripod. In order to capture fruits and vegetables selected from stand-alone salad bars in the cafeteria, research staff stood directly next to the salad bar and/or circulated the lunchroom with a camera to collect photos at the lunch table of these items.

Digital photographs of students' lunch trays were imported to a computer and renamed using the unique code number from the sticker on the tray to facilitate side-by-side comparison of photos. Six coders (trained, undergraduate-level students in nutrition) first visually assessed the portion sizes of food items available on the lunch tray in the pre-photo, which was supplemented by portion size information obtained on the day of data collection from food service directors and cafeteria staff, school menus and/or nutrition facts panel labeling, and uneaten reference images of meal components and packaging. The USDA Nutrient Database was used for consistency in estimations of standard portion sizes (in cup equivalents) for fruits and vegetables. Coders conducted a side-by-side comparison of pre- and post-meal photographs to determine amount consumed, assuming that amounts that had disappeared from the photos were consumed. Coders rated amount consumed in $10 \%$ increments (e.g. $0 \%, 10 \%, 20 \%$, etc.), and items or packaging completely missing from the photographs were treated as missing data. We multiplied the portion size on the tray in the pre-photo by the percentage consumed to determine the absolute amount consumed. Outcome measures were portions of foods served and consumption of school meal components (in cup equivalents), categorized according to the USDA National School Lunch Program meal components definitions for fruits (including juice) and vegetables (including white potatoes).

Inter-rater reliability (IRR) was assessed prior to and during data analysis (Table S3.2). First, each coder participated in a 3-hour training and coded 12 photos and IRR was assessed by overlapping with the team member who took the lead on this analysis (MMG), reaching a match rate of $100 \%$ for identifying items present on the tray and $92 \%$ for amount eaten in adjacent categories across all food categories. Throughout coding, photographs from each day of data collection were assigned to one coder, in a counterbalanced order, and IRR was assessed by having two coders and the lead author overlap on 5 photos from each day of data collection (200 photos total). The average IRR for the entire sample was $99.5 \%$ match rate for identifying items present on the tray and a $95.8 \%$ adjacent match rate for amounts eaten across all food categories. In addition, any questions on photographs were reviewed by a quorum of at least 3 other coders and the lead team member on this project, and a majority consensus was reached.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Fruit and Vegetable Recall Questionnaire. The Fruit and Vegetable Recall Questionnaire (FVRQ), a group administered paper-and-pencil questionnaire was also used as a secondary outcome to assess fruit and vegetable consumption among second and third grade students. Given staff and logistical constraints, on each day of data collection, we randomly selected one 2nd and one 3rd grade class to participate in the questionnaire (in schools with only one 2nd and/or 3rd grade class, the class participated on both days). The FVRQ was administered by research staff in classrooms directly following lunch or recess (not more than 30 minutes following the meal). Students used the unique code from the wristband to identify themselves on the questionnaire. Staff administering the questionnaire guided students through each question, and had the students fill in the fruit and vegetable options served for lunch on that day.

Data analysis. Given that schools were the initial sampling unit from which students were recruited to participate in this study, we used a multilevel modeling technique to analyze the data using HLM version 7.0. The following were the primary outcomes: fruit and/or vegetable selection (presence on tray), fruit and/ or vegetable consumption (in cup equivalents) among those who selected the item, fruit and/or vegetable consumption (dichotomous) among those who selected the item and fruit and/or vegetable consumption (in cup equivalents) among those who ate any of the item.

## Results

The results section begins with descriptive statistics for the 20 schools. Table S3.1 presents demographics for the school and Healthy School Progress Report scores. The Progress Report for Hands-on Learning has be calculated to reflect the programming reported for 2nd and 3rd graders, as they are the sample used in this study. Table S3.2 presents inter-rater reliability for each school. This means that when two raters looked at before and after meal digital photos, how often did they "rate" what was on the tray and percentage of each item consumed was the same. Table S3.3 presents school descriptive statistics on the school lunch data collection and school level demographics. Table S3.4 presents means and ranges for the Progress Report.

The next set of tables present data on fruit and vegetable consumption at the 20 schools. Table S3.5 is fruits and vegetables combined, Table S3.6 is fruit, and Table S3.7 is vegetables. Table S3.8 presents data on the specific fruits and vegetables served on the days of data collection.

Statistical analysis of the association between Healthy School Progress Report score and fruit and vegetable consumption are the next set of tables. Table S3.9 presented hierarchical linear regression models to show association between total Progress Report and each area of service. Since Hands-on Learning-Knowledge showed an association, Table $\mathbf{S 3 . 1 0}$ shows how Hands-on Learning-Knowledge scores on spring compare to the quintiles on the fall Progress Report scores that were used for recruitment. Table S3.11 presents a correlational analysis to show other factors that seem to be related to fruit and vegetable consumption. Since percent white students seems to have a very similar association to Hands-on Learning-Knowledge, we conducted an analysis with majority ( $<50 \%$ ) white schools ( $\mathrm{n}=5$ ) and minority white ( $<50 \%$ ) schools and found a difference in fruit and vegetable consumption, presented in Table S3.12. Table S3.13 presents the secondary analysis which is a hierarchical linear regression comparing Progress Report scores and consumption measured using the Fruit and Vegetable Recall Questionnaire.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Table S3.1 presents descriptive statistics for the 20 schools. The school vary in size of enrollment and other school characteristics.

Table S3.1. Descriptive information for the 20 schools participating in a cross-sectional study of the relationship between the FoodCorps Healthy School Progress Report and fruit and vegetable consumption at school lunch, 2015-16

| School | State | Urbanicity* | $\begin{aligned} & \text { FRPL } \\ & \text { (\%) } \dagger \end{aligned}$ | White (\%)* | $\begin{gathered} \text { Hisp } \\ (\%)^{*} \end{gathered}$ | $\begin{gathered} \text { Black } \\ (\%)^{*} \end{gathered}$ | Healthy School Progress Report Spring |  |  |  |  | Enrollment $\dagger$ |  |  | Lunch tray observations ( n ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Overall | HL-K | HL-E | HSM | SCH | 2nd | 3rd | Both | Day 1 | Day 2 | Total |
| C | MT | Rural | 69 | 83 | 8 | 0 | 68 | 16 | 13 | 21 | 18 | 20 | 11 | 31 | 28 | 27 | 55 |
| D | MT | City | 70 | 78 | 3 | 1 | 67 | 20 | 16 | 13 | 18 | 53 | 46 | 99 | 73 | 78 | 151 |
| E | MS | Town | 66 | 44 | 7 | 44 | 50 | 17 | 12 | 10 | 11 | 150 | - | 150 | 105 | 97 | 202 |
| F | MS | Rural | 52 | 53 | 3 | 36 | 50 | 14 | 13 | 12 | 12 | 304 | - | 304 | 81 | 87 | 168 |
| G | IA | City | 93 | 10 | 8 | 74 | 28 | 16 | 0 | 5 | 7 | 81 | 74 | 155 | 112 | 114 | 226 |
| H | IA | Rural | 33 | 98 | 0 | 0 | 62 | 23 | 16 | 12 | 11 | 39 | 34 | 73 | 66 | 62 | 128 |
| 1 | ME | City | 94 | 38 | 6 | 41 | 64 | 16 | 14 | 16 | 18 | 61 | 70 | 131 | 74 | 75 | 149 |
| J | CT | Suburb | 93 | 17 | 57 | 19 | 49 | 19 | 9 | 11 | 12 | 48 | 49 | 97 | 83 | 76 | 159 |
| K | CT | Rural | 75 | 35 | 34 | 16 | 54 | 14 | 11 | 17 | 12 | 69 | 73 | 142 | 123 | 116 | 239 |
| L | DC | City | 95 | 9 | 3 | 87 | 54 | 11 | 12 | 11 | 21 | 74 | 59 | 133 | 103 | 98 | 201 |
| M | DC | City | 100 | 1 | 12 | 87 | 72 | 20 | 23 | 13 | 17 | 33 | 27 | 60 | 46 | 48 | 94 |
| N | NJ | City | 41 | 1 | 12 | 82 | 97 | 25 | 25 | 24 | 23 | 43 | 42 | 85 | 81 | 83 | 164 |
| 0 | CT | City | 100 | 14 | 65 | 17 | 28 | 5 | 11 | 6 | 6 | 48 | 50 | 98 | 85 | 87 | 172 |
| P | NY | City | 100 | 4 | 50 | 9 | 71 | 21 | 18 | 17 | 15 | 78 | 68 | 146 | 103 | 92 | 195 |
| Q | NY | City | 92 | 0 | 34 | 65 | 44 | 15 | 0 | 16 | 14 | 42 | 43 | 85 | 75 | 73 | 148 |
| R | NY | City | 93 | 1 | 15 | 82 | 59 | 14 | 16 | 17 | 12 | 125 | 116 | 241 | 111 | 108 | 219 |
| S | NJ | City | 81 | 0 | 10 | 90 | 24 | 12 | 0 | 3 | 9 | 45 | 46 | 91 | 59 | 70 | 129 |
| T | CT | City | 72 | 7 | 76 | 12 | 44 | 15 | 12 | 11 | 7 | 129 | 100 | 229 | 110 | 146 | 256 |
| U | NY | City | 79 | 4 | 39 | 49 | 51 | 16 | 13 | 12 | 11 | - | - | 46 | 49 | 45 | 94 |
| v | ME | Rural | 32 | 92 | 1 | 3 | 64 | 24 | 14 | 12 | 14 | - | - | 28 | 24 | 24 | 48 |
| ALL | - | - | 77 | 29 | 22 | 41 | 55 | 17 | 12 | 13 | 13 | 1442 | 908 | 2424 | 1591 | 1606 | 3197 |

$\dagger$ FRPL = Free/Reduced Price Lunch. Rates of free/reduced price lunch eligibility and $2^{\text {nd }}$ and $3^{\text {rd }}$ grade enrollment were obtained for the school year during which data were collected (2015-16) by contacting school staff
HL-K= Hands-on Learning-Knowledge
HL-E= Hands-on Learning
HSM = Healthy School Meal
SCH= Schoolwide Culture of Health
Highlights of the specific finding from Table S3.1 include:

- FoodCorps focuses on working in schools that are over 50\% eligible for free or reduced price lunch (FRPL). The mean was 77\%, with 2 of the schools being under $50 \%$.
- Recruitment of schools used Fall Progress Report scores and recruits low, medium and high scoring schools with the hope of having a range of Progress Report scores. The range was 24 to 97 . A wide range of Progress Report scores was necessary in order to determine of there is a relationship between Progress Report scores and fruit and vegetable consumption.
- The schools were also diverse in urbanicity, race and ethnicity, and enrollment. Additionally, the schools represent 8 FoodCorps states, out of 17 states and the District of Columbia.


## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Table S3.2 presents the inter-rater reliability. Our overall rates of agreement are at a level that is considered high when compared to others who conduct digital photography analysis.

Table S3.2. Inter-rater reliability (\% agreement) among six coders of digital photographs of school lunch from 2nd and 3rd grade students from 20 schools in the United States, 2015-16

Inter-rater reliability (\% agreement)

| School | Food on Tray | \% Eaten - Exact * | \% Eaten - Adjacent $\dagger$ |
| :---: | :---: | :---: | :---: |
| Pilot | 100.0 | 77.1 | 92.0 |
| C | 97.3 | 78.8 | 92.8 |
| D | 100.0 | 85.3 | 94.5 |
| E | 98.8 | 77.0 | 95.5 |
| F | 100.0 | 89.5 | 99.0 |
| G | 100.0 | 89.5 | 97.3 |
| H | 99.5 | 86.5 | 94.8 |
| 1 | 100.0 | 91.0 | 97.3 |
| J | 100.0 | 93.3 | 98.0 |
| K | 100.0 | 69.8 | 92.0 |
| L | 100.0 | 84.5 | 93.0 |
| M | 97.5 | 83.0 | 96.5 |
| N | 100.0 | 69.8 | 90.5 |
| 0 | 100.0 | 93.8 | 99.3 |
| P | 99.0 | 74.5 | 90.8 |
| Q | 98.5 | 78.3 | 96.5 |
| R | 100.0 | 70.0 | 95.5 |
| S | 100.0 | 80.3 | 97.0 |
| T | 99.3 | 90.5 | 100.0 |
| U | 100.0 | 96.0 | 96.0 |
| V | 100.0 | 79.0 | 100.0 |
| Overall | 99.5 | 82.7 | 95.6 |

* Exact matches for amount eaten refer to direct agreement between two raters on a scale from $0-100 \%$ (in ten percent increments)
$\dagger$ Adjacent matches for amount eaten refer to agreement within an adjacent category between two raters on a scale from $0-100 \%$ (in ten percent increments)
Highlights of the specific findings from Table S3.2 include:
- Match rates for what was on the tray was $99.5 \%$, with 13 of the 20 FoodCorps schools having a $100 \%$ match rate.
- The \% Eaten exact match rate was $82.5 \%$ and adjacent was $95.6 \%$. The scale had 11 points, $0 \%$ to $100 \%$ in $10 \%$ increments. For an exact match, both raters had to estimated the same amount consumed (e.g., 70\%) for a food item, whereas for an adjacent match two raters needed be adjacent (e.g., $60 \%$ and $70 \%$, or $70 \%$ and $80 \%$ ).


## Studies (continued)

## Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch

Table S3.3 displays descriptive statistics on the data collection process and school level data. Throughout the 20 schools data were collected on 2,571 lunch trays.

Table S3.3. Characteristics of students, trays, and schools in a study measuring fruit and vegetable consumption among 2nd and 3rd grade students from schools enrolled in the FoodCorps program in the United States, 2015-16

| Student-day lunch tray observations ( $\mathrm{n}=2,571$ ) |  |  |
| :---: | :---: | :---: |
| Grade | $n$ | \% |
| $2^{\text {nd }}$ grade | 1360 | 52.9 |
| $3{ }^{\text {rd }}$ grade | 1065 | 41.4 |
| Unknown | 146 | 5.7 |
| Day of participation |  |  |
| Day 1 | 1259 | 49.0 |
| Day 2 | 1312 | 51.0 |
| Recess structure |  |  |
| Recess before lunch | 695 | 27.0 |
| Recess after lunch | 1876 | 73.0 |
| Salad bar access |  |  |
| No salad bar | 1249 | 48.6 |
| Salad bar as main fruit and vegetable service | 343 | 13.3 |
| Salad bar as an extra source of fruits and vegetables | 979 | 38.1 |
| Schools ( $\mathrm{n}=20$ ) |  |  |
| Gender* | Mean | Range |
| Male (\%) | 51.4 | 43-57 |
| Ethnicity * |  |  |
| White (\%) | 29.4 | 0-98 |
| Black (\%) | 40.1 | 0-90 |
| Hispanic (\%) | 22.1 | 0-76 |
| Asian (\%) | 3.5 | 0-36 |
| Other (\%) | 4.3 | 0-16 |
|  |  |  |
| Total enrollment * | 384 | 87-635 |
| Free/reduced price lunch eligible (\%) $\dagger$ | 76.5 | 32-100 |
| Prior years of participating in FoodCorps | 2.2 | 1-4 |
| Time for lunch (min) | 28.1 | 17-40 |
| Fruit and vegetable items offered | 7.4 | 3-14 |
| Urbanicity * | $n$ | \% |
| City | 13 | 65.0 |
| Suburb | 1 | 5.0 |
| Town | 1 | 5.0 |
| Rural | 5 | 25.0 |
| State * |  |  |
| New York | 4 | 20.0 |
| New Jersey | 2 | 10.0 |
| Connecticut | 4 | 20.0 |
| Mississippi | 2 | 10.0 |
| Montana | 2 | 10.0 |
| lowa | 2 | 10.0 |
| D.C. | 2 | 10.0 |
| Maine | 2 | 10.0 |

*Data were obtained from the National Center for Education Statistics Common Core of Data 2013-14

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Highlights of the specific finding from Table S3.3 include:

- The lunch tray data was from $52.9 \%$ second graders and $41.4 \%$ third graders, over the two days of data collection at each school.
- The majority of the students had lunch and then recess (73\%).
- Over $60 \%$ of the schools had salad bar as an extra source of fruits and vegetables. About $24 \%$ of schools had no salad bar and about $13 \%$ of schools used the salad bar as the source of fruits and vegetables. Because of these differences, the outcome data are all reports as vegetables and fruit, not distinguishing meal items from salad bar items.

Table S3.4 present descriptive statistics for the spring Healthy School Progress Reports for the 20 schools in the study.

Table S3.4 Descriptive Statistics for spring 2016 Health School Progress Report scores for the 20 schools enrolled in FoodCorps in the United States during the 2015-16 school year

| Spring (n=20) | Possible Range | Mean (SD) | Minimum | Maximum |
| :--- | :---: | :---: | :---: | :---: |
| Overall Progress Report Score | $0-100$ | $55.00(17.22)$ | 23.65 | 96.66 |
| Hands-on Learning—Knowledge | $0-25$ | $16.51(4.68)$ | 5.17 | 25.00 |
| Hands-on Learning—Engagement | $0-25$ | $12.38(6.61)$ | .00 | 25.00 |
| Healthy School Meals | $0-25$ | $12.91(5.14)$ | 2.65 | 23.66 |
| Schoolwide Culture of Health | $0-25$ | $13.20(4.63)$ | 6.00 | 23.00 |
| Staying Power | $0-60$ | $31.35(12.40)$ | 9.00 | 53.00 |

Highlights of the specific finding from Table S3.4 include:

- The overall Healthy School Progress Report score as well as each of the areas of service (Hands-on Learning—Knowledge, Handson Learning-Engagement, Healthy School Meals, and Schoolwide Culture of Health all had a large range of scores, which would make it possible to detect associations with school lunch consumption, if such associations existed.

Table S3.5 provides data on fruit and vegetables (combined) for the 20 schools in the study. There was a wide range of amounts of fruits and vegetables on the tray, percentage of student eating fruits and vegetable and the portion size eaten. These wide ranges could then be compared to the Progress Report scores to determine if there were associations between Progress Report score and fruit and vegetable consumption. Table S3.6 provides data on fruit only and Table S3.7 provides data on vegetables only.

## Studies (continued)

## Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch

Table S3.5. Fruits and vegetables selected on lunch tray and consumption of fruits and vegetables among 2nd and 3rd grade students during school lunch periods ( $n=2,751$ ), 2015-16, using digital photography

|  | $\begin{gathered} \text { Sample } \\ \text { size } \end{gathered}$ | $\begin{gathered} \hline \text { On } \\ \text { tray } \\ \hline \end{gathered}$ | On tray, cup equivalents* | Eat any* | Eaten, cup equivalents* | Eaten, cup equivalents** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$ | \% | Mean (SD) | \% | Mean (SD) | Mean (SD) |
| C | 48 | 97.9 | 0.84 (0.40) | 95.8 | 0.70 (0.43) | 0.70 (0.43) |
| D | 133 | 98.5 | 0.86 (0.35) | 95.4 | 0.55 (0.35) | 0.57 (0.34) |
| E | 157 | 98.7 | 0.98 (0.43) | 94.2 | 0.58 (0.34) | 0.62 (0.32) |
| F | 106 | 97.2 | 0.87 (0.47) | 90.0 | 0.45 (0.31) | 0.50 (0.28) |
| G | 191 | 100.0 | 0.92 (0.38) | 97.9 | 0.65 (0.40) | 0.66 (0.39) |
| H | 108 | 100.0 | 1.05 (0.40) | 100.0 | 0.76 (0.39) | 0.76 (0.39) |
| 1 | 125 | 76.8 | 0.58 (0.37) | 81.8 | 0.35 (0.36) | 0.43 (0.36) |
| J | 145 | 98.6 | 0.68 (0.26) | 75.8 | 0.26 (0.26) | 0.34 (0.24) |
| K | 200 | 97.0 | 0.61 (0.20) | 84.4 | 0.32 (0.27) | 0.38 (0.25) |
| L | 142 | 100.0 | 1.15 (0.24) | 76.8 | 0.33 (0.31) | 0.43 (0.29) |
| M | 71 | 98.6 | 0.82 (0.31) | 80.6 | 0.32 (0.23) | 0.39 (0.18) |
| N | 149 | 99.3 | 1.37 (0.57) | 92.6 | 0.61 (0.49) | 0.66 (0.48) |
| 0 | 108 | 98.1 | 0.77 (0.31) | 65.2 | 0.18 (0.23) | 0.28 (0.23) |
| P | 156 | 76.3 | 0.69 (0.36) | 82.5 | 0.35 (0.33) | 0.42 (0.32) |
| Q | 132 | 99.2 | 1.14 (0.37) | 73.1 | 0.26 (0.26) | $0.35{ }_{(0.24)}$ |
| R | 143 | 95.8 | 1.02 (0.50) | 59.8 | 0.25 (0.32) | 0.42 (0.32) |
| S | 115 | 100.0 | 0.83 (0.24) | 67.3 | 0.18 (0.22) | 0.26 (0.22) |
| T | 227 | 97.4 | 1.39 (0.68) | 87.3 | 0.61 (0.54) | 0.70 (0.51) |
| U | 78 | 94.9 | 1.14 (0.64) | 83.3 | 0.47 (0.39) | 0.56 (0.37) |
| v | 37 | 94.6 | 1.11 (0.57) | 94.1 | 0.84 (0.59) | 0.89 (0.56) |
| Overall | 2571 | 96.0 | 0.96 (0.49) | 84.2 | 0.45 (0.40) | 0.53 (0.39) |

Vegetables include juices but not potatoes
*For students who had fruits and vegetables on their tray
**For students who had fruits and vegetables on their tray and ate at least a bite

Highlights of the specific finding from Table S3.5 include:

- Most schools had a high percentage of students with fruit or vegetables on their tray, with 11 schools being over $98 \%$. Two schools had $76 \%$ of students with fruit or vegetables on their tray.
- The mean fruit and vegetable cup equivalents on the tray was almost one (.96) cups. This ranges from .58 cups to 1.37 cups.
- The range of students who ate any fruits and vegetables $65 \%$ to $100 \%$, with 7 of the schools having $90 \%$ or more of the students eating at least a bite of fruit and vegetable.
- For students who had fruits and vegetables on their tray, they were eating a mean of 45 cups, with the range, by school, being from .18 to .84 cups. Since many students do not eat any of their vegetables we were did another analysis that included only students who ate at least a bit of fruits and vegetables. For this analysis, the range by school was .26 to .89 cups.


## Studies (continued)

## Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch.

Table S3.6. Fruits selected on lunch tray and consumption of fruits 2 nd and 3rd grade students during school lunch periods ( $\mathrm{n}=2,751$ ), 2015-16, using digital photography

|  | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | On tray | On tray, cup equivalents* | Eat any* | Eaten, cup equivalents* | Eaten, cup equivalents** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$ | \% | Mean (SD) | \% | Mean (SD) | Mean (SD) |
| C | 48 | 83.3 | 0.35 (0.17) | 92.1 | 0.31 (0.17) | 0.33 (0.14) |
| D | 133 | 93.2 | 0.71 (0.23) | 91.9 | 0.45 (0.26) | 0.49 (0.23) |
| E | 157 | 97.5 | 0.77 (0.26) | 90.8 | 0.51 (0.30) | 0.56 (0.27) |
| F | 106 | 79.2 | 0.59 (0.22) | 85.7 | 0.33 (0.20) | 0.38 (0.16) |
| G | 191 | 89.0 | 0.38 (0.13) | 94.7 | 0.27 (0.18) | 0.28 (0.17) |
| H | 108 | 97.2 | 0.85 (0.36) | 99.0 | 0.63 (0.32) | 0.63 (0.32) |
| 1 | 125 | 52.0 | 0.50 (0.24) | 77.6 | 0.31 (0.29) | 0.39 (0.27) |
| J | 145 | 84.1 | 0.46 (0.12) | 88.1 | 0.30 (0.21) | 0.34 (0.19) |
| K | 200 | 79.5 | 0.52 (0.09) | 84.1 | 0.29 (0.21) | 0.34 (0.18) |
| L | 142 | 98.6 | 0.65 (0.25) | 71.0 | 0.30 (0.28) | 0.43 (0.23) |
| M | 71 | 94.4 | 0.54 (0.14) | 60.3 | 0.20 (0.21) | 0.33 (0.18) |
| N | 149 | 71.1 | 0.60 (0.42) | 86.7 | 0.36 (0.35) | 0.42 (0.34) |
| 0 | 108 | 53.7 | 0.51 (0.16) | 50.9 | 0.14 (0.19) | 0.27 (0.20) |
| P | 156 | 53.2 | 0.53 (0.15) | 90.2 | 0.35 (0.24) | 0.39 (0.22) |
| Q | 132 | 88.6 | 0.51 (0.09) | 67.0 | $0.22{ }^{(0.21)}$ | 0.32 (0.17) |
| R | 143 | 89.5 | 0.63 (0.24) | 71.3 | 0.31 (0.30) | 0.44 (0.26) |
| S | 115 | 90.4 | 0.50 (0.00) | 63.0 | 0.14 (0.15) | 0.22 (0.14) |
| T | 227 | 88.1 | 0.89 (0.44) | 85.2 | 0.56 (0.45) | 0.66 (0.41) |
| U | 78 | 83.3 | 0.57 (0.33) | 74.5 | 0.25 (0.24) | 0.34 (0.21) |
| V | 37 | 81.1 | 0.71 (0.37) | 96.6 | 0.52 (0.29) | 0.54 (0.28) |
| Overall | 2571 | 82.5 | 0.61 (0.29) | 82.5 | 0.35 (0.31) | 0.43 (0.28) |

For students who had fruits on their tray
*For students who had fruits and vegetables on their tray and ate at least a bite

Highlights of the specific finding from Table S3.6 include:

- The range of students with fruit on the tray was $53 \%$ to $92 \%$, with a mean of $82.5 \%$.
- The amount of fruit on the tray ranged from .35 to .89 cups with a mean of .61 cups.
- Students eating any fruit ranged from $60 \%$ to $99 \%$, with a mean of $82.5 \%, 7$ schools have $90 \%$ or more students eating fruit.
- Students ate an average of .35 cups of fruit with a range of .14 to .56 cups. Among students who ate any fruit the range was .22 to .66 cups.


## Studies (continued)

## Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch

Table S3.7. Vegetables selected on lunch tray and consumption of vegetables 2 nd and 3 rd grade students during school lunch periods ( $n=2,751$ ), 2015-16, using digital photography

|  | $\begin{gathered} \text { Sample } \\ \text { size } \end{gathered}$ | On tray | On tray, cup equivalents* | Eat any* | Eaten, cup equivalents* | Eaten, cup equivalents** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$ | \% | Mean (SD) | \% | Mean (SD) | Mean (SD) |
| C | 48 | 91.7 | 0.57 (0.30) | 95.3 | 0.48 (0.32) | 0.50 (0.31) |
| D | 133 | 38.3 | 0.48 (0.30) | 95.9 | 0.32 (0.26) | 0.33 (0.26) |
| E | 157 | 36.3 | 0.57 (0.25) | 92.9 | 0.22 (0.19) | 0.23 (0.18) |
| F | 106 | 44.3 | 0.73 (0.32) | 85.1 | 0.33 (0.35) | 0.39 (0.35) |
| G | 191 | 89.5 | 0.65 (0.28) | 94.2 | 0.46 (0.31) | 0.49 (0.29) |
| H | 108 | 47.2 | 0.47 (0.26) | 94.1 | 0.32 (0.25) | 0.34 (0.24) |
| 1 | 125 | 40.8 | 0.45 (0.27) | 82.0 | 0.27 (0.24) | 0.33 (0.23) |
| J | 145 | 53.8 | 0.51 (0.09) | 39.7 | 0.09 (0.17) | 0.23 (0.21) |
| K | 200 | 32.0 | 0.55 (0.16) | 84.4 | 0.26 (0.24) | 0.31 (0.23) |
| L | 142 | 100.0 | 0.51 (0.28) | 33.1 | 0.06 (0.14) | 0.20 (0.19) |
| M | 71 | 52.1 | 0.56 (0.18) | 75.7 | 0.26 (0.21) | 0.35 (0.17) |
| N | 149 | 99.3 | 0.93 (0.36) | 83.7 | 0.38 (0.37) | $0.45{ }^{(0.36)}$ |
| 0 | 108 | 55.6 | 0.71 (0.25) | 70.2 | 0.16 (0.18) | 0.23 (0.18) |
| P | 156 | 39.7 | 0.63 (0.35) | 71.2 | 0.25 (0.36) | 0.35 (0.39) |
| Q | 132 | 99.2 | 0.68 (0.32) | 52.7 | 0.11 (0.18) | 0.20 (0.21) |
| R | 143 | 76.2 | 0.55 (0.44) | 29.2 | 0.06 (0.20) | 0.22 (0.33) |
| S | 115 | 74.8 | 0.50 (0.00) | 38.4 | 0.09 (0.17) | 0.23 (0.20) |
| T | 227 | 73.6 | 0.77 (0.40) | 71.8 | 0.19 (0.26) | 0.26 (0.27) |
| U | 78 | 64.1 | 0.86 (0.50) | 80.0 | 0.34 (0.32) | 0.42 (0.30) |
| V | 37 | 75.7 | 0.63 (0.48) | 92.9 | 0.49 (0.41) | 0.52 (0.40) |
| Overall | 2571 | 63.5 | 0.64 (0.34) | 68.8 | 0.24 (0.29) | 0.35 (0.30) |

Vegetables include juices but not potatoes
*For students who had vegetables on their tray
Highlights of the specific finding from Table S3.7 include:

- Overall, vegetables were on the tray less, eaten less, and smaller portions were consumed than fruit.
- The range of students with vegetables on the tray was $32 \%$ to $100 \%$, with a mean of $63.5 \%$.
- The amount of vegetables on the tray ranged from .45 to .93 cups with a mean of .64 cups.
- Students eating any vegetables ranged from $29 \%$ to $96 \%$, with a mean of $68.8 \%$, with 6 schools have $90 \%$ or more students eating vegetables.
- Students ate an average of .24 cups of vegetables with a range of .06 to .48 cups. Among students who ate any vegetables the range was .20 to .50 cups. The large difference in the lower end of the range (from .06 to .20 ) is due to a high number of students eating no vegetables, which lowered the mean.

Table S3.8 shows the fruits and vegetables that were served in the 20 schools during the two days of data collection at each school. The table also shows the total number of days (out of 40 possible days) that each fruit and vegetable was service.

## Studies (continued)

## Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch

Table S3.8. Frequency of fruits and vegetable items offered across 40 days of observation of 2 nd and 3 rd grade school lunch trays from 20 schools participating in the FoodCorps program in the United States, 2015-16

| Fruit |  |  | Vegetables |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Description of subtypes | Number of days | Type | Description of subtypes | Number of days |
| Apple | whole, sliced, applesauce | 24 | Lettuce, raw | romaine, spinach, iceberg | 25 |
| Juice (100\%) | apple, orange, grape, fruit punch | 23 | Carrots | baby, sliced, cooked | 23 |
| Orange | whole, sliced | 17 | Tomatoes | cherry, sliced, tomato sauce | 19 |
| Banana | whole | 10 | Cucumbers | sliced | 15 |
| Peaches | whole, sliced, canned | 6 | Celery | strips | 14 |
| Dried fruit | raisins, craisins | 5 | Broccoli | raw, cooked | 12 |
| Mixed fruit salad | canned, fresh | 5 | Beans | white, black, pinto, kidney, chickpeas, hummus | 11 |
| Pears | whole, sliced, canned | 4 | Corn | cooked, on the cob | 9 |
| Pineapple | canned | 4 | Peppers | sliced | 7 |
| Watermelon | wedge | 4 | Radishes | whole, sliced | 6 |
| Strawberries | sliced, canned | 2 | Green beans | cooked | 6 |
| Kiwi | sliced | 2 | Pickles | sliced | 4 |
| Grapes | whole | 2 | Sweet potatoes | fries, mashed | 3 |
| Mixed berries | strawberries \& blueberries | 1 | Mushrooms | sliced | 2 |
| Grapefruit | sliced | 1 | Cauliflower | raw | 2 |
| Cantaloupe | sliced | 1 | Mixed veggies | peas \& carrots | 3 |
|  |  |  | Spinach | cooked | 2 |
|  |  |  | Coleslaw | prepared | 2 |
|  |  |  | Cabbage | cooked | 1 |
|  |  |  | Collard greens | cooked | 1 |
|  |  |  | Pea pods | raw | 1 |
|  |  |  | Onions | sliced | 1 |
|  |  |  | Eggplant | roasted | 1 |
|  |  |  | Juice (100\%) | vegetable | 1 |
|  |  |  | Sunflower seeds* | roasted | 1 |

* Sunflower seeds were served on the salad bar at one school. Although they are not counted as a vegetable, they are listed here since they were an option for students as part of the salad bar. Very few students took and ate the sunflower seeds and thus, this did not influence the consumption data.

Highlights of the specific finding from Table S3.8 include:

- Apples, juices, and oranges were the most common fruits served, while lettuce, carrots and tomatoes were the most common vegetables.

The before and after meal digital photography data was used to conduct the primary analysis to determine of there were associations between Healthy School Progress Report score and consumption of fruits and vegetables at school lunch. We conducted analyses to look at several ways fruit and vegetables at school lunch may be changed by a higher Progress Report.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
For the digital photography data, we conducted analyses to answer 4 questions:
Was higher Healthy School Progress Report score associated with...

1) a higher percentage of students having fruit and vegetables on their tray? = "On tray"
2) a higher percentage of students eating any fruit and vegetables? = "Ate any"
3) students having a larger portion of fruit and vegetables on their tray? = "Cups on tray"
4) students eating a larger portion of fruit and vegetables? = "Cups eaten"

Table S3.9 shows the results of hierarchical linear regression models to answer these questions for overall Progress Report score and each Area for the digital photography data.

Highlights of the specific finding from Table S3.9, next page, include:

1) On tray: There was no association between higher Progress Report score and the percentage of students who had fruit and vegetables on their tray.
2) Ate Any: Higher scores on Hands-on Learning—Knowledge were associated with a higher percentage of students eating fruit and vegetables. This means that higher scores on Hands-on Learning-Knowledge were associated with more students at least TRYING fruits and vegetables.
3) Cups on Tray: There was no association between higher Progress Report score and the portion size of fruit and vegetables on students' tray.
4) Cups Eaten: Higher scores on Hands-on Learning—Knowledge were associated with students eating a bigger portion of fruit and vegetables. This means that for the $96 \%$ of students who had fruits and vegetables on their tray, students who were in schools with higher Hands-on Learning-Knowledge ate more fruit and vegetables.
To provide an illustration of this association, Hands-on Learning—Knowledge had a range of 0 to 25 points. School O had a score of 5 and student ate an average of .18 cups. School Q had a score of 15 and students ate .26 cups. School $N$ had a score of 25 and students ate .61 cups. Thus, higher scores in Hands-on Learning-Knowledge were associated with eating larger portions of fruits and vegetables at school lunch.
More specifically, Question B on Hands-on Learning—Knowledge asked about how many lessons students received and was scored from 0 to 5 points. Schools G, Q and S had a score of 0, meaning these schools did not do any nutrition education lessons. Students at these schools ate an average of .36 cups of fruits and vegetables. School T had a score of 2.57 , meaning the students had about 5 lessons during a school year. Students at this school ate . 62 cups. Schools H, N and V has a score of 5, meaning the students; students at these schools at an average of 10 lessons or more during the school year. Students at these schools ate an average of .73 cups. Thus, higher scores in Question B in Hands-on Learning-Knowledge were associated with eating larger portions of fruits and vegetables at school lunch; indeed going from a score of 0 to 5 was associated with a doubling of portion size consumed of fruit and vegetables.
Question D on Hands-on Learning—Knowledge asked about whether or not students had content related to motivational and skills building activities that the research literature relates to increase fruit and vegetable consumption and was scored from 0 to 10 points. School O had score of 0 ; students ate .18 cups. School Q and $S$ had a 5; students in these schools averaged .22 cups. School D had a 6.5; students ate . 55 cups. School N had a 10; students at . 61 cups. Thus, higher scores in Question D in Hands-on LearningKnowledge were associated with eating larger portions of fruits and vegetables at school lunch.
5) FV Eaters Cups Eaten: For students who ate at least a bite of fruits and vegetables, higher scores on Hands-on LearningKnowledge were associated with them eating more. This means that for the $69 \%$ of students who at any fruits and vegetables (the $27 \%$ of students who had fruits and vegetables on their tray but did not eat any were excluded from this analysis), students in schools with higher Hands-on Learning-Knowledge ate more fruit and vegetables.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Table S3.9. Associations between FoodCorps Healthy School Progress Report and fruit and vegetable consumption using digital photography

| Photos$n=2571$ | On tray |  | Ate any (only students with FV on tray) |  | Cups on tray (only students with FV on tray) ${ }^{\text {st }}$ |  | Cups eaten (only students with FV on tray) ${ }^{\text {s }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OR | 95\% CI | OR | 95\% CI | $B$ | $P$ | $B$ | $P$ |
| Fruit and Vegetables |  |  |  |  |  |  |  |  |
| Overall Progress Report | 0.97 | (0.931,1.014) | 1.02 | (0.986, 1.050) | 0.0008 | 0.618 | 0.004 | 0.119 |
| Hands-on LearningKnowledge | 0.97 | (0.830,1.141) | 1.14* | (1.032,1.260) | 0.005 | 0.419 | 0.022 | 0.004 |
| Hands-on LearningEngagement | 0.91 | (0.810, 1.021) | 1.02 | (0.942,1.112) | 0.001 | 0.768 | 0.006 | 0.288 |
| Healthy School Meals | 0.88 | (0.766,1.020) | 1.03 | (0.924,1.152) | 0.002 | 0.742 | 0.007 | 0.381 |
| Schoolwide Culture of Health | 0.96 | (0.820,1.125) | 1.02 | (0.908,1.155) | 0.002 | 0.800 | 0.005 | 0.579 |
| Fruit |  |  |  |  |  |  |  |  |
| Overall Progress Report | 0.99 | (0.964,1.024) | 1.02 | (0.989, 1.043) | 0.0007 | 0.584 | 0.003 | 0.102 |
| Hands-on LearningKnowledge | 1.02 | (0.909,1.142) | 1.14** | (1.056,1.241) | 0.004 | 0.353 | 0.018 | 0.004 |
| Hands-on LearningEngagement | 0.98 | (0.904, 1.060) | 1.02 | (0.948,1.092) | 0.004 | 0.192 | 0.006 | 0.186 |
| Healthy School Meals | 0.95 | $(0.857,1.045)$ | 1.03 | (0.939,1.128) | -0.001 | 0.736 | 0.006 | 0.33 |
| Schoolwide Culture of Health | 1.00 | (0.894,1.126) | 1.01 | $(0.909,1.114)$ | -0.002 | 0.732 | 0.002 | 0.731 |
| Vegetables |  |  |  |  |  |  |  |  |
| Overall Progress Report | 1.01 | (0.959,1.062) | 1.02 | (0.984,1.054) | 0.0002 | 0.839 | 0.003 | 0.148 |
| Hands-on LearningKnowledge | 0.99 | (0.820, 1.193) | 1.12 | $\begin{gathered} (0.996,1.270) \\ * p=.057 \end{gathered}$ | 0.0003 | 0.950 | 0.018 | 0.028 |
| Hands-on LearningEngagement | 0.95 | (0.837,1.087) | 1.04 | (0.950,1.139) | 0.0012 | 0.684 | 0.007 | 0.258 |
| Healthy School Meals | 1.08 | (0.909,1.272) | 1.04 | $(0.918,1.167)$ | 0.002 | 0.536 | 0.007 | 0.332 |
| Schoolwide Culture of Health | 1.16 | (0.969, 1.393) | 1.01 | $(0.886,1.157)$ | -0.002 | 0.571 | 0.004 | 0.602 |
| Hierarchical linear regression models: Progress Report scores as school-level fixed effects, and consumption data as student-level dependent variables sr: data were square-root transformed <br> OR: odds ratio <br> Cl: confidence interval <br> *p<.05; **p<.01; Italic means approaching to significance at . 05 |  |  |  |  |  |  |  |  |

Since we found a strong association between Hands-on Learning-Knowledge and consumption of fruits and vegetables, we conducted several other analyses to try to better understand this relationship.

First, we investigated how Hands-on Learning-Knowledge on the spring Progress Report was related to fall Progress Report score, which was used as the basis of recruitment. This is presented in Table S3.10.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch.
Table S3.10. Schools ranked by Hands-on Learning - Knowledge Progress Report score in Low, Middle, \& High categories and comparisons with quintiles for overall Progress Report categories at baseline (Fall 2016)

| Hands-on Learning-Knowledge score ranking |  | Quintiles for Overall Progress Report scores at baseline (Fall 2016) |
| :---: | :---: | :---: |
| $\begin{gathered} \text { High } \\ \text { Hands-on Learning-Knowledge } \\ \text { score } \end{gathered}$ | 25 | High |
|  | 23.5 | Low |
|  | 23 | Middle |
|  | 20.62 | Middle |
|  | 20 | High |
|  | 19.9 | High |
| $\begin{gathered} \begin{array}{c} \text { Middle } \end{array} \\ \text { Hands-on Learning-Knowledge } \\ \text { score } \end{gathered}$ | 18.5 | High |
|  | 17 | Low |
|  | 16 | High |
|  | 16 | Low |
|  | 15.7 | High |
|  | 15.58 | Low |
|  | 15 | Middle |
| $\begin{gathered} \text { Low } \\ \text { Hands-on Learning—Knowledge } \\ \text { score } \end{gathered}$ | 14.57 | Low |
|  | 14 | Middle |
|  | 13.91 | Low |
|  | 13.79 | High |
|  | 12 | Low |
|  | 11 | High |
|  | 5.17 | Low |

Colors represent High(quintile=5), Middle(quintile=3), and Low(quintile=1) Total PR scores at baseline
Highlights of the specific finding from Table S3.10 include:

- The spread of Hands-on Learning—Knowledge does not seem to be similar to the baseline scores. However, there are more "Middle" and "High" categorized schools at baseline in the high Hands-on Learning—Knowledge schools in Spring, compared to more "Low" categorized schools at baseline in the low Hands-on Learning—Knowledge schools.

Since this was a cross-sectional study we wanted to determine if any specific school-level factors (e.g., percent students who qualify for free or reduced price lunch) were confounded with fruit and vegetable consumption. That is, did any school-level factors "statistically" explain the association we were contributing to the Healthy School Progress Report. We conducted a correlational analysis to determine associations between the Healthy School Progress report and school level factors. These data are presented in Table S3.11.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Table S3.11. Correlational analysis of Healthy School Progress Report and school-level factors with amount of fruits and vegetables students eat.

|  | Spring Overall PR Score ${ }^{1}$ | HL-K ${ }^{2}$ | $A^{3}$ | $\mathrm{B}^{4}$ | $C^{5}$ | $\mathrm{D}^{6}$ | HL-E ${ }^{7}$ | HSM ${ }^{8}$ | SCH ${ }^{9}$ | FV items offered ${ }^{10}$ | White (\%) | $\begin{aligned} & \text { FRPL } \\ & (\%)^{11} \end{aligned}$ | Hisp (\%) | \%Black | FV eaten in cups ${ }^{12}$ | FV eaten in cups ${ }^{13}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring Overall PR Score ${ }^{1}$ | 1 | .729" | . 244 | .728" | . 400 | . $547{ }^{*}$ | .858" | . $848{ }^{\prime \prime}$ | .817* | . $451{ }^{*}$ | . 238 | $-.533^{*}$ | -. 297 | -. 101 | . 347 | . 357 |
| HL-K ${ }^{2}$ |  | 1 | . 420 | .740" | . $666{ }^{\prime \prime}$ | .844" | .510* | . $463{ }^{*}$ | . $458{ }^{\circ}$ | . 360 | . 361 | -.574" | -. 338 | -. 179 | .612** | .599** |
| $A^{3}$ |  |  | 1 | . 092 | . 185 | 134 | . 065 | . 184 | . 186 | . 020 | . 285 | -. 297 | -.543* | . 079 | . 286 | 241 |
| $B^{4}$ |  |  |  | 1 | . 223 | .549* | .719* | . 390 | . $502{ }^{*}$ | . 340 | . 358 | -. 345 | -. 128 | -. 325 | . 364 | . 357 |
| $\mathrm{C}^{5}$ |  |  |  |  | 1 | 444* | . 103 | . 279 | . 357 | . 076 | . 154 | -. 303 | -. 283 | . 016 | . 373 | . 366 |
| $\mathrm{D}^{6}$ |  |  |  |  |  | 1 | . 390 | . 377 | . 205 | . 439 | . 210 | -.583" | -. 115 | -. 171 | .604" | .615*' |
| HL-E ${ }^{7}$ |  |  |  |  |  |  | 1 | .615" | .563** | . 429 | . 165 | -. 414 | -. 118 | -. 138 | . 240 | . 267 |
| HSM ${ }^{8}$ |  |  |  |  |  |  |  | 1 | .697* | . $489{ }^{\circ}$ | . 144 | -.477* | -. 106 | -. 145 | . 202 | 221 |
| $\mathrm{SCH}^{9}$ |  |  |  |  |  |  |  |  | 1 | . 157 | . 127 | -. 281 | -.476* | . 164 | . 106 | . 095 |
| FV items offered ${ }^{10}$ |  |  |  |  |  |  |  |  |  | 1 | . 289 | -.565" | . 090 | -. 354 | . $500{ }^{*}$ | . $527{ }^{*}$ |
| White (\%) |  |  |  |  |  |  |  |  |  |  | 1 | $-.519^{*}$ | $-.477^{*}$ | -.686** | .672" | .617" |
| FRPL (\%) ${ }^{\text {T }}$ |  |  |  |  |  |  |  |  |  |  |  | 1 | . 357 | . 249 | -.659" | -.644* |
| Hisp (\%) |  |  |  |  |  |  |  |  |  |  |  |  | 1 | -. 273 | -. 363 | -. 323 |
| Black (\%) |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | -. 418 | -. 380 |
| FV eaten in cups $^{12}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | . $987{ }^{*}$ |
| FV eaten in cups ${ }^{13}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| *Correlation is significant at the 0.05 level (2-tailed). <br> ${ }^{* *}$ Correlation is significant at the 0.01 level ( 2 -tailed). <br> 1 Spring Overall Progress Report Score <br> $2 \mathrm{HL}-\mathrm{K}=$ Hands-on Learning-Knowledge <br> $3 \mathrm{~A}=$ Classes have nutrition education <br> $4 B=$ Number of nutrition education lessons <br> $5 \mathrm{C}=$ Opportunities for tasting during nutrition education |  |  |  |  | 7 HL <br> 8 HS <br> 9 SC <br> 10 F <br> 11 F <br> 12 F <br> 12 F | $\begin{aligned} & E=\text { Hands-or } \\ & 1=\text { Healthy } \\ & =\text { Schoolwi } \\ & \text { items offere } \\ & \text { PL F Freer } \\ & \text { eaten in cu } \\ & \text { eaten in cu } \end{aligned}$ | Learning chool Meal = Num duced Price <br> = For stu <br> $=$ For stu | ngagement <br> ealth Fruit and unch. nts who ha nts who had | getable ite fruits and fruits and | s offered at s getables on th getables on th | hool lunch <br> ir tray <br> ir tray and | at least a |  |  |  |  |

Highlights from Table S3.11 include:

- Hands-on Learning—Knowledge, as well as question D in Hands-on Learning—Knowledge were correlated with fruit and vegetable consumption. This confirms the previous analysis.
- Three school level factors were correlated with fruit and vegetable consumption: number of fruits and vegetables offered at school lunch, percentage of white students, and percentage of students who qualify for free and reduced price lunch.

As presented in Table S3.11, three school factors were also associated with fruit and vegetable consumption. Percent of white students and number of fruit and vegetable items offered had a positive correlation. Precent of students who qualified for free and reduced price lunch had a negative correlation. Further analysis (data not shown) found that the factors associated with consumption in the same way as Hands-on Learning-Knowledge (called a covariate) was percentage of white student, and when the analysis hierarchical regression analysis was rerun with these three school factors, the results were no longer significant (data not shown).

Finding this, we then compared schools with minority and majority white students with students' consumption (in cups) of fruits and vegetables. These data are presented in Table S3.12.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Table S3.12. Fruit and vegetable consumption comparisons between schools with minority and majority white students

|  | Minority White <br> $(<50 \%)$ <br> $\mathrm{n}=15$ schools | Majority White <br> $(\geq 50 \%)$ <br> $\mathrm{n}=5$ schools |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Mean (SD) | $\mathrm{Mean}(\mathrm{SD})$ | t | p |
| Fruits and vegetables eaten in cups by students who <br> had on their tray | $0.38(0.16)$ | $0.66_{(0.16)}$ | $\mathbf{3 . 3 4 4}$ | $\mathbf{0 . 0 0 4}$ |
| Fruits and vegetables eaten in cups by students who <br> ate any from what they had on their tray | $0.46_{(0.14)}$ | $0.69_{(0.16)}$ | $\mathbf{2 . 9 7 5}$ | $\mathbf{0 . 0 0 8}$ |

Highlights from Table S3.12 include:

- Schools with less than $50 \%$ white students ate statistically lower amounts of fruits and vegetables than schools with majority white students.

Given this result, we conducted a hierarchical linear regression with the only the 15 schools with fewer than $50 \%$ white students. This yielded the same results, with Hand-on Learning-Knowledge and specifically question D within that area of service showing an association with eating a larger amount of fruits and vegetables.

As a secondary analysis, we used the consumption data from the Fruit and Vegetable Recall Questionnaire to answer 3 questions:

Was higher Progress Report score associated with...

1) a higher percentage of students having fruit and vegetables on their tray? = "On tray"
2) a higher percentage of students eating any fruit and vegetables? = "Ate any"
3) students eating a larger portion of fruit and vegetables? = "Amount eaten"

Table S3.13 shows the results of hierarchical linear regression models to answer these questions for overall Progress Report score and each Area for the Fruit and Vegetable Recall data.

Highlights of the specific finding from Table S3.13, next page, include:

1) On tray: There was no association between higher Progress Report score and students having fruit and vegetables on their tray.
2) Ate any: Higher scores on the Total Progress Report, Hands-on Learning—Knowledge, and Hands-on Learning—Engagement were associated with a higher percentage of students eating any fruit and vegetables.
3) Amount eaten: Higher scores on the Total Progress Report, Hands-on Learning—Knowledge, and Hands-on LearningEngagement Healthy School Meals (fruit only) and Schoolwide Culture of Health were associated with students eating more fruit and vegetables.

## Studies (continued)

Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch
Table S3.13. Associations between FoodCorps Healthy School Progress Report and the Fruit and Vegetable Recall Questionnaire

| Recall | On tray |  | Ate any (among on tray) |  | $\begin{aligned} & \text { Amount eatenn }^{\text {a }} \\ & \text { (among on tray) }^{\text {sr }} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{n}=1323$ | OR | 95\% CI | OR | 95\% CI | $B$ | $P$ |
| Fruit and vegetables |  |  |  |  |  |  |
| Overall Progress Report | 1.00 | (0.968,1.029) | 1.03* | (1.006,1.059) | 0.008 | 0.003 |
| Hands-on LearningKnowledge | 1.05 | (0.946,1.163) | 1.12* | $(1.024,1.230)$ | 0.029 | 0.003 |
| Hands-on LearningEngagement | 0.95 | (0.879,1.026) | 1.07* | $(1.001,1.147)$ | 0.016 | 0.037 |
| Healthy School Meals | 1.00 | (0.903,1.103) | 1.08 | $(1.002,1.168)$ | 0.020 | 0.055 |
| Schoolwide Culture of Health | 1.02 | (0.916,1.141) | 1.08 | (0.975,1.205) | 0.025 | 0.017 |
| Fruit |  |  |  |  |  |  |
| Overall Progress Report | 1.00 | (0.976, 1.028) | 1.03* | (1.004,1.057) | 0.006 | 0.003 |
| Hands-on LearningKnowledge | 1.06 | (0.967,1.157) | 1.13** | (1.039,1.235) | 0.022 | 0.002 |
| Hands-on LearningEngagement | 0.97 | (0.907,1.039) | 1.06 | (0.985, 1.136) | 0.011 | 0.037 |
| Healthy School Meals | 0.99 | (0.911,1.086) | 1.09 | $(0.988,1.197)$ | 0.016 | 0.029 |
| Schoolwide Culture of Health | 1.03 | (0.936,1.132) | 1.07 | (0.961,1.198) | 0.016 | 0.041 |
| Vegetables |  |  |  |  |  |  |
| Overall Progress Report | 1.00 | (0.980,1.030) | 1.03 | (0.996, 1.068) | 0.007 | 0.032 |
| Hands-on LearningKnowledge | 1.01 | (0.923,1.106) | 1.15* | (1.019,1.306) | 0.030 | 0.013 |
| Hands-on LearningEngagement | 0.98 | (0.919,1.043) | 1.08 | (0.986, 1.181) | 0.017 | 0.054 |
| Healthy School Meals | 1.03 | (0.945,1.114) | 1.07 | (0.943, 1.208) | 0.016 | 0.186 |
| Schoolwide Culture of Health | 1.07 | (0.979,1.164) | 1.06 | (0.919,1.214) | 0.016 | 0.236 |

[^2]Study 3: Association Between Healthy School Progress Report Score and Fruit \& Vegetable Consumption at School Lunch

## Discussion

We measured 2nd and 3rd grade students' fruit and vegetable consumption at lunch. The recruitment for this study used a sampling methodology to obtain a sample of 20 representative FoodCorps schools from across the United States. The final sample was diverse, both in terms of school demographics and locations as well as in terms of level of FoodCorps programming, as measured on the FoodCorps Healthy School Progress Report. The schools also had a wide range of the amount of fruits and vegetables on the tray, percentage of students who ate any fruits and vegetables, and portion size of fruits and vegetables consumed. To our knowledge, this is the first study with a sample across the United States that investigated association of programs and practices related to Hands-on Learning about food and nutrition, Healthy Schools Meals, and a Schoolwide Culture of Health and fruit and vegetable consumption at school lunch.

The study used methods that are valid and reliable. Across two days at each school, we used a digital photography method to capture before- and after-meal photographs of over 2,000 lunch trays, which were coded by trained researchers to estimate the quantity of fruit and vegetable items eaten. The trained coders displayed higher inter-rater reliability in coding the photos, exceeding $95 \%$ for matching in adjacent categories while estimating amounts eaten on a $0-100 \%$ scale in $10 \%$ increments. These levels are at or above reliability rates reported for similar studies in the literature (Paxton, 2011).

This study found that higher Hands-on Learning (Knowledge) scores were associated with higher fruit and vegetable consumption (i.e., both eating any amount of fruits and vegetables and eating larger portions). The magnitude of the association was meaningful. Students in schools that scored the highest on Hands-on Learning (Knowledge) were eating about triple the amount of fruits and vegetables (. 18 cups to .61 cups) as compared to students in schools that scored the lowest. Schools where students had more nutrition education lessons, and those lessons include evidence-based motivational and skill-building activities, were associated with students eating more fruits and vegetables at school lunch.

This study also found that the percentage of white students was a strong covariate that was also highly associated with consumption of fruits and vegetables at school lunch. This indicates that the association with the Healthy School Progress Report should be interpreted with some caution. However, the analysis with the 15 schools with fewer than $50 \%$ white students yielding the same results as the full sample provide some reassurance of the association found between Hands-on Learning-Knowledge and fruit and vegetable consumption.

The implication for practice that can be drawn from these results is for FoodCorps to encourage and provide resources and supports for service members to implement the lesson activities and best practices, as highlighted in the PY2017 Healthy School Progress Report (See Study 1, Box 1) are factors most highly associated with fruit and vegetable consumption.

The implications for research are that the results of this study justify FoodCorps conducting a pre-post intervention-control outcome evaluation study to determine if increasing scores on the FoodCorps Healthy School Progress Report, particularly increasing scores on the Hands-on Learning area of service, are able to increase fruit and vegetable consumption at school lunch.

## Conclusions and Implications

## Two Valid New Instruments: FoodCorps Healthy School Progress Report \& Fruit and Vegetable Recall Questionnaire

The FoodCorps Healthy School Progress Report appears to be a valid tool that can detect change and is reflective of FoodCorps programming. FoodCorps can expect to have a wide range of Progress Report scores on the 0-100 scale. FoodCorps can use the three levels of programming of Planting Seeds, Starting to Grow, and Flourishing, as a guide for the level of FoodCorps programming in schools. (See Study 1, Box 1, page 42). Schools can also be encouraged to use the Progress Report as a menu of options for programming ideas. This can help schools understand and appreciate that they are not expected to implement all of the programming ideas that are on the Progress Report.

The Fruit and Vegetable Recall Questionnaire also appears to be a valid tool, sensitive to change. It is feasible to administer and implement in a classroom setting for a wide range of FoodCorps schools and in students as young as second grade.

We recommend that FoodCorps consider if and how these instruments can be used by other organizations that conduct food-related work in schools.

## Recommend Using New Instruments for Ongoing Program Evaluation

We believe both the FoodCorps Healthy School Progress Report and the Fruit and Vegetable Recall Questionnaire can be used for ongoing program evaluation in FoodCorps schools in second graders and older. The Fruit and Vegetable Recall Questionnaire can be used to monitor fruit and vegetable consumption change in FoodCorps schools, particularly when more intensive methods such as digital photography are cost prohibitive. We also believe these tools have potential application to others doing similar work. An advantage of the Fruit and Vegetable Recall Questionnaire is that it can be easily adapted to a variety of school lunch settings.

## Several Factors Associated with Bigger Changes on FoodCorps Healthy School Progress Report

Lower baseline Progress Report scores, more FoodCorps service member hours, being an elementary school, and higher Staying Power were associated with the biggest changes in Progress Report scores. We believe these data suggest several things. First, FoodCorps may want to try to place more service members in schools that currently have a low level of food-related programming, such as schools that are at the Planting Seeds level with a Progress Report score of $0-32$. These are the schools were service members can have the biggest impact on increasing the level of programming.

On the other hand, when service members are placed in schools with higher levels of programming such as schools at the Flourishing level with a Progress Report score above 53 is different. At such schools, it appears that the role of service member is to maintain programming, such as continue to conduct classroom or garden lessons

## Conclusions and Implications (continued)

or taste-tests in the cafeteria. The service members interviewed by the evaluation team during PY2016 discussed these differences in the role of service members. Service members in schools new to FoodCorps discussed the process of initiating programming, while service members who were working in schools with previous FoodCorps service members and higher levels of programming discussed spending the majority of their time maintaining programming initiated during previous school years, leaving them much less time to initiate new programming.

Second, FoodCorps should continue moving towards a model in which service members spend more hours in a single school as opposed to few hours in more schools, since there were larger changes on Progress Report scores in schools that had service members for more hours. Of note, only $29.5 \%$ of the schools who completed a Progress Report in PY2016 had service members for more than 9 hours a week, while over $41 \%$ o had a service member for fewer than 5 hours a week. If more schools had service members a higher weekly average, with more service members spending much of their weekly hours in one school, this would allow for a more detailed analysis of the level of programming change that could be possible with service members dedicated time to fewer schools.

Third, we found that bigger changes occurred in elementary schools versus high schools, but the studies conducted in this evaluation were not designed to explore why. Perhaps it is easier to implement programming in elementary schools or it is a function of the Progress Report not capturing the type of programming in high schools. Additionally, some parts of the Progress Report, particularly reporting on how many educational or gardening sessions classes received each week was challenging for high schools since students are not divided into discrete classes as is typically the case in elementary schools. We believe the challenges with finding changes in high schools warrants further investigation, which could be done by exploring the processes of completing the Progress Report, implementing program and setting goals to compare and contrast the experiences of service members in elementary versus high schools.

Lastly, schools that had more people in the school community supporting programming (higher Staying Power score) were associated with bigger changes in programming (higher Progress Report score). This seems to suggest that service members can work on increasing Staying Power concurrently with developing and implementing programming.

## Some FoodCorps Areas of Service More Common than Others

Service members most commonly increased programming in the area of Hands-on Learning. Since Hands-on Learning was associated with higher consumption of fruits and vegetables, we recommend service members continue to focus on this area of service. Specifically, the results of this study indicate that FoodCorps may want to provide more resources toward supporting service members to incorporate more of the lesson activities and best practices, as presented in the PY2017 version of the Progress Report (Study 1, Box 2, page 60). In addition, for those service members not doing Hands-on Learning, we would recommend this be encouraged. We recommend each class receive a minimum of 5 hours, and ideally 10 hours of classroom or garden nutrition education during the year. This could be from service members, teachers, or other educators.

Service members were least likely to make changes towards Healthy School Meals; with this area of service having the lowest change score. In particular, there were very few changes in the salad bar. Further analysis revealed that this was due to both schools not starting salad bars and school with salad bars not improving

## Conclusions and Implications (continued)

their score. FoodCorps may want to explore why Healthy School Meals was the area of service with the least change (i.e., did not feel it was feasible to make changes, lacked confidence in ability to work with food service employees, not as interesting to promote as the other areas) and ways to support service members in doing this work. Foodcorps may want to develop resources for service members about how to work with schools to start a salad bar, as well as how to create a salad bar that is well utilized.

## Hands-On Learning-Knowledge Associated with Fruit and Vegetable Consumption

It was encouraging that almost all students (96\%) had a fruit or vegetable on their tray. This may be a function of the requirement of the National School Lunch Program that reimbursable meals include a fruit or vegetable. Regardless, it suggests that FoodCorps programming can focus on encouraging students to eat fruits and vegetables, not getting fruits and vegetables on their lunch trays. We found that higher Hands-on Learning Knowledge scores were associated with higher fruit and vegetable consumption (i.e., eating any amount of fruits and vegetables and eating larger portions). The magnitude of the association was meaningful. Students in schools that scored the highest on Hands-on Learning (Knowledge) were eating about triple the amount of fruits and vegetables (. 61 cups to .18 cups) as compared to students in schools that scored the lowest. Schools where students had more nutrition education lessons, and those lessons included evidence-based motivational and skill-building activities, were associated with students eating more fruits and vegetables at school lunch. We recommend that FoodCorps continue to encourage programming in the area of Hands-on Learning -Knowledge, as stated above with a minimum of 5 hours and ideally 10 hours or more of education for each class. Additionally, we recommend these lessons address the activities and best practices in Box 3. Doing so is particularly important if promoting fruit and vegetable consumption remains a key outcome for FoodCorps. Although we did not see associations with other areas of service (i.e., Hands-on Learning-Engagement, Healthy School Meals, and Schoolwide Culture of Health) with respect to fruit and vegetable consumption at school lunch, it is entirely possible that programming in these areas had other benefits (e.g., consumption of fruits and vegetables outside of school and decreased consumption of snack foods and sweetened beverages, more positive attitudes and beliefs toward healthy, sustainable, local, and fair food [often called "good foods"], students' confidence or self-efficacy in choosing these good foods, and students knowledge about our farm to plate food system) that were not measured in this evaluation but are supported by the literature (Langellotto \& Gupta, 2012, Foster et al, 2008, Roseman, 2011, DiNoia and Byrd-Bredbenner, 2014, Berlin, 2013, Berezowitz et al, 2015).

It is also possible that there are associations with these other areas of service and fruit and vegetable consumption at school lunch, but the sample size of this study was not large enough to detect these smaller associations. Prior research has shown that larger sample sizes are particularly important for detecting change when there is wide diversity among schools, as is the case in the schools with FoodCorps (Tipton, 2013)

## Conclusions and Implications (continued)

## Only a few Healthy School Progress Report questions had larger change scores when chosen as a goal

Interestingly, there were only three questions that had larger change scores from fall to spring for schools in which they were chosen as a goal. These were all in the Schoolwide Culture of Health area of service. Perhaps service members see making changes to the Schoolwide Culture of Health (e.g., encouraging families, creating respect for healthy food) as more peripheral to their core work and thus making a goal in this area is essential for change to occur.

## Challenges Finding Association with FoodCorps Presence and FoodCorps Healthy School Progress Report

We found that FoodCorps schools did not have significantly higher changes to the Progress Report scores than non-FoodCorps matched-control schools. Although Progress Report change scores were higher in the FoodCorps schools compared to non-FoodCorps schools, these differences did not reach statistical significance. Recruitment for this study was extremely challenging. All FoodCorps service sites received a survey that asked if they had schools ready for a FoodCorps service member, but did not yet have one. Thirty-seven sites responded, and 29 of these were sent initiations to participate. The goal was to enroll 20 pairs of schools in the study. However, only 12 service sites agreed to participate. This may be because it was a lot to ask of service sites to complete the FoodCorps Healthy School Progress Report twice for schools that did not have a FoodCorps service member. If FoodCorps would like to investigate this further other study designs may be necessary. One such idea is to allow other groups to use the Healthy School Progress Report and compare the changes achieved by these programs to FoodCorps. Another idea is to work with a few school districts that have FoodCorps service members in some schools and have the school district work with schools without FoodCorps service members to complete the Progress Report.

## Future Directions

## Short-term

The current evaluation generated a variety of interesting questions that we feel warrant further investigation, these include:

- Investigate the facilitators and barriers to promoting Hands-on Learning in schools, so that these types of activities can be implemented on a wide scale. This type of investigation would best be accomplished by qualitative interviews with current FoodCorps service members. This could also inform which curricula and resources to share in the FoodCorps Toolshed and training provided to service members, as well as inperson and virtual training FoodCorps provides to its service members. This may also reveal other changes to the Healthy School Progress report in this area of service, beyond those made between the versions used in PY2016 and PY2017.
- Administer the Fruit and Vegetables Recall Questionnaire to all PY17 FoodCorps. This would entail training of the FoodCorps service members (training videos to be created by the Tisch Food Center) on how to administer the brief questionnaire and collect data from one class on two days (to get variety in the menu) during the spring of 2017. This would provide a large dataset to examine the relationship between Healthy School Progress Report PY17 and fruit and vegetable consumption at school lunch across the wide diversity of schools. Analysis of this dataset would inform future changes to the Healthy School Progress Report and also provide additional guidance on the specific areas of service that FoodCorps could develop as resources for their Toolshed.
- An in-depth qualitative analysis of the goals and action plans identified by school teams on the PY2016 Healthy School Progress Report could provide insight as to how Progress Report change occurs, and in which areas of service.
- Explore how the number of years of FoodCorps programming (i.e., 1 to 5 years) affects baseline Progress Report scores, as well as Progress Report change scores over time.


## Long-term

We believe the instrument development and studies provided the foundation for a larger outcome evaluation. First, we believe we demonstrated that the Progress Report, the Fruit and Vegetable Recall Questionnaire, and the digital photography method, were all feasible to implement and acceptable to FoodCorps service members, administrators, and students in FoodCorps schools. We believe a larger controlled study that evaluates the effects of FoodCorps programming on fruit and vegetable consumption is warranted. Other outcomes, such as the effects on FoodCorps programming on academic achievement and pro-social behaviors would also be important to consider given that the link between health and learning is becoming a top priority for schools in the United States

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## Appendices

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## 4 Domains

## I: Knowledge

A. All students have at nutrition education lessons
B. Students have at least 10 nutrition education lessons
C. Classroom lessons include tasting fruits and vegetables
D. Lessons contain content that is specifically about getting students excited
E. Lessons contain content that is specifically about building skills

## III: Access

A. Meal line set up to promote fruit and vegetable consumption
B. Salad bar is present with high quality food and a wide variety
C. Students participate in tastings
D. Food from local farms or school garden food served and promoted
E. Cafeteria atmosphere set up to be conducive to eating

## II: Engagement

A. All students participate in garden-based activities
B. Students have at least 10 experiences in the garden
C. Students taste foods that are grown in the garden
D. Students' experiences in the garden are connected to core curriculum
E. In the garden students learn skills related to gardening, cooking, or setting goals to eat more fruits and vegetables

## IV: Culture

A. School has standards that are well implemented for foods served outside of the school meal program
B. School administration and teachers embrace food, nutrition, health and wellness
C. Physical environment conducive to health
D. Family involvement and education
E. "Farm to school" integration into school culture

## I: Knowledge

A. All students have at nutrition education lessons with fruits and vegetables being discussed
0 . No one does nutrition education

1. One grade, or some small subset of students e.g. after school class) has nutrition education (can be in the classroom and/or after school
2. Two grades or a few small subsets of students have nutrition education
3. About half the students have nutrition education
4. About three-quarters of the students have nutrition education
5. All students have nutrition education

## 360 Food In Schools Index

The proposed 360 Food In Schools is an Index that can be used as both a way to assess the current food environment within a school and also as a way to plan for change and track progress on those changes. The tool will document the food environment within four domains: knowledge (nutrition education), engagement (gardening), access (healthy, local school meals), and culture (degree to which school embraces and celebrates healthy food in schools).

The main focus of the FoodCorps programming is to promote fruit and vegetable consumption in school-age children. Research suggests that programs with multiple components are more likely to lead to increased fruit and vegetable consumption compared to single component programs. Furthermore, the research suggests that programs are more likely to exhibit positive changes in fruit and vegetable consumption if they focus on specific behaviors (behaviorally-focused), enhance motivation and build skills (theory-based), provide multiple exposures, experiences and tastings in the classroom and garden, integrate nutrition education and garden lessons into the core curriculum, have a cafeteria atmosphere that entices healthy eating, and has a school culture that celebrates healthy food.

The 360 Food In Schools Index will be scored on a 0-100 scale. For each of the four domains there will be five indicators (see table on following pages that will list indicators and provide evidence and justification for each indicator). These indicators are developed from the best research- and practice-based evidence of the kinds of programming that are most successful at changing students' fruit and vegetable consumption. Each of the indicators will be scored on a $0-5$ scale. The rationale behind the 360 Food In Schools Index is that schools will receive a higher (i.e., better) score if they address multiple domains and address a greater number of indicators.
In addition to the questions in the four main categories, there will be questions on policy and process questions for the knowledge, engagement, and access sections. These questions follow the table with the indicators.

## Appendix A－Healthy School Progress Report：Initial Development April 2015 （continued）

## 360 Food in Schools Index（working title）

## Indicators $\quad$ Evidence and Justification for Indicators

A．All students have at nutrition education lessons with fruits and vegetables being discussed

B．Students have at least 10 nutrition education lessons in the classroom during the year， with eating fruits and vegetables being covered at least 8 lessons

C．Classroom lessons include tasting fruits and vegetables during at least half of lessons

D．Lessons contain content that is specifically about getting students excited about and motivated to eat fruits and vegetables

The nutrition education literature has found that nutrition education with school children improves eating behaviors（Kann et al，2007；Contento 2011）．Also，nutrition education is more effective when it is behaviorally focused（Contento 2011；Roseman et al 2011）．This means that it is specifically targeted at what eating pattern the intervention wants the audience to change （e．g．，fruits and vegetables）．

Research has found that interventions with more total lessons，as well as lessons spaced over a longer period of time（e．g．，over most or all of the school year）are more likely to be effective at changing behavior（Sobel－Goldberg et al，2013；Shaya，2008；Van Cauwenberghe et al，2010）

In the nutrition education literature，there is evidence that providing tastings to fruits and vegetables can increase preferences（Wong et al，2012；Chu et al，2013）for fruits and vegetables． Also，increasing preferences has been found to increase consumption（Baxter and Thompson 2002；Cullen et al 2003；Brug et al，2008；Di Noia and Byrd－Bredbenner，2014）．

In the field of behavioral nutrition education on of the key components to effective behavior change is to enhance motivation．To investigate the best way to do this nutrition education researchers have worked closely with colleagues in the field of psychology to explore what kind of information（e．g．，talking about the benefits of healthier behavior or helping people think about the barriers they might face in changing and ways to overcome them）is most likely to motivate people to change behavior（Contento，2011）
These kinds of information are called＂determinants＂since they＂determine＂how much people change their behaviors from an intervention．Researchers often put many determinants together into a＂theory＂and then cover all the determinants in the theory during the intervention．This is called＂theory－based nutrition education＂and makes interventions more likely to change behavior（Contento，2011）．One theory that has been used extensively in school－based nutrition education is social cognitive theory（Contento 2011）．This has also been used specifically in evaluations of Farm to School（Roche et al 2012；Berlin et al 2013）．The Roche study（2012） found three determinants led to the most behavior change：1）decrease fear of trying new foods （neophobia）；2）increase perception that it is socially desirable and acceptable to eat vegetables and fruits（social norms）；and 3）increase confidence in abilities to eat fruits and vegetables（self－ efficacy）．This study also found that students respond very well to having＂food system knowledge＂as the base of the education．The Berlin article（2013）called for more systematic inclusion of determinants of social cognitive theory into farm to school program．
Additionally，more recent analyses have investigated how overall psychosocial theories work for changing children＇s fruit and vegetable consumption（Di Noia and Bryd－Bredbenner，2014： Diep et al，2014），with the Diep（2014）study calling for more research to understand the practical－and experience－based procedures that can compliment theory to make interventions effective at changing behavior．
Overall，changing fruit and vegetable intake through school based education programs has had modest results（Evan et al，2012）and more research is needed．
A second key component of making nutrition education effective is to facilitate ability to make behavior change．This means providing the specific factual knowledge（e．g．，we need to eat at least five different fruits and vegetables each day）and procedural skills（how to make a color salad from the salad bar）that are needed to do the desired behavior（Contento，2011）．
Cooking is also used to facilitate ability．When students prepare in their classrooms the specific recipes that are served in the lunchroom，they are more likely to eat them at lunch（Liquori et al， 1998）and research has found that when students are given recipes to prepare at home that those children who do make the recipes at home are more likely to change their behavior （Cullen et al，2007）．Additionally，a qualitative evaluation of a kitchen garden program in Australia（Gibbs et al，2013）indicated that when students were involved in a kitchen garden activities their willingness to try new foods increased and many children talked about cooking what they prepared in school with their families．

## 360 Food in Schools Index (working title)

## Indicators $\quad$ Evidence and Justification for Indicators

A. All students participate in garden-based activities (Q14)
B. Students have at least 10 experiences in the garden
C. Students taste foods that are grown in the garden
D. Students' experiences in the garden are connected to core curriculum
E. In the garden students learn skills related to gardening, cooking, or setting goals to eat more fruits and vegetables

There is evidence that students who participate in garden lessons have increased fruit and vegetable consumption (McAleese and Ratkin, 2007; Ratcliffe et al 2009; Wright and Rowell 2010; Langellotto and Gupta 2012).

There seems to be evidence that garden-based intervention that included more overall visits to the garden were the intervention that were more likely students are to increase fruit and vegetable consumption (McAleese and Ratkin, 2007; Ratcliffe et al 2009; Wright and Rowell 2010; Langellotto and Gupta 2012).
In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).
Garden programs are often integrated into the core curriculum to enable teachers to spend more time in the garden (Lineberger, 1998). This has been reinforced more recently, "unless teachers perceive school gardens as outdoor classrooms critical to teaching the skills and content they're responsible for imparting, students will have limited exposure to any school garden experience." (Hirschi, 2012)

As discussed above in the knowledge section, indicator E , when students learn specific skills, particularly those that are about growing, preparing and eating fruits and vegetables they will be more likely to eat then in the future.
A. Meal line set up to promote fruit and vegetable consumption (Q 24)
B. Salad bar is present with high quality food and a wide variety (Q23)
C. Students participate in tastings of fruits and vegetables that will be served as part of school meals or salad bar (Q 27)
D. Food from local farms or school garden food served and promoted (?Q29 Q32)
E. Cafeteria atmosphere set up to be conducive to eating (Q25)

The Cornell Center for Behavioral Economics that is within Child Nutrition Program has worked since 2009 to create research-based lunchrooms designed to guide students to healthier choices (Smarter Lunchroom Self Assessment, 2014). For this indicator the cafeteria will be assessed for specific Smarter Lunchroom strategies related on "promoting vegetables \& salad" and "focusing on fruit."

Studies that assess children fruit and vegetable intake before and after introduction of a salad bar in the lunchroom have found salad bars to contribute to increased fruit and vegetable intake (Adams, 2005, Slusser et al, 2007).

In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).

The foundation of the Farm to School movement is to provide students with experiences eating local foods (Taylor and Johnson, 2013). Although there is not much research that directly links local food consumption, specifically, when local foods are used they can be tasted to build preferences and local foods can be used to enhance motivation, using connections with where it was grown to get children excited about eating the food.

As with above (Access indicator A) the Smarter Lunchroom Self Assessment has key changes to make to the eating atmosphere to help assure that students will eat what is served at school meals, these will be used for this indicator.

## 360 Food in Schools Index (working title)

## Indicators <br> Evidence and Justification for Indicators

A. School has standards that are well implemented for foods served outside of the school meal program
B. School administration and teachers embrace food, nutrition, health and wellness
C. Physical environment conducive to health (Q33)
D. Family involvement and education (Q7 and Q17)
E. "Farm to school" integration into school culture (Q15)

The food that is available at classroom and school events can have a powerful influence over students eating habits (Centers for Disease Control and Prevention and Bridging the Gap Research Program, 2014). As of the beginning of school 2006, all schools have been required to have wellness policies (mandates around wellness policies are currently being updated as part of the 2010 Healthy Hungry Free Kids Act). Standards for food are a recommended part of wellness policies to build a culture of healthy food that can support changing eating behaviors.

In order to create a culture of health in schools, both administrators and teachers need to be receptive to and embrace a culture of health (Center for Disease Control and Prevention, 2011). Additionally, administrative and teacher support has been found to be a key factor in developing successful school garden programs (Ozer, 2006).

Decreasing marketing and promotion of less healthful foods and promoting healthful foods can help to promote positive eating behaviors (Institute of Medicine, 2005).
A review of what makes nutrition education programs effective at changing behavior found that family involvement, particularly for children in elementary grades (Roseman, 2011).

Although there has been limited peer-reviewed publications on Farm to School work (despite its widespread implementation) (Taylor and Johnson, 2009), there has been called for more research and more overall adoption and integration into the school culture (Roche et al, 2012; Berlin et al, 2013)

## Appendix A - Healthy School Progress Report: Initial Development April 2015 (continued)

## Policy questions:

State or District level standards for nutrition education (Q1 and Q2)
District has preferred curriculum (Q3)
District wellness plan or policy (Q10)
School wellness committee and members (Q11 and 12)
Language on garden-based learning in state standards (Q20)
Recess before lunch (Q 26)
Local procurement and frequency (Q 29 and 30)
Garden food allowed in school meals (Q31)

## Knowledge Process Questions:

- Description of content of lessons conducted (both those specifically about fruits and vegetables and those about other topics.
- Receptivity of teachers to nutrition education in the classrooms (Q4)
- Curriculum and programs used for nutrition education (Q5)
- Who is doing the nutrition education -- visitors coming to the school, fieldtrips (Q 8 and 9)


## Engagement Process Questions:

- Who in the school uses the garden
- Who maintains the garden (Q18)
- How garden integrated into the curriculum (Q19)
- Garden plan and goals (Q21)
- School staff engagement in garden (Q 16)


## Access Process Questions:

- Cafeteria staff receptivity


## Appendix A - Healthy School Progress Report: Initial Development April 2015 (continued)

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## Summary of Interviews with FoodCorps Service Members

## I. Overview of activities

Researchers from the Laurie M. Tisch Center for Food, Education \& Policy (TFC) interviewed 7 FoodCorps Service Members representing 6 states. The interviews were conducted over the phone and focused on learning about Service Members experiences completing the Landscape Assessment Tool. Service members reported liking the activity and understanding the importance of collecting the data, but felt limited by the question response options and shared suggestions for improving the tool.

- Each interview was conducted by phone, lasting approximately 1 hour
- Service Members represented a diverse geography of FC programming from 6 states
- $\mathrm{n}=5$ first year, $\mathrm{n}=2$ second year service members
- $\mathrm{n}=3$ males, $\mathrm{n}=4$ females
- Range from serving in only one school to 15 or so (within an entire district)
- Based on Landscape Assessments of 4 elementary school sites, 2 middle school sites, and 1 district level site


## II. What we learned

## Identified Strengths of the Landscape Assessment Tool:

- The length of the tool was not a problem for most service members
- Service members reported liking the activity and understood the importance of collecting this data
- The service members wanted a reason to get in contact with certain members of school staff and the tool was used to initiate conversation
- The questions on the tool reflect the varied work of service members
- We saw only a few instances of work that was entirely missed by the existing questions (E.g. aquaponics, composting)
- Some of the questions will capture change from the beginning to end of this school year
- Many service members reported that their direct activities this year will cause increases on certain questions


## Identified Weaknesses of the Landscape Assessment Tool:

- Response options are stacked (not sequential and often double-barreled)
- Question 16 asks about developing lessons beyond curriculum but if there is no curriculum would have to develop other ways to use the garden and score a 3 without accomplishing 2.
- Question 25 asks about cafeteria environment being pleasant and having short lines, but the cafeteria could be unpleasant and have short lines if not all students get hot lunch
- Even if there is change, service members have trouble deciding which to choose, for example:
- Question 6 asks about the frequency of farm to school activities, but service members were unclear what constitutes 'regular'? And does it mean regular with FC or regular within the school?
- Question 32 asks about garden produce being served in school meals but if served on salad bar questioned whether that qualified as actual school meal;
and yield of garden produce, not seasonality, determined frequency of being available in cafeteria
- Questions combine (conflate) attitude and action and both might not be true; for example:
- Question 4 asks about receptivity to nutrition education being taught during class time and teachers could be receptive but that does not mean that nutrition education is happening during class time
- Question 28 asks about Food Service Director receptivity and top score is positive attitude, not action of making changes or initiating changes for local sourcing
- We observed many instances of inaccurate baseline assessments of the school environment
- Service members reported not knowing where to find the answers, guessing, using the prior Landscape Assessment Tool, or basing score on word of a school staff member who "inflated" the extent of certain activities
- This, in some cases, will lead to a LOWER readjustment score at year's end


## Opportunities for Improvement:

- Service members had ideas for questions to add:
- Time spent in the garden
- Type and scope of crops grown in garden
- Garden produce use (e.g. used in class? Lunch? Donated?)
- Student receptivity to programming
- School staff (beyond teachers) receptivity to programming
- Cooking classes
- Afterschool clubs


## III. Proposed Next Steps

We hope to update the tool to reflect the responses gleaned from these interviews. In addition to capturing the breadth of activities of the service members, we hope that the tool will reflect the specificity with which service members implement these activities. We further hope that the tool will align with what research and theory suggests are important environmental and interpersonal determinants of eating behaviors. We will update the tool, both through adding questions and altering existing questions, to match what we have learned from service members in these seven interviews.

# JUNE 3, 2015: DRAFT FOR REVIEW AND PILOT TEST BY PY2015 SERVICE MEMBERS PLEASE DO NOT DISTRIBUTE 

Produced for FoodCorps by Laurie M. Tisch Center for Food, Education \& Policy
Teachers College Columbia University

## Healthy School Progress Report

## Overview

FoodCorps serves to connect kids to healthy food in schools and promote healthy eating behaviors. The 360 Food in Schools Index ( 360 Food) is a tool that can be used to help service members plan for and track what changes are happening across schools and what FoodCorps program components contribute the most to healthy eating behaviors, in particular, fruit and vegetable consumption. Because this tool is evidence-based, we believe that if a school increases their score on 360 Food by making a conscious effort to add food-based educational activities, experiences, and practices, students will eat more fruits and vegetables. This hypothesis will be tested in an upcoming evaluation that will look at the association between 360 Food scores and students' fruit and vegetable consumption at school lunch.
360 Food assesses four domains. Three of the domains are the FoodCorps pillars (knowledge, engagement, access). Knowledge (nutrition education) questions ask whether there are lessons for students to learn about food, nutrition, and cooking and, if so, if the lessons are grounded in theory. Engagement (school gardens) questions ask about students' experiences in school gardens. Access (school meals) questions ask if healthy, local foods are served at school lunch and if the cafeteria atmosphere is conducive to eating. A fourth domain has been added, Culture (healthy school environment), which intersects the other domains and includes questions that capture if the school environment is supportive of wellness.

In addition to the questions in the four domains, there are questions on policy and process that capture policies on the state, district, and school level. These questions are not factored into the schools' score (see below) but are used to provide


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## Usage and scoring

360 Food can be used to assess the current school environment and to help service members plan for and track progress on changes. 360 Food is scored on a $0-100$ scale. For each of the four domains there are five indicators, with one question per indicator ( 20 total questions). For each indicator a school can score a minimum of 0 (suggesting they are not yet conducting activities related to this indicator) to a maximum of 5 (suggesting they are conducting extensive activities related to this indicator). See page 19 for a detailed explanation of how individual questions are scored.

## Key terms

The following provides definitions to operationalize some of the terms used in 360 Food.

- nutrition education: Nutrition education provides experiences that empower people to understand and navigate the food system and advocate for change on a personal and policy level. It provides hands-on and minds-on experiences that are culturally appropriate and investigates issues related to food system sustainability and social justice. It includes experiences gardening (for this tool garden-based activities are so important they are pulled out and represented in the engagement domain), cooking, eating, and critically analyzing food system issues. It is directed at specific behaviors (such as eating more fruits and vegetables). Finally, it is grounded in theory from the fields of psychology and social sciences to include activities to motivate and inspire change, appropriately teach how-to skills, and create a supportive environment.
- garden-based activities: Garden-based activities (GBAs) include everything related to growing food, from planting seeds to harvesting. In the school context, garden-based activities should be connected to the curriculum to help teachers meet educational standards and students feel like gardening is interwoven into the school experience.
- meal line: The meal line is the line where students get school meals. This can include food that is part of the United States Department of Agriculture (USDA) reimbursable school meals program, as well as foods that are offered a la carte to students.
- salad bar: Salad bar is a specific addition to the meal line where vegetables (and maybe some fruits) are served in addition to the reimbursable school meal.
- culture of health: A culture of health is a total school environment encompassing everything from the classroom to school events to school meals where healthy choices are easy, accessible, celebrated, respected, and most importantly normative.


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## Pilot-testing $\mathbf{3 6 0}$ Food by current service members

Since 360 Food is the basis of an evaluation study of FoodCorps during PY2016 (2015-16 school year) and no pre-post data exists for this new index, service members are asked to fill out the tool to assess their school(s) BOTH at the end of PY2015 (June 2015) as well as to reflect BACK to assess where their school(s) was at the beginning of PY2015 (September 2014). This is called "retrospective" data collection. For each question there is a column for September and June. Note: it may be easier to first complete the June column to assess what occurred during this school year and then reflect back to September to assess what occurred during 2013-14.


## Types of Questions

There are two types of questions on this tool. Some questions can only have a single answer. Others questions can have more than one answer, "check all that apply" type questions.


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## Rating confidence in answers

We all realize that it is very challenging to capture the kinds of activities and practices around food that a school does. For each question, please choose the answer or answers that you believe to be true for your school(s). Then on the right side of each question is a box to rate how confident you are with your answer.


Use this scale to choose your response for each column:

- very confident: talked to everyone involved in this activity or practice and feel completely sure this answer is accurate
* confident: talked to most key people involved in this activity or practice and feel sure this answer is accurate
- somewhat confident: talked to one or two people involved in this activity or practice and only somewhat sure this answer is accurate
- not so confident! was not able to talk to any key people who would know this information, my answer is my best educated guess


## Methodology for obtaining answers

Finally for each question, we would like to know the sources you used to obtain your answers. This will help us interpret your answers and also help to inform us on what other groups who might work with the schools around nutrition education, gardening, or school food who were involved in accurately completing this index.


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## Domain 1: Knowledge (nutrition education)

There are many factors that make nutrition education more likely to be effective at changing behavior. The first is that the education has to be targeted to the behavior the educator wants to change, which for FoodCorps is to eat more fruits and vegetables. Second it has to be of adequate intensity and duration.

There is evidence that more lessons, and lessons spread over more of the school year, are more effective at changing behavior. Third, there is strong evidence that nutrition education needs to contain three components to be effective: a) increase students' personal desire to want to do the targeted behavior
(e.g., opportunities to taste and eat healthy foods have been shown to increase desire to eat them); b) teach knowledge and skills that will help students be able to do the targeted behavior; and c) create an environment that is supportive of the targeted behavior (this is covered in the access and culture domains).
A. What percentage of students received nutrition education lessons focused on fruits and vegetables ( $\mathrm{F} \& \mathrm{Vs}$ )?

| September (previous school year) | $\begin{gathered} \text { June } \\ \text { (current } \\ \text { school year) } \end{gathered}$ | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No one did nutrition education focused on $\mathrm{F} \& \mathrm{~V}$ s |
| $\bigcirc$ | $\bigcirc$ | One or two classes or a small subset had nutrition education focused on F\&Vs ( $\sim$ $5-10 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | Several classes or subsets of students had nutrition education focused on F\&Vs ( $\sim 25 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | About half the classes had nutrition education focused on $\mathrm{F} \& \mathrm{~V}$ s ( $\sim 50 \%$ ) |
| $\bigcirc$ | $\bigcirc$ | About three-quarters of the classes had nutrition education focused on F\&Vs (~75\%) |
| $\bigcirc$ | $\bigcirc$ | All classes had nutrition education focused on F\&Vs ( $\sim 100 \%$ ) |

Confidence in responses:
S J
$\bigcirc$ very confident
$\bigcirc$ confident
$\bigcirc$ somewhat confident
$\bigcirc$ not so confident
How did you obtain these answers?

## B. Among classes that received nutrition education (Question A), how many lessons on average were focused on $F \& V$ s?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Choose ONE answer per column: |
| :---: | :---: | :--- |
| - | $\bigcirc$ | None focused on F\&Vs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Two lessons focused on F\&Vs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Four lessons focused on F\&Vs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Six lessons focused on F\&Vs |
| $\sim$ | $\cap$ | $\sim$ Eight lessons focused on F\&Vs |

Confidence in responses:
S J
$\bigcirc$ very confident
$\bigcirc$ ○ confident
$\bigcirc$ ) somewhat confident
$\bigcirc$ not so confident
How did you obtain these answers?

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## C. Among the classes that received nutrition education (Question

 A) how many lessons included tasting or eating F\&Vs?(note: opportunities for tasting or eating foods grown in the garden and foods served at school lunch will be asked separately in later questions, this question relates to tastings in the classroom)


Choose ONE answer per column:

| O | O | None of the lessons included tasting or eating of F\&Vs |
| :---: | :---: | :--- |
| 0 | $\bigcirc$ | A few lessons included tasting or eating F\&Vs ( $\sim 5-10 \%$ of total lessons) |

Confidence in responses:
S J
O $O$ very confident
O O confident
O $O$ somewhat confident
O O not so confident

How did you obtain these answers?
D. Among the classes that received nutrition education (Question A) did lessons include activities specifically geared toward getting students excited and motivated to eat $F \& V$ s?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | At least two lessons had activities that: <br> (check ALL that apply): | O not so confident |
| :---: | :--- | :--- | :--- | :--- |
| $\square$ | $\square$ | Increased students' perceptions that eating F\&Vs is socially desirable (e.g., <br> students shared their favorite F\&Vs and talked about times they eat them) | How did you obtain <br> these answers? |
| $\square$ | Taught students health benefits of eating F\&Vs (e.g., learned health benefits of <br> different colored F\&Vs, such as blue is good for the brain and red for the heart, <br> or teaching about "eat the rainbow") | Discussed that eating a larger portion of F\&Vs, instead of meat and other foods <br> from animals, or processed foods, creates a healthier planet |  |
| $\square$ | $\square$ | Discussed strategies for decreasing barriers/fears of trying new F\&Vs (e.g., told <br> stories about people who started liking foods they did not like in the past) |  |
| $\square$ | $\square$ | Students cooked and ate F\&Vs |  |
| $\square$ | $\square$ | None, lessons did not include any of these activities |  |
| $\square$ | $\square$ |  |  |

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## E. Among the classes that received nutrition education (Question A) did lessons include activities to build knowledge and skills for eating F\&Vs?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | At least some of the lessons had activities that: <br> (check ALL that apply): |
| :---: | :--- | :--- |
| $\square$ | $\square$ | Reminded students to make half their plate F\&Vs at every meal |

Confidence in responses:
O O very confident O O confident
O O somewhat confident
O O not so confident

How did you obtain these answers?

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## Domain 2: Engagement (school gardens)

When students spend adequate time engaged in garden-based activities, they are more likely to eat F\&Vs. Similar to nutrition education (Domain 1) there needs to be adequate intensity and duration of garden-based activities and
they need to be done in ways that increase desire to eat $\mathrm{F} \& V$ s and teach appropriate knowledge and skills. Additionally, when garden education is part of core subjects, students see these connections and are more likely to make the desired change.

School administrators and teachers more fully embrace garden-based activities when they are tied to core subjects and this also helps students to change behavior.
F. What percentage of students participated in garden-based activities (GBAs)? (GBAs include anything related to growing food whether starting seeds in the classroom or working in a garden)

| September (previous school year) school ye | $\begin{gathered} \text { June } \\ \text { (current } \\ \text { school year) } \end{gathered}$ | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No one did GBAs |
| $\bigcirc$ | $\bigcirc$ | One or two classes or a small subset had GBAs ( $\sim 5-10 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | Several classes or subsets of students had GBAs ( $\sim 25 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | About half the classes had GBAs ( $\sim 50 \%$ ) |
| $\bigcirc$ | $\bigcirc$ | About three-quarters of the classes had GBAs ( $\sim 75 \%$ ) |
| $\bigcirc$ | $\bigcirc$ | All classes had GBAs ( $\sim 100 \%$ ) |

Confidence in responses:
s J
O $O$ very confident
O O confident
O O somewhat confident
O O not so confident

How did you obtain these answers?
G. Among the classes that participated in GBAs (Question F) how many lessons did they have?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Choose ONE answer per column: |
| :---: | :---: | :--- |
| 0 | $\bigcirc$ | None |
| O | $\bigcirc$ | $\sim$ Two lessons with GBAs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Four lessons with GBAs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Six lessons with GBAs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Eight lessons with GBAs |
| $\bigcirc$ | $\bigcirc$ | $\sim$ Ten or more lessons with GBAs |

Confidence in responses:
O $O$ very confident
O O confident
O $O$ somewhat confident
O O not so confident
How did you obtain these answers?

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## H. Among the classes that participated in GBAs (Question F) how many included tasting or eating F\&Vs?



Choose ONE answer per column:
No GBAs included tasting F\&Vs


About three-quarters of the GBAs included tastings F\&Vs (~75\%)
$\bigcirc$ All GBAs included tasting F\&Vs (~100\%)

Confidence in responses:
O $O$ very confident
O O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?
I. Among classes that participated in GBAs (Question F), were the GBAs connected to the curriculum?

| September (previous school year) | June (current school year) | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No GBAs |
| $\bigcirc$ | $\bigcirc$ | GBAs were not connected to the curriculum (e.g., garden activities were stand alone, no connections to classroom lessons) |
| $\bigcirc$ | $\bigcirc$ | Actively working toward connecting GBAs to curriculum (but not connected now) |
| $\bigcirc$ | $\bigcirc$ | GBAs connected to curriculum (but did not meet standards) |
| $\bigcirc$ | $\bigcirc$ | GBAs connected to curriculum and met standards in one core subject (e.g., National Common Core Standards (English and Math) Next Generation Science Standards, State level standards or local standards or "scope and sequence") |
| $\bigcirc$ | $\bigcirc$ | GBAs connected to curriculum and met standards in more than one core subject (e.g., National Common Core Standards (English and Math) Next Generation Science Standards, state standards, or local "scope and sequence") |

Confidence in responses:
S J
O O very confident
O O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?

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## J. Among the classes that participated in GBAs (Question F) did the GBAs include activities to motivate students and build knowledge and skills for eating F\&Vs?

| September (previous school year) | $\begin{gathered} \text { June } \\ \text { (current } \\ \text { school year) } \end{gathered}$ | At least two of the GBAs had activities that: (check ALL that apply): |
| :---: | :---: | :---: |
| $\square$ | $\square$ | Taught students about health or environmental benefits of eating fruits and vegetables grown in the garden |
| $\square$ | $\square$ | Discussed strategies for overcoming barriers/fears for trying new F\&Vs |
| $\square$ | $\square$ | Reminded students that of current recommendations to eat half your plate of F\&Vs every day |
| $\square$ | $\square$ | Taught students about proper serving sizes for F\&Vs |
| $\square$ | $\square$ | Had activities that taught gardening skills (such as growing food in small pots) that students could do at home |
| $\square$ | $\square$ | Had students set personal goals for increasing their consumption of F\&Vs |
| $\square$ | $\square$ | Had students monitor their goals for eating more F\&Vs |
| $\square$ | $\square$ | Had students cook and eat simple recipes |
| $\square$ | $\square$ | Had information focused on F\&Vs that went home to families (e.g., gardening tips, recipes and shopping tips) |
| $\square$ | $\square$ | Had students make a public commitment (e.g., raise their hand, sign a form or place a sticker on poster) to eat more F\&Vs either at school lunch or at home with their families |
| $\square$ | $\square$ | None, lessons did not include any of these activities |

Confidence in responses:
O $O$ very confident
O O confident
O $O$ somewhat confident
O O not so confident

How did you obtain these answers?

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## Domain 3: Access (school meals)*

School meals are the most consistent experience that students have with food in schools. Students learn a lot about eating, food, meal etiquette, and the value of health during school meals - whether this learning is intentionally planned or
not. Many practices can create a cafeteria atmosphere conducive to eating F\&Vs. Evidence shows that 1) having a meal line that is set up to make eating F\&Vs the easy and default option; 2) having a salad bar; 3) having opportunities for students to
taste F\&Vs served in school meals; 4) serving and promoting local/seasonal foods; and 5) having a cafeteria atmosphere conducive to eating can increase $F \& V$ consumption

## K. Was the meal line set up to promote consumption of fruits and

 vegetables?| September (previous school year) | June (current school year) | Check ALL practices the school does regularly: | $\begin{aligned} & \text { O somewhat confident } \\ & \text { O not so confident } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $\square$ | $\square$ | F\&Vs were not wilted, browning or otherwise damaged | How did you obtain these answers? |
| $\square$ | $\square$ | Daily F\&V option were easily seen by students of average height for your school |  |
| $\square$ | $\square$ | A default vegetable choice was established by pre-plating a vegetable on some of the trays |  |
| $\square$ | $\square$ | When whole fruit was served, it was in attractive bowls or baskets on serving line and/or at the register |  |
| $\square$ | $\square$ | F\&V options were given creative or descriptive names and these names were written on menu boards and/or on signs that were displayed next to the fruit/vegetable |  |
| $\square$ | $\square$ | None of these practices were done regularly in the cafeteria |  |

[^3]
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L. Was salad bar present with high quality (e.g., fresh, attractive, healthy) food and a wide variety of $\mathrm{F} \& \mathrm{~V}$ ?

| September (previous school year) | $\begin{gathered} \text { June } \\ \text { (current } \\ \text { school year) } \end{gathered}$ | Check ALL salad bar features done regularly: |
| :---: | :---: | :---: |
| $\square$ | $\square$ | Salad bar was highly visible and located in a high traffic area |
| $\square$ | $\square$ | Salad bar was part of or very near the meal line, so all students had to walk by |
| $\square$ | $\square$ | Salad bar was at the proper height for students AND there was space for students to put down their tray at the salad bar |
| $\square$ | $\square$ | Salad bar had at least three different fruits or vegetables and at least two different colors (e.g., two green vegetables and one orange) |
| $\square$ | $\square$ | Items on salad bar were not wilted, browning or otherwise damaged |
| $\square$ | $\square$ | Self-serve salad bar utensils were appropriate size and type for students to handle |
| $\square$ | $\square$ | An adult examines the salad bar regularly to replenish as needed and make sure the salad bar looks neat |
| $\square$ | $\square$ | An adult stands by the salad bar to encourage students to take salad and helps students as appropriate |
| $\square$ | $\square$ | An adult makes a salad in a large serving bowl with several vegetables and goes around to offer it to students who are sitting and eating |
| $\square$ | $\square$ | Students see adults (teachers, principals, staff, etc.) taking and eating from the salad bar |
| $\square$ | $\square$ | None, there was no salad bar or there was a salad bar but none of these features are present |

Confidence in responses:
O $O$ very confident
O O confident
O $O$ somewhat confident
O O not so confident
How did you obtain these answers?

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## M. Did students and families have opportunities to participate in tastings of $\mathrm{F} \& \mathrm{~V}$ s served at school meals?

| September <br> (revevious <br> school year) | June <br> (current <br> school year) | Check ALL school meal tasting opportunities that were done at <br> least twice during the school year: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | A tasting table was set up in a high traffic area of the cafeteria for students to taste <br> F\&Vs served that day or in upcoming days |
| $\square$ | $\square$ | Students prepared and ate a recipe that is part of the school lunch menu (in their <br> classroom, cafeteria or other location) |
| $\square$ | $\square$ | Adult(s) walked around the cafeteria offering a taste of a vegetable served on the <br> salad bar (e.g., a red pepper strip served in paper tasting cup) |
| $\square$ | $\square$ | Opportunities were provided to families to taste the F\&Vs that are served in <br> school meals (e.g., before school, after school, or at school events) |
| $\square$ | Results from taste testing (e.g., how many students liked the food) are tallied and <br> displayed in a prominent spot in the school |  |
| $\square$ | None of these tasting opportunities were offered, or they were offered fewer than <br> two times a year |  |

Confidence in responses: s J O $O$ very confident O O confident
O $O$ somewhat confident O O not so confident

How did you obtain these answers?
N. At school meals, was "local" food (e.g., from local farms or school garden) served and promoted? (exclude milk)

| $\begin{aligned} & \text { September } \\ & \text { (previous } \\ & \text { school year) } \end{aligned}$ | $\begin{gathered} \text { June } \\ \text { (current } \\ \text { school year) } \end{gathered}$ | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No food from local farms or school garden was served in school meals |
| $\bigcirc$ | $\bigcirc$ | Local food was served and promoted once or twice during the school year (e.g., as part of a harvest celebration) |
| $\bigcirc$ | $\bigcirc$ | Local food was served and promoted about three to nine times during the school year (e.g., once a week through the harvest season, or every day during a harvest week-long celebration) |
| $\bigcirc$ | $\bigcirc$ | Local food was served and promoted about 10-20 times during the school year (e.g., once or twice a month throughout the school year, or many harvest celebrations) |
| $\bigcirc$ | $\bigcirc$ | Local food was served and promoted ~21-39 times during the school year (e.g., several times a month or once a week or more during a long harvest season) |
| $\bigcirc$ | $\bigcirc$ | Local food was served and promoted at least 40 times during the school year (e.g., at least once a week) |

Confidence in responses:
S J
O $O$ very confident
O O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?

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## O. Was the cafeteria atmosphere conducive to eating?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Choose ALL that were done in the cafeteria: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | When students entered the lunchroom it looked clean (e.g., tables are clear, not <br> much on the floor, garbage can not overflowing) |
| $\square$ | $\square$ | There were wall hangings that made the cafeteria and serving line inviting (e.g., <br> student artwork, colorful posters of F\&Vs) |
| $\square$ | $\square$ | Noise and chaos level were reasonable (e.g., no fighting, yelling, whistle blowing) |
| $\square$ | $\square$ | At least one adult modeled healthy behaviors (e.g., dined in the lunchroom with <br> students, encouraged students to eat what is served at school lunch) at least once <br> a week |
| $\square$ | $\square$ | Cafeteria staff had a good rapport with students (e.g., smiled as they distribute <br> food) |
| $\square$ | $\square$ | None of these regularly applied to the cafeteria |
| $\square$ |  |  |

Confidence in responses:
S J
O O very confident
O O confident
O $O$ somewhat confident
O O not so confident
How did you obtain these answers?

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## Domain 4: Culture (healthy school environment)

For students to eat $\mathrm{F} \& \mathrm{~V}$ s, they need an environment in which $F \& V$ s as well as other healthy food are available, valued, and encouraged. This means F\&Vs are available in school meals, classroom
events and school events. Additionally, teachers, administrators, school staff, other students, families and special guests can encourage students to eat F\&Vs and the combination of encouragement
from many sources is powerful. Finally, a culture of health goes beyond just adding F\&Vs and other healthy foods. A conscious effort must also be made to decrease access to unhealthy foods.

## P. Were eating $\mathrm{F} \& \mathrm{~V}$ s and healthy foods a natural part of day-today life in the school?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Check ALL that were done most of the time: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | When there was food at classroom snacks or celebrations there was a conscious <br> effort (in most classes) to serve F\&Vs and limit (number of options and portion <br> sizes) processed packaged foods (e.g., chips, baked goods, candy) and sugar- <br> sweetened beverages (e.g., juice drinks, soda, sweetened iced tea) |
| $\square$ | $\square$ | When there was food at school events, there was a conscious effort to serve F\&Vs <br> and limit (number of options and portion sizes) processed packaged foods (e.g., <br> chips, baked goods, candy) and sugar-sweetened beverages (e.g., juice drinks) |
| $\square$ | $\square$ | School avoided bake sales or when they had one, there is a conscious effort to <br> limit (number of options and/or portion sizes) processed packaged foods (e.g., <br> chips, packaged cookies or muffins, candy) and sugar-sweetened beverages (e.g., <br> juice drinks) and promote homemade baked good, particularly those that are <br> healthier and/or include F\&Vs in the recipe (e.g., carrot cake, apple bread) <br> and/or have F\&Vs as an option |
| $\square$ | $\square$ | School avoided selling unhealthy food for fundraising and/or had fundraisers <br> with healthy items (e.g., oranges, seed packets, healthy recipe cookbooks) |
| $\square$ | $\square$ | There were no vending machines or there is a conscious effort to have healthier <br> options in the vending machines |
| $\square$ | $\square$ | None of these were done |
| $\square$ |  |  |

Confidence in responses: S J O O very confident
O O confident
O $O$ somewhat confident
O O not so confident
How did you obtain these answers?

## 360 Food in Schools Index - Draft for Review and Pilot Test, June 32015

Q. Did the school administration, teachers, staff, and parents embrace food, nutrition, gardening and wellness activities?

| September <br> (previous <br> school year) | June <br> (ccurrent <br> school year) | Check ALL that were regularly done at the school: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | Administration encouraged and provided teachers with professional <br> development and time to plan for food and nutrition education, gardening <br> activities and developing connections between core curriculum and nutrition <br> education and garden lessons |
| $\square$ | $\square$ | Administration provided support (e.g., additional pay, class release time) for <br> teachers who were enthusiastic about food and nutrition education/gardening/ <br> healthy school meals to mentor and support teachers who are not yet involved |
| $\square$ | $\square$ | At least two teachers were champions for healthy food, nutrition and gardening |
| $\square$ | $\square$ | School staff (e.g., school nurse, office staff security guards, custodians) supported <br> and talked about food, nutrition, gardening program with students, parents, <br> school visitors, etc |
| $\square$ | $\square$ | Parents supported (e.g., financially if the Parent Teacher Association raises funds <br> and/or volunteering time) food, nutrition and gardening activities |
| $\square$ | $\square$ | None of these were regularly done |
| $\square$ |  |  |

Confidence in responses:

S J
O $O$ very confident
O O confident
O $O$ somewhat confident
O O not so confident
How did you obtain these answers?

## 360 Food in Schools Index - Draft for Review and Pilot Test, June 32015

R. Did the school have a culture of respect and care for food and healthy eating?

| September (previous school year) | June <br> (current school year) | Check ALL that were true at the school: |
| :---: | :---: | :---: |
|  | $\square$ | School meals were seen as a respected and integrated part of the school day (e.g., teachers and administrators are present at least sometimes during school meals and/or eat with students, and there were the same student expectations of behavior and style of discipline used during school meals as other times of day) |
|  | $\square$ | Student groups were involved in developing creative and descriptive names for school meal menu items and/or creating F\&V artwork or signage for the cafeteria or other areas in the school |
|  | $\square$ | Older students served as mentors or role models to encourage younger students to eat F\&Vs (e.g., helping with salad bar in cafeteria, teaching lessons in the classroom) |
| $\square$ | $\square$ | Students, teachers, and/or administrators announced (e.g., over loudspeaker or as students line up to get lunch) what was being served for lunch and encouraged students to eat F\&Vs |
| $\square$ | $\square$ | Local celebrities (e.g., politicians, sports heroes, media personalities) dined (at least once) with students in the cafeteria and encouraged them to eat $\mathrm{F} \& \mathrm{~V}$ |
| $\square$ | $\square$ | None of these were done in the school over the past year |

Confidence in responses:
s J
O O very confident
$\bigcirc$ confident
O O somewhat confident
O O not so confident
How did you obtain these answers?

## 360 Food in Schools Index - Draft for Review and Pilot Test, June 32015

S. Were there opportunities for family involvement and education about food?

| September (previous school year) | June (current school year) | Check ALL that were done at the school: |
| :---: | :---: | :---: |
|  | $\square$ | Helped families access healthy foods (e.g., told them where they can sign up for Supplemental Nutrition Assistance Program (SNAP) or about food pantries or other programs in their community, reminded them about farmers' markets and community supported agriculture (CSAs) - especially those that take SNAP) |
|  | $\square$ | Provided at least two workshops or events for families that focused on eating more F\&Vs (e.g., cooking, gardening, eating on a budget, healthy eating, sharing foods from families' cultural backgrounds) to families |
| $\square$ |  | There was a farmers market and/or CSA pick up at or very close to the school AND families were encouraged to shop at the farmers market and/or join the CSA |
| $\square$ | $\square$ | At least three newsletters were sent home to families that had motivational and inspirational messages about eating $\mathrm{F} \& \mathrm{Vs}$, simple $\mathrm{F} \& \mathrm{~V}$ recipes, and/or shopping tips etc |
| $\square$ | $\square$ | Parents or other adult family members volunteered in the cafeteria and helped students during meals (e.g., helped them take salad bar and encourage them to eat $\mathrm{F} \& \mathrm{Vs}$ ) |
| $\square$ | $\square$ | None of these were regularly done |

Confidence in responses:
S J
O $O$ very confident
O O confident
O $O$ somewhat confident
O O not so confident
How did you obtain these answers?

## 360 Food in Schools Index - Draft for Review and Pilot Test, June 32015

T. Was a "Farm to school" philosophy integrated into the school culture?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Check ALL that were regularly done at the school: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | Opportunities for students ( $\sim 25 \%$ of students or more) to meet local farmers <br> (e.g., local farmers visiting schools, exchanging letters with local farmers) |
| $\square$ | $\square$ | Fieldtrips for at least several classes (~25\% of students or more) related to <br> learning about food and the food system (e.g., farm or community gardens, <br> farmers' markets, local food processors, restaurants that use local foods) |
| $\square$ | $\square$ | School events (either food related or other such students reading poetry, singing, <br> or displaying art) took place in school garden or close-by community gardens or <br> farms |
| $\square$ | $\square$ | Educational opportunities (e.g., lessons, posters, newsletters) highlighting what is <br> locally were available to students and families (e.g., Harvest of the Month) |
| $\square$ | The school composted food waste, recycled, and tried to reduce overeall waste. <br> Students (e.g., "green team") were actively involved in these conducting these <br> efforts and/or educating others (e.g., posters, announcement, workshops) about <br> these efforts |  |
| $\square$ | $\square$ | None of these were regularly done at the school |
| $\square$ | $\square$ |  |

## Confidence in responses:

S J
O O very confident
○ O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?

## Scoring

Below shows how the questions are scored. All questions can receive $0-5$ points.

## Questions:

A, B, C, F, G, H, I, \& N
(choose ONE answer)
First option: 0 points
Second option: 1 point
Third option: 2 points
Fourth option: 3 points
Fifth option: 4 points
Sixth Option: 5 points

## Questions: <br> D, K, M, O, P, Q, R, S, \& T

(ALL that apply with 5 options + "none")
1 point for each item checked for up to 5 points (if the last item "none" is checked 0 points received for this question).

## Questions:

E, J, \& L

## (ALL that apply with 10

 options + "none")Checking "none" (last option) or 1 $=0$ points
Checking 2 or $3=1$ point
Checking 4 or $5=2$ points
Checking 6 or $7=3$ points
Checking 8 or $9=4$ points
Checking all $10=5$ points

# Appendix D - Feedback on Healthy School Progress Report Version 2 

Board Call Notes, 6/9/15
FC Board Members: Jenny Shilling Stein, Jill Cohen
Curt, Eva, Alexa, Claire, Raynika

- Initial responses to the draft tool:
- Jenny and Jill were curious to learn about changes made since the board meeting
- Weighting variables differently: how to best communicate that just because each piece gets a check mark, getting teachers on board with taste testing is not equal to incorporating food from local farms in the cafeteria. How do we communicate to service members which of the many, many items on the list are actually "must haves," if some are more of "nice to haves." E.g., without $X$, don't even bother focusing on $Y$.
- Curt: How to set this up as a work planning tool so that service members and site partners can plan for the service year?
- Claire: Matching contextual information at a site with research; recommending resources for incoming service members
- Eva: Service members will be provided with a guide to help school teams identify the most appropriate action steps given interest and resources. The longer-term goal will be to match each indicator on the Progress Report with implementation resources on the Toolshed.
- Interested in a Toolshed tour
- Excited about the timeline moving forward

Funder Call Notes, 6/11/15

- Attending (might be missing a few): Kathleen (Orfalea), Whole Kids Fdn, Honest Company, Kelly Brownell, Lindsey Shae, Sterling Speirn, Carolyn Sitcher, Tory Deitel Hopps, Kelly Newman's Own, Lukas Weinstein, Marland Buckner, Cathy Frankel, Mailee Walker, Anne Maura, Carol Pickering, Edgar Cullman, Elizabeth, Erin Eisenberg, Deborah Kane, Aaron Woolf, Jan Cohen, Carol May (Walmart), Ariane Bertrand, Paul Matteucci, Stacey Faella, Natalie McKinney (Kōkua Hawai $\square \mathrm{i}$ Foundation), Pamela Hung


## Feedback:

- Paul Matteucci: Eva motivated the report by a short verbal explanation of why FC thinks more F\&V consumption is important. It's important to state the value structure up front. Towards the end, you imply a value that you haven't stated previously (local food production), but this wasn't motivated internally. Would like to see why this is an important attribute spelled out.
- Stacey Faella, Woodcock: Impressed with the high level of details and the metrics. Questions about reliability and SM data-recording - how to handle training for users of the tool? (Eva responded about reporting training around the tool at Orientation; important to engage a group of users to respond to the tool for more holistic, accurate reporting). Question about confidence - will FC be using this to reform the tool or for something else? (Eva: for refining the tool and refining our support for SMs to do the community building in the school to bring stakeholders on for observation)
- Deborah Kane: Will be sending follow up feedback!
- Kelly G., Newman's Own: Curious about the timeline for rolling the tool out and synthesizing the information. (Eva: training at August Orientation, using the tool throughout the school year (pre/post assessment), TC will synthesize around the end of Dec 2016). Loves the 20 indicators - doesn't make things overly complicated. Curious about comparing results with Wellness in the Schools Teacher's College? (Claire: Won't be using the exact tool with WITS, but one of the process evals that they're doing will be observing a lot of these indicators in the cafeterias and including the info in the eval for WITS and ESYNYC). Kelly would like to follow up with Claire about this.
- Lukas Weinstein, NY Center for Community Schools: Is there a cover sheet that goes along with this that tackles demographics? How will this inform program changes for all of our schools and also site by site? Is there another tool that helps take these indicators to the next stage of development in each


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

individual levels? (Eva: Use DoE data for school demographics. We'll be able to use this to understand sticking points with FC programming or with partnerships or trainings that we need to be able to provide. Site level partners will be able to see how they can focus their energy in the coming years).

- Ariane, Emerson Collective: Is there any desire in understanding what happens throughout a school year? Drop off of classes being held, fluctuations in the school year? Clarification about the policy statement at the end of the lit review. (Eva: Can update the weekly reports.
- Tory Deitel Hopps: Curious about pre- and post- absentee issues in terms of impact on schools with FC's programming? Any assessment done about pre- and post- family F\&V consumption? (Eva: Don't currently collect absentee data across the board, but it's something we aspire to. Hoping to pilot test those types of evaluations with some of our sites. Curt: school stakeholder survey told us that they noticed higher attendance rates on FC garden and teaching days, so there might be something there)
- Kelly Brownell: Progress report mentions that the report is evidence based, but was wondering if there could be a place where the document leads people to the evidence. Tool provides a blueprint for how FC can move ahead in the schools, but is there anything about how to weight these indicators for SMs? In the tool they look equally weighted. (Curt: challenges with weighting, recognizing that this tool needs to function as a communications tool, we're continuing to work through this. Eva: From a programmatic perspective, when it comes to where to dig in first, it's something we're thinking about a lot in terms of how we know a school is ready to partner with us)
- Natalie McKinney: NFSN Evaluation for Transformation. Do you all see this evaluation tool as having legs beyond FC eventually? (Eva: Love the Eval for Transformation framework. See ourselves as having the responsibility to contribute back).
- Lindsey Shae, Woodcock: How do you gauge that a school is ready for FoodCorps...is there a way to speak to the metrics of where it doesn't work? (Curt: We do see discrepancies with how some schools are advancing at a rapid pace and how others aren't, so we see an opportunity to address the underlying causes that are holding sites back from making progress at an appropriate pace).
- Carol May, Walmart Fdn: This looks like a hand scored type of tool. Will this be on a computer platform once it's in practice? (Curt: This is a prototype, there may be an intermediate form before we move it to a fully computer-based format).

2015/6/9 Call with RWJF Notes: Curt and Kishshana spoke with Jasmine for 45 mins about the draft Healthy Schools Progress Report

- Jasmine shared her enthusiastic support and helpful feedback on the draft Healthy Schools Progress Report.
- Jasmine was very excited to see the culture of health framing we brought to the tool and was excited about it as a goal-setting and visioning tool as well an impact tracking one.
- She suggested we connected with Alliance for a Healthier Generation to discuss how best to convince school administrators to work with us on filling out the tool.
- She shared a modest concern around whether we had put enough thought into how results from this tool would translate into a compelling and punchy story of impact (it's a little qualitative)
- She hopes we will build a community of FC schools who can learn from each other with this tool as the central framework (sharing results from one school with another school so they can see a road map for how they got there)


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

## Review - Healthy School Progress Report <br> Host Site Supervisor and Fellow Office Hours Call \#1 <br> 6/18/15

Eva (FC), Ann and Marlie (IA), Ally (CA), Alex (MA), Maddie (DC), Emily and Erin (GA), Chelsey (CT), Pam and Raynika (TC)

## AGENDA

A. Brief review of how the tool works and walk-through of the two documents
B. Overall reactions to the content of the tool
C. Walk through each domain
a. What resonates the most?
b. Are there indicators that are missing, given your experience, perspective, or knowledge of promising practices?
c. What feedback would you share with the evaluation team?

## COMMENTS

## Marlie

- Appreciate the level of depth and detail of the scoring options for each indicator
- Excited that the checkbox options provide varying combinations of activities
- Wanted to see more context -- glad to hear that there will be more context added to it. The instructions from the LA that talk about convening key stakeholders need to be in there, etc. Need the context and framework for the Progress Report will make or break it.
- Should we be supporting site supervisors in setting up those meetings NOW?

Ann

- This is great progress, exciting, good work.
- About how much time does this represent for site supervisors and service members to be up front and thoughtful about in terms of what is realistic?
- Pam will ask service members.
- At the beginning, it will take longer. Once you have the knowledge and relationship, it will likely be shorter at the end of the year.
- Take a deep look at how we are framing "farm to school" throughout the questions as well as more broadly and ensure that it parallels our use of the term and concept program-wide. Because "farm to school" isn't just one thing--not just local--relates to all of these items (garden-based education, culture, etc.)
Ally
- How will the data be made available from year to year.
- What about those service sites that bring schools to the organization itself. How will we provide that guidance to service members for whom it doesn't totally fit.
Chelsey
- Do service members fill this out online or on paper?


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

- Scoring: Is that something that service members should be doing? Have we thought about what the ideal score might be.
- Service member's in Pam's view would not be scoring; we are working on how we will provide back the scoring in a nice visual way to share back with the school
- Important to communicate to service members that XY number is not "failing." It will probably be virtually impossible to score 100 on it. We want it to be comprehensive. But we also don't want all schools to score between 70-90 on that, because we want to have enough range. Are the answer options too harsh or too easy?
Emily
- Policy questions $\rightarrow$ How will they be included?
- They will have response options, but just won't be included into the score. It's important to capture what's going on for context and analysis.
- $\mathrm{R} \rightarrow$ Service member this year struggled with severe discipline techniques used at the school, like lockdowns during lunch and using the cafeteria as part of a discipline technique (only allowed to sit on one side of the table).
- Pam: That would make it hard to do many of the other Culture and Access pieces of the tool. Add details about "what's going on in facilitating this work in the school that's being done and what's going on that's being a barrier to this work getting done?"
- Pam: For these yes/no questions, what if the school is "kind of" doing that? Or what if it's a really, really big "no"?
Marlie
- How to answer some of the nutrition or GBA questions where some classes do one practice, and the other classes don't do that practice. E.g., taught the 3rd graders 10 lessons and the 4th graders 1 lesson.
- Having the "on average" or "typically" questions about most lessons in the Knowledge and Engagement sections where it might be variable.

Alex

- What is intended by the "How did you obtain these answers" box? Is it the method of how you got the answer plus any other details that are important to capture programmatically. Those details are really important to capture. However, wouldn't want it to be redundant with the Site Guide.


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

Review - Healthy School Progress Report<br>Host Site Supervisor and Fellow Office Hours Call \#2<br>6/19/15

Eva and Ryan (FC), Nancy and Andrea (HI), Erica (DC), AI (MT), Caroline (NC), Pam and Raynika (TC)

## AGENDA

A. Brief review of how the tool works and walk-through of the two documents
B. Overall reactions to the content of the tool
C. Walk through each domain
a. What resonates the most?
b. Are there indicators that are missing, given your experience, perspective, or knowledge of promising practices?
c. What feedback would you share with the evaluation team?

## COMMENTS

AI

- Is the intent to be having it used by outgoing FCSMs currently?
- Nol Starting in the fall
- What might be helpful is adding under each section -- a brief "comments" section -- so that if a section is left blank or incomplete to be able to say why they don't have much confidence in the data/why it wasn't observed. Brief backstory that's germane to the answer selection.
- How did you obtain these answers $\square$ Will there be a "key" with short choices (by direct observation, by XYZ, etc.)
- There will be instances where Harvest of the Month is not focused on fruits and vegetables. Lentils, small grains, beef, commodities that can be obtained locally in Montana. Should at least have the opportunities in the comments field to indicate that it was non-fruit/vegetable.
- Really good job of stripping out the "eye of the beholder" $\square$ being very specific given the checkboxes.
- Cafeteria noise levell subjective; how quiet can they ever get? Would be hard to rate.
- Extremely well done. Applauds the tool.


## Erica

- Cafeteria set-up and ownership and ability to make changes can be very sensitive when there is a specific, external food service management company that has a very specific role.
- Is there a way to indicate which items are appropriate to focus their energy on, a way to help them prioritize, or know where certain items are just too challenging?


## Caroline

- Excited about taking this as part of the process that helps the school and community to clarify their goals and actions for the year


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

- Pamb Any ideas for language that makes it clear that this is a snapshot of where the school is at vs. being "you are supposed to do all of this immediately"
- She feels that it is important to do this up front even if it is hard to make it happen.
- Interested in the process of how we combine these evaluation techniques with the service plan.
- Crating service around the school conversation ("with community") is critical given our mission statement, need to get that input from the school. In her first year, she basically made up her own service plan, which isn't the best way of going about it.


## Erica

- See it as a way for a host site to have a discussion with the school about whether they are ready for FoodCorps, and as a way to talk about how they plan on transitioning out of FoodCorps
- Might want to reiterate that you probably will/should be scoring medium-low on this, or you don't have progress to be made or need the program
- Pam: could this translate into a shorter "Is your school ready to take on FoodCorps" questionnaire.


## Nancy

- Fabulous opportunity for the service members to begin to learn how to engage stakeholders and create policy. But facilitation is an interesting art and a big responsibility. What does FoodCorps plan to do as far as training the service members in August.
- It might be very important to include this topic--about facilitating conversations--into the state orientation, and talking about the specific local needs and community ways of being in doing work like this.


## Andrea

- It is important that we train and prepare service site supervisors to have this conversation, and ensure that it's a community-based response on this Progress Report.
- Wondered when service members will need to submit? October 30.
- Eva reiterated that we will be communicating these new updates directly to service site supervisors.
- It could be interesting to have something like this on a state level -- to talk to the host site team in a new state (like New York) to ask the state-level policy questions, etc., to hear how the statewide landscape is changing. (Wonder if NFSN is doing anything along these lines?)


## WRITTEN COMMENTS SHARED VIA EMAIL

From Ally

- (p. 2) Under Key Terms > nutrition education: It states "hands-on and minds-on experiences." I have not heard the term "minds-on" before, and think that it would be great to clarify what this implies.


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

- Under Pilot-testing Progress Report by current service members > diagram: It states "(pervious experience)" instead of previous.
- Also, will SMs and SSs have access to the previous "landscape assessments?" I think it's confusing to say September of the previous year (2013-2014) and then June of this current school year (2014-2015) -- this information seems confusing.

From Ann (who was on call \#1):

Just to give you the detail that you requested regarding my comment on Farm to School. There were a couple of places in the Indicators document that I was concerned might somewhat misrepresent Farm to School:

- Under Access, Indicator N, the way F2S is referenced focuses primarily on Local/Procurement. Although I like the note that is added about farm to school can be used to build $\mathrm{F} \& V$ preferences and enhance motivation.
- Under Culture, T, when it says that F2S studies have been limited in peer reviewed research. I think it is primarily referring to Local/Procurement again, since in the same document it cites research related to the Knowledge pillar (under A, B, C and D that mentions that food systems knowledge has been found to have benefits) and the Engagement pillar (under F, G, $\mathrm{I}, \mathrm{J})$. As you agreed, these are also elements of Farm to School programs.

I have one other comment:

- In terms of context, you probably already plan to include language about this in the introductory material, but just in case: I think important to include a statement about how this information will be used or made available. I assume that an individual school's report and "score" will be kept confidential to the school and local FoodCorps, and that otherwise, information will only be shared cumulatively, by state or nationally? I imagine many school administrators would want to know before they could participate fully. I think about this because someone recently, for a grant report, suggested that I report the results of our service sites' neophobia surveys. I wasn't sure how that information is available to report publicly or if it will be available, on what scale.


## Appendix D - Feedback on Healthy School Progress Report Version 2 (continued)

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# JUNE 26 2015: DRAFT 2 EDITED FROM COMMENTS <br> <br> FOR PILOT TEST BY PY2015 SERVICE MEMBERS <br> <br> FOR PILOT TEST BY PY2015 SERVICE MEMBERS PLEASE DO NOT DISTRIBUTE <br> Produced for FoodCorps by Laurie M. Tisch Center for Food, Education \& Policy Teachers College Columbia University 

# FoodCorps Healthy School Progress Report 

## Overview

FoodCorps serves to connect kids to healthy food in schools and promote healthy eating behaviors. The FoodCorps Healthy School Progress Report (Progress Report) is a tool that can be used to help service members plan for and track what changes are happening across schools and what FoodCorps program components contribute the most to healthy eating behaviors, in particular, fruit and vegetable consumption. Because the various components of the Progress Report are evidence-based, we believe that if a school increases their score on Progress Report by making a conscious effort to add food-based educational activities, experiences, and practices, students will eat more fruits and vegetables. This hypothesis will be tested in an upcoming evaluation that will look at the association between Progress Report scores and students' fruit and vegetable consumption at school lunch.
Progress Report assesses four domains. Three of the domains are the FoodCorps pillars (knowledge, engagement, access). Knowledge (nutrition education) questions ask whether there are lessons for students to learn about food, nutrition, and cooking and, if so, if the lessons are grounded in theory. Engagement (school gardens) questions ask about students' experiences in school gardens. Access (school meals) questions ask if healthy, local foods are served at school lunch and if the cafeteria designed to promote increased fruit and vegetable consumption. A fourth domain has been added, Culture (healthy school food environment), which intersects the other domains and includes questions that capture if the school environment is supportive of wellness.
In addition to the questions in the four domains, there are questions on policy and process that capture policies on the state, district, and school level. These questions are not factored into the schools' score (see below) but are used to provide context and inform the interpretation of the Progress Report score.


FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015

## Background on Development of the Progress Report

The Progress Report is a revision to FoodCorps' "Landscape Assessment Tool." The questions have been revised to assess strategies and activities that can be implemented in schools that, to date, have evidence to promote increased fruit and vegetable consumption (see Appendix A). The questions have also been revised to better ground the Progress Report in theory. For example, questions related to educational activities, particularly in domains of knowledge and engagement, are based on psychosocial theory-based indicators that have been found to increase fruit and vegetable consumption.
The focus of this Progress Report is on FoodCorps activities that promote fruit and vegetable consumption. Future versions of the Progress Report can be adapted to assess, plan for and evalaute for other FoodCorps related outcomes.

## Why Fruits and Vegetables?

According to the 2010 Dietary Guidelines for Americans, children between the ages of $5-18$ should get $21 / 2$ to $61 / 2$ cups of fruits and vegetables each day (depending on age, gender, and activity level) for general good health and to reduce the risk of obesity and other chronic diseases. National surveys indicate that children of all ages are not meeting these recommendations. Thus, increasing fruits and vegetables are an important behavior to target for school-based interventions that want to move children toward overall healthier diets. Promoting a diet high in fruits and vegetables is also an important behavior to target for school-based interventions that want to teach children about eating in a more just and sustainable way.

## Scoring

The Progress Report is scored on a $0-100$ scale. For each of the four domains there are five indicators, with one question per indicator ( 20 total questions). For each indicator a school can score a minimum of 0 (suggesting they are not yet conducting activities related to this indicator) to a maximum of 5 (suggesting they are conducting extensive activities related to this indicator). See page 19 for a detailed explanation of how individual questions are scored.

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## Key terms

The following provides definitions to operationalize some of the terms used in the Progress Report.

- nutrition education: Nutrition education provides experiences that empower people to understand and navigate the food system and advocate for change on a personal and policy level. It provides hands-on and minds-on (meaning activities that have students critical think about, analyze or synthesize what is being covered) experiences that are culturally responsive and investigates issues related to food system sustainability and social justice. It includes experiences gardening (for this tool garden-based activities are so important they are pulled out and represented in the engagement domain), cooking, eating, and critically analyzing food system issues. It is directed at specific behaviors (such as eating more fruits and vegetables). Finally, it is grounded in theory from the fields of psychology and social sciences to include activities to motivate and inspire change, appropriately teach how-to skills, and create a supportive environment.
- garden-based activities: Garden-based activities (GBAs) include everything related to growing food, from planting seeds to harvesting. In the school context, garden-based activities should be connected to the curriculum to help teachers meet educational standards and students feel like gardening is interwoven into the school experience.
- meal line: The meal line is the line where students get school meals. This can include food that is part of the United States Department of Agriculture (USDA) reimbursable school meals program, as well as foods that are offered a la carte to students.
- salad bar: Salad bar is a specific addition to the meal line where vegetables (and maybe some fruits) are served in addition to the reimbursable school meal.
- culture of health: A culture of health in specifically in relation to a "healthy school food environment" for this survey is a total school environment encompassing everything from the classroom to school events to school meals where healthy choices are easy, accessible, celebrated, respected, and most importantly normative.


## Instructions for Completion of Pilot Test 2015

Congratulations! You are among the first FoodCorps service members to pilot this new Progress Report. The answers and the feedback you provide will be invaluable for revising the Progress Report for implementation by all FoodCorps service members in PY2016.
A focus of the pilot is to see the range of scores to be expected from the Progress Report based on the breath of activities conducted at different FoodCorps schools. If there are activities that you engage in that you do not feel are reflected in the questions, please use the "other" and "comment" sections to describe what you do.
Please track how much time this takes you to complete the Progress Report. This estimate should include the time you might spend talking to others in order to answer the Progress Report accurately.

FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Instructions for Completion of Pilot Test 2015 (continued)
We would like to learn about how much is a reasonable amount a school could improve in one year on this Progress Report. Since we have no pre data we would like for you to complete the report for BOTH now (June 2015) as well as to reflect BACK to assess where their school(s) was at the beginning in September 2014. This is called "retrospective" data collection. For each question there is a column for September and June. Note: it may be easier to first complete the June column to assess what occurred during this school year and then reflect back to September to assess what occurred during 2013-14.


## Types of Questions

There are two types of questions on the Progress Report. Some questions can only have a single answer. Others questions can have more than one answer, "check all that apply" type questions.


Remember: It is highly unlikely for any school to be doing all the activities or practices asked about on the Progress Report.

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FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Instructions for Completion of Pilot Test 2015 (continued)
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FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Instructions for Completion of Pilot Test 2015 (continued)

## Rating confidence in answers

We all realize that it is very challenging to capture the kinds of activities and practices around food that a school does. For each question, please choose the answer or answers that you believe to be true for your school(s). Then on the right side of each question is a box to rate how confident you are with your answer.
Please note: we have placed this "confidence in responses" in for this pilot test and are trying to determine if this will be in the tool that will be used for PY2016. If you have any thoughts about having this question, please share.

## Confidence in Responses



Use this scale to choose your response for each column:

- very confident: talked to everyone involved in this activity or practice and feel completely sure this answer is accurate
- confident: talked to most key people involved in this activity or practice and feel sure this answer is accurate
- somewhat confident: talked to one or two people involved in this activity or practice and only somewhat sure this answer is accurate
- not so confident: was not able to talk to any key people who would know this information, my answer is my best educated guess


## Information sources

Finally for each question, we would like to know the sources you used to obtain your answers. This will help us interpret your answers and also help to inform us on what other groups who might work with the schools around nutrition education, gardening, or school food who were involved in accurately completing the Progress Report.


Think about what you did to obtain the answers for both September and June and check all that apply. Also write in another other sources you used to get this information.

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## Domain 1: Knowledge (nutrition education)

There are many factors that make nutrition education more likely to be effective at changing behavior. The first is that the education has to be targeted to the behavior the educator wants to change, which for FoodCorps is to eat more fruits and vegetables. Second the education has to be of adequate intensity (number of
sessions) and duration (amount of time, e.g., 4 months that the sessions are spread over). Third, there is strong evidence that nutrition education needs to contain three components to be effective: a) increase students' personal desire to want to do the targeted behavior (e.g., opportunities to taste and eat healthy
foods have been shown to increase desire to eat them); b) teach knowledge and skills that will help students be able to do the targeted behavior; and c) create an environment that is supportive of the targeted behavior (this is covered in the Access and Culture domains).
A. What percentage of students received any nutrition education lessons ${ }^{\text {a }}$ focused ${ }^{b}$ on fruits and vegetables ( $\mathrm{F} \& \mathrm{~V}$ s)?

| September (previous school year) | June (current school year) | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No one received nutrition education focused on F\&Vs |
| $\bigcirc$ | $\bigcirc$ | One or two classes or a small group of students had nutrition education focused on F\&Vs ( $\sim^{\mathrm{c}} 5-10 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | Several classes or small groups of students had nutrition education focused on F\&Vs ( $\sim 25 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | About half the classes had nutrition education focused on F\&Vs ( $\sim 50 \%$ ) |
| $\bigcirc$ | $\bigcirc$ | About three-quarters of the classes had nutrition education focused on $\mathrm{F} \& \mathrm{~V}$ (~75\%) |
| $\bigcirc$ | $\bigcirc$ | All classes had nutrition education focused on F\&Vs ( $\sim 100 \%$ ) |

## Confidence in responses:

$\stackrel{5}{5}$
O O very confident
O O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?

- conducted this education myself
directly observed others doing this education
- talked to one or more teachers
] surveyed all teachers
reviewed curriculum/ lesson plans used
] other:

[^4]FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 1: Knowledge (continued)

| B. Among classes that received nutrition education (Question A), how many lessons on average ${ }^{d}$ focused on $F \& V$ s? |  |  | Confidence in responses: $\begin{array}{ll} \text { s } \\ \text { O } & \text { ory } \\ \text { very confident } \end{array}$ |
| :---: | :---: | :---: | :---: |
| September (previous school year) | $\begin{gathered} \text { June } \\ \text { churent } \\ \text { school year) } \end{gathered}$ | Choose ONE answer per column: | O O somewhat confident <br> O O not so confident |
| $\bigcirc$ | $\bigcirc$ | None focused on F \& V s (or no one received nutrition education focused on $\mathrm{F} \& \mathrm{~V}$ s) | How did you obtain these answers? |
| $\bigcirc$ | $\bigcirc$ | One or two lessons focused on F\&Vs | - conducted this education |
| $\bigcirc$ | $\bigcirc$ | Three or four lessons focused on $\mathrm{F} \& \mathrm{~V}$ s | - directly observed others |
| $\bigcirc$ | $\bigcirc$ | Five or six lessons focused on F\&Vs | - talked to one or more |
| $\bigcirc$ | $\bigcirc$ | Seven to nine lessons focused on $\mathrm{F} \& \mathrm{~V}$ s | teachers <br> $\square$ surveyed all teachers |
| $\bigcirc$ | $\bigcirc$ | Ten or more lessons focused on F\&Vs | - reviewed curriculum/ <br> lesson plans used <br> [ other: |

## C. Among the classes that received nutrition education (Question

 A) how many lessons on average ${ }^{\text {d }}$ included tasting or eatingF\&Vs? (note: opportunities for tasting or eating foods grown in the garden and foods served at school lunch will be asked separately in later questions, this question relates to tastings in the classroom)

| September (previous school year) | June (current school year) | Choose ONE answer per column: |  |
| :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No lessons had tastings | How did you obtain these answers? <br> - conducted this education myself <br> - directly observed others doing this education <br> - talked to one or more teachers <br> $\square$ surveyed all teachers <br> [ reviewed curriculum/ lesson plans used <br> $\square$ other: |
| $\bigcirc$ |  | One or two lessons had tastings |  |
| $\bigcirc$ | $\bigcirc$ | Three or four lessons had tastings |  |
| $\bigcirc$ | $\bigcirc$ | Five or six lessons had tastings |  |
| $\bigcirc$ | $\bigcirc$ | Seven to nine lessons had tastings |  |
| $\bigcirc$ | $\bigcirc$ | Ten or more lessons had tastings |  |

[^5]FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 1: Knowledge (continued)

## D. Among the classes that received nutrition education (Question A) did lessons include activities specifically geared toward getting students excited and motivated to eat $\mathrm{F} \& \mathrm{~V}$ s?

| September (previous school year) | June <br> (current school year) | Students had activities that: (check ALL that apply): |
| :---: | :---: | :---: |
| $\square$ | $\square$ | Increased perceptions that eating $\mathrm{F} \& \mathrm{~V}$ s is socially desirable (e.g., students shared their favorite F\&Vs and talked about times they eat them) |
| $\square$ | $\square$ | Taught health benefits of eating F\&Vs (e.g., learned health benefits of different colored F\&Vs, such as blue is good for the brain and red for the heart, or teaching about "eat the rainbow") |
|  | $\square$ | Discussed that eating a larger portion of $\mathrm{F} \& \mathrm{Vs}$, instead of meat and other foods from animals, or processed foods, creates a healthier planet |
| $\square$ | $\square$ | Discussed strategies for decreasing barriers/fears of trying new F\&Vs (e.g., told stories about people who started liking foods they did not like in the past) |
| $\square$ | $\square$ | Included cooking ${ }^{\mathrm{e}}$ and eating F\&Vs as a group |
| $\square$ | $\square$ | Other: |
| $\square$ | $\square$ | None, lessons did not include any of these activities |

## Confidence in responses:

s J
O O very confident
O O confident
O O somewhat confident
O O not so confident

How did you obtain these answers?
conducted this education myself
] directly observed others doing this education

- talked to one or more teachers
- surveyed all teachers
- reviewed curriculum/ lesson plans used
- other:
e "Cooking" means that the students did something to prepare food such as chopping, mixing, adding ingredients, etc, as opposed to tasting where the students eat pre-prepared food.

FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 1: Knowledge (continued)

## E. Among the classes that received nutrition education (Question A) did students learn specific knowledge and skills for eating F\&Vs?

| September <br> (previous <br> school year) | June (current school year) | Students have: <br> (check ALL that apply): | $\bigcirc$ O not so confident |
| :---: | :---: | :---: | :---: |
| $\square$ | $\square$ | Learned about MyPlate's recommendation to make half their plate F\&Vs at every meal | How did you obtain these answers?conducted this education myselfdirectly observed others doing this educationtalked to one or more teacherssurveyed all teachersreviewed curriculum/ lesson plans usedother: |
| $\square$ | $\square$ | Learned about proper serving sizes for F\&Vs |  |
| $\square$ | $\square$ | Learned practical skills for how to eat more F\&Vs in school meals (e.g., how to make a colorful salad at the salad bar, where the fruit is placed in the lunch line) |  |
| $\square$ | $\square$ | Compared the nutritional value (e.g., vitamins and minerals) in snack foods (e.g. chips, candy) to the nutritional value specific F\&Vs (e.g., apple, carrots) |  |
| $\square$ | $\square$ | Set personal goals for increasing their consumption of F\&Vs |  |
| $\square$ | $\square$ | Monitored progress toward their goals for eating more F\&Vs |  |
| $\square$ | $\square$ | Learned basic cooking skills such as chopping, measuring ingredients, stirring |  |
| $\square$ | $\square$ | Cooked simple recipes with fruits and vegetables that they will see on the school lunch menu (identical recipes to the school lunch menu, if possible) |  |
| $\square$ | $\square$ | Cooked simple recipes (e.g., dips for vegetables and smoothies) that they could prepare at home with their family |  |
| $\square$ | $\square$ | Been asked to make a public commitment (e.g., raise their hand, sign a form or place a sticker on poster) to eat more F\&Vs either at school lunch or at home with their families |  |
| $\square$ | $\square$ | Other: |  |
| $\square$ | $\square$ | None (students did not do any of these) |  |

## Confidence in responses:

S J
$\bigcirc$ very confident
$\bigcirc$ ○ confident
$\bigcirc$ somewhat confident
$\bigcirc$ not so confident

How did you obtain these answers?

- conducted this education myself
directly observed others doing this education talked to one or more teachers
- surveyed all teachers lesson plans used other:

FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 1: Knowledge (continued)

Questions A-E Comments: Use this page to comment and elaborate on your answers. This may include questions you had difficulty answering and why (e.g., Question B might be difficult to answerif there is wide fluctuation. Or other details about activities that you feel are important but were not captured in these questions. Also include details such as: which grades you worked with, lessons about food and nutrition teachers did on their own, specific curriculum used, etc.

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## Domain 2: Engagement (school gardens)

When students spend adequate time engaged in garden-based activities, they are more likely to eat F\&Vs. Similar to nutrition education (Domain 1) there needs to be adequate intensity (number of sessions) and duration (amount of time, e.g., 4 months that the sessions are spread
over) of garden-based activities and they need to be done in ways that increase desire to eat $\mathrm{F} \& \mathrm{~V}$ s and teach appropriate knowledge and skills. Additionally, when garden education is part of core subjects, students see these connections and are
more likely to make the desired change. School administrators and teachers more fully embrace garden-based activities when they are tied to core subjects and this also helps students to change behavior.

## F. What percentage of students participated ${ }^{\ddagger}$ in any garden-based activities (GBAs) ${ }^{9}$ ?

| September (previous school year) |  | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No one did GBAs |
| $\bigcirc$ | $\bigcirc$ | One or two classes or one or a few small groups of students had GBAs (~5-10\% of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | Several classes or groups of students had GBAs ( $\sim 25 \%$ of all students in the school) |
| $\bigcirc$ | $\bigcirc$ | About half the classes had GBAs ( $\sim 50 \%$ ) |
| $\bigcirc$ | $\bigcirc$ | About three-quarters of the classes had GBAs ( $\sim 75 \%$ ) |
| $\bigcirc$ | $\bigcirc$ | All classes had GBAs ( $\sim 100 \%$ ) |

Confidence in responses:
s J
O O very confident
O O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?
conducted GBAs myself

- directly observed others who conducted GBAs
- talked to one or more teachers
- surveyed all teachers
- reviewed curriculum/ lesson plans used for GBAs
$\square$ other:
f "Participated" here can range from one 15 minute experience to weekly lessons throughout the school year.
${ }^{g}$ GBAs include anything related to growing food whether starting seeds in the classroom or working in a garden).

FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Domain 2: Engagement (continued)

## G. Among the classes that participated in GBAs (Question F) how many lessons ${ }^{\mathrm{h}}$ on average ${ }^{i}$ did they have?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Choose ONE answer per column: |
| :---: | :---: | :--- |
| 0 | O | None |
| O | O | One or two lessons with GBAs |
| O | O | Three or four lessons with GBAs |
| O | $\bigcirc$ | Five or six lessons with GBAs |
| O | O | Seven to nine lessons with GBAs |
|  | $\bigcirc$ | Ten or more lessons with GBAs |

[^6]FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Domain 2: Engagement (continued)

## H. Among the classes that participated in GBAs (Question F) how many lessons included tasting F\&Vs?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\bigcirc$ | $\bigcirc$ | No lessons had tastings |
| $\bigcirc$ | $\bigcirc$ | One or two lessons had tastings |
| $\bigcirc$ | $\bigcirc$ | Three or four lessons had tastings |
|  | $\bigcirc$ | Five or six lessons had tastings |
|  |  | Seven to nine lessons had tastings |
|  |  | Ten or more lessons had tastings |

Confidence in responses:
s J
O $O$ very confident
O O confident
○ $O$ somewhat confident
O O not so confident
How did you obtain these answers?

- conducted GBAs myself
directly observed others who conducted GBAs
- talked to one or more teachers
d surveyed all teachers
- reviewed curriculum/ lesson plans used for GBAs ] other:
I. Among classes that participated in GBAs (Question F), were the GBAs connected to the curriculumi?

| September (previous school year) | June (current school year) | Choose ONE answer per column: |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | No GBAs |
| $\bigcirc$ | $\bigcirc$ | GBAs not connected to curriculum (e.g., garden activities were stand alone with no real connections to any classroom lessons) |
| $\bigcirc$ | $\bigcirc$ | Actively working toward connecting GBAs to curriculum (but not connected now) |
| $\bigcirc$ | $0$ | GBAs connected to curriculum (but were not specifically designed to meet state or local educational standards) |
| $\bigcirc$ | $\bigcirc$ | GBAs connected to curriculum and were specifically designed to meet standards in one core subject (e.g., National Common Core Standards (English and math) Next Generation Science Standards, state level standards or local standards or "scope and sequence") |
| $\bigcirc$ | $0$ | GBAs connected to curriculum and were specifically designed to meet standards in more than one core subject (e.g., National Common Core Standards (English and math) Next Generation Science Standards, state standards, or local "scope and sequence") |

## Confidence in responses:

S J
O $\bigcirc$ very confident
$\bigcirc$ ○ confident
$\bigcirc$ ○ somewhat confident
$\bigcirc$ not so confident
How did you obtain these answers?
conducted GBAs myself
$\square$ directly observed others who conducted GBAs
$\square$ talked to one or more teachers
b surveyed all teachers
$\square$ reviewed curriculum/ lesson plans used for GBAs

- compared GBAs to standards and/or mapped GBAs onto standards
$\square$ other:

[^7]FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 2: Engagement (continued)

## J. Among the classes that participated in GBAs (Question F) did students learn knowledge and skills for eating F\&Vs?

| September (previous school year) |  | Students have: <br> (check ALL that apply): | O O somewhat confident <br> O O not so confident |
| :---: | :---: | :---: | :---: |
| $\square$ | $\square$ | Learned about health or environmental benefits of eating fruits and vegetables grown in the garden | How did you obtain these answers? <br> - conducted GBAs myself <br> d directly observed others who conducted GBAs <br> - talked to one or more teachers <br> ] surveyed all teachers <br> - reviewed curriculum/ lesson plans used for GBAs <br> d compared GBAs to standards and/or mapped GBAs onto standards <br> $\square$ other: |
| $\square$ | $\square$ | Discussed strategies for overcoming barriers/fears for trying new F\&Vs |  |
| $\square$ | $\square$ | Learned about MyPlate's recommendation to make half your plate F\&Vs every day |  |
| $\square$ | $\square$ | Learned about proper serving sizes for F\&Vs |  |
| $\square$ | $\square$ | Learned gardening skills (such as growing food in small pots) that students could do at home |  |
| $\square$ | $\square$ | Set personal goals for increasing their consumption of F\&Vs |  |
| $\square$ | $\square$ | Monitored progress toward their goals for eating more F\&Vs |  |
| $\square$ | $\square$ | Cooked simple recipes and ate what they prepared |  |
| $\square$ | $\square$ | Learned about various cultures that use different foods in the garden and how they use them |  |
| $\square$ | $\square$ | Made a public commitment (e.g., raised their hand, signed a form or placed a sticker on poster) to eat more F\&Vs either at school lunch or at home with their families |  |
| $\square$ | $\square$ | Other: |  |
| $\square$ | $\square$ | None, lessons did not include any of these activities |  |

FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 2: Engagement (continued)

Questions F-J Comments: Use this page to comment and elaborate on your answers. This may include questions you had difficulty answering and why. Discuss what part of the school year GBAs took place (e.g., fall / spring only or all year). If for Question G had wide fluctuation across grades, please explain. List specific curricula you used to teach GBAs. Also include other details about activities that you feel are important but were not captured in these questions etc.

## Domain 3: Access (school meals) ${ }^{k}$

School meals are the most consistent experience that students have with food in schools. Students learn a lot about eating, food, meal etiquette, and the value of health during school meals - whether this learning is intentionally planned or
not. Many practices can create a cafeteria atmosphere conducive to eating F\&Vs. Evidence shows that 1) having a meal line that is set up to make eating F\&Vs the easy and default option; 2) having a salad bar; 3) having opportunities for students to
taste F\&Vs served in school meals; 4) serving and promoting local/seasonal foods; and 5) having a cafeteria atmosphere conducive to eating can increase $F \& V$ consumption

## K. Was the meal line set up to promote consumption of fruits and vegetables?

| September <br> (previous <br> school year) |
| :--- |
| $\square$ |

Confidence in responses: s J
○ O very confident
O O confident
O O somewhat confident
O O not so confident
How did you obtain these answers?
. spent time in the cafeteria helping with school meals and observing

- talked to school food service staff
- talked to one or more teachers
- surveyed school food service staff
$\square$ other:
k Several of the indicators and answer options in "Domain 3: Access" and a few of the cafeteria-related questions in "Domain 4: Culture" are adapted from the Smarter Lunchroom Self Assessment (2014), developed by Food \& Brand Lab, The Cornell Center for Behavioral Economics, Child Nutrition Program.

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L. Was a salad bar present with high quality (e.g., fresh, attractive, healthy) food and a wide variety of $F \& V s$ ?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Check ALL salad bar features done regularly: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | Salad bar was highly visible and located in a high traffic area | | $\square$ |
| :--- |
| $\square$ |

Confidence in responses:
s J
O O very confident
O O confident
○ O somewhat confident
O O not so confident
How did you obtain these answers?
$\square$ spent time in the cafeteria helping with school meals and observing

- talked to school food service staff
$\square$ talked to one or more teachers
$\square$ surveyed school food service staff
$\square$ other:

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## M. Did students and families have opportunities to participate in tastings of $\mathrm{F} \& \mathrm{~V}$ s served at school meals?

| September (previous school year) | $\begin{gathered} \text { June } \\ \text { (current } \\ \text { school year) } \end{gathered}$ | Check ALL school meal tasting opportunities that were done at least twice during the school year: |
| :---: | :---: | :---: |
| $\square$ | $\square$ | A tasting table was set up in a high traffic area of the cafeteria for students to taste F\&Vs served that day or in upcoming days |
| $\square$ | $\square$ | Students prepared and ate a recipe that was part of the school lunch menu (in their classroom, cafeteria or other location) |
| $\square$ | $\square$ | Adult(s) walked around the cafeteria offering a taste of a vegetable served on the salad bar (e.g., a red pepper strip served in paper tasting cup) |
| $\square$ | $\square$ | Opportunities were provided to families to taste the F\&Vs that were served in school meals (e.g., before school, after school, or at school events) AND/OR parents were invited to eat school lunch |
| $\square$ | $\square$ | Results from taste testing (e.g., how many students liked the food) were tallied and shared with the school community (e.g., placed on bulletin board in prominent spot in school, on school website, included in newsletter or email blast) |
| $\square$ | $\square$ | Other: |
| $\square$ | $\square$ | None of these tasting opportunities were offered, or they were offered fewer than two times a year |

Confidence in responses:
S J
$\bigcirc$ very confident
$\bigcirc$ ○ confident
O O somewhat confident
O $O$ not so confident

How did you obtain these answers?

- spent time in the cafeteria helping with school meals and observing
- talked to school food service staff
talked to one or more teachers
$\square$ surveyed school food service staff
$\square$ other:

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N. At school meals, was "local food"| or food from the school garden served? (exclude milk)
$\left.\left.\left.\begin{array}{|c|c|l|}\hline \begin{array}{c}\text { September } \\ \text { (previous } \\ \text { school year) }\end{array} & \begin{array}{c}\text { June } \\ \text { (current } \\ \text { school year) }\end{array} & \begin{array}{l}\text { Choose ONE answer per column: }\end{array} \\ \hline \text { O } & \text { O } & \text { No local food was served in school meals }\end{array} \right\rvert\, \begin{array}{lcl}\text { Local food was served once or twice during the school year (e.g., as part of a } \\ \text { harvest celebration) }\end{array}\right] \begin{array}{l}\text { Local food was served about three to nine times during the school year (e.g., once } \\ \text { a week through the harvest season, or every day during a harvest week-long } \\ \text { celebration) }\end{array}\right]$

## Confidence in responses:

s J
O O very confident
O O confident
$\bigcirc \bigcirc$ somewhat confident
O O not so confident
How did you obtain these answers?
a spent time in the cafeteria helping with school meals and observing
$\square$ talked to school food service staff
$\square$ talked to one or more teachers
$\square$ surveyed school food service staff
$\square$ other:

[^8]FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Domain 3: Access (continued)
O. Was the cafeteria atmosphere conducive to eating?

| September <br> (previous <br> school year) | June <br> (current <br> school year) | Choose ALL that were done in the cafeteria: |
| :---: | :--- | :--- |
| $\square$ | $\square$ | When students entered the lunchroom it looked clean (e.g., tables were clear, not <br> much on the floor, garbage can not overflowing) |
| $\square$ | $\square$ | There were decorations that made the cafeteria and serving line inviting (e.g., <br> student artwork, colorful posters of F\&Vs, colorful paint on walls, flowers on <br> tables, table clothes) |
| $\square$ | $\square$ | Noise and chaos levels were reasonable (e.g., no fighting, yelling, whistle <br> blowing) |
| $\square$ | $\square$ | Food service staff was supportive and enthusiastic about getting students to eat <br> more F\&Vs and/or regularly encouraged the students to take and eat F\&Vs |
| $\square$ | $\square$ | At least once a week, one or more adults (non including food service staff) <br> modeled healthy behaviors (e.g., dined in the lunchroom with students, <br> encouraged students to eat what was served at school lunch) |
| $\square$ | $\square$ | Other: |
| $\square$ | $\square$ | None of these regularly applied to the cafeteria |
| $\square$ | $\square$ |  |

## Confidence in responses:

S J
○ $\bigcirc$ very confident
$\bigcirc$ ○ confident
O O somewhat confident
O O not so confident
How did you obtain these answers?
b spent time in the cafeteria helping with school meals and observing

- talked to school food service staff
$\square$ talked to one or more teachers
$\square$ surveyed school food service staff
$\square$ other:

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Questions K-O Comments: Use this page to comment and elaborate on your answers. This may include questions you had difficulty answering and why. Other details about activities that you feel are important but were not captured in these questions etc. If "local food" was served at your school, please share how "local food" was defined for your school. If you had particular challenges working in the access domain, please explain.

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## Domain 4: Culture (healthy school environment)

For students to eat F\&Vs, they need an environment in which F\&Vs as well as other healthy food are available, valued, and encouraged. This means F\&Vs are available at school meals, classroom
events and school events. Additionally, teachers, administrators, school staff, other students, families and special guests can encourage students to eat F\&Vs and the combination of encouragement
from many sources is powerful. Finally, a culture of health goes beyond just adding F\&Vs and other healthy foods. A conscious effort must also be made to decrease access to unhealthy foods.
P. Were eating $\mathrm{F} \& V$ s and healthy foods a natural part of day-today life in the school?

| September (previous school year) | June current school year) | Check ALL that were done most of the time: |
| :---: | :---: | :---: |
| $\square$ | $\square$ | When there was food for classroom snacks, celebrations, or rewards there was a conscious effort (in most classes) to serve F\&Vs and limit less healthy foods ${ }^{m}$ |
| $\square$ | $\square$ | When there was food at school events, there was a conscious effort to serve F\&Vs and limit less healthy foods |
| - | $\square$ | When the school had bake sales there was a conscious effort to limit less healthy foods and promote healthier, homemade baked goods, (e.g., carrot cake, apple bread) and/or have F\&Vs as an option <br> - also check this item if the school had NO bake sales |
| $\square$ | $\square$ | School had fundraisers with healthy items (e.g., oranges, seed packets, healthy recipe cookbooks) and/or avoided selling unhealthy food for fundraising <br> - also check this item if the school had NO fundraisers |
| $\square$ |  | There was a conscious effort to have healthier options in the vending machines - also check this item if the school had NO vending machines |
| $\square$ | $\square$ | None of these were done |

Confidence in responses:
S J
O $\bigcirc$ very confident
$\bigcirc$ ○ confident
O O somewhat confident
$\bigcirc$ O not so confident

How did you obtain these answers?
I I participated in making these activities happen
$\square$ directly observed these activities happen
$\square$ talked to school administration, teachers and/or staff
$\square$ surveyed school administration, teachers, and/or staff
$\square$ other:

[^9]FoodCorps Healthy School Progress Report - Draft for Service Member Pilot Test, June 26, 2015 Domain 4: Culture (continued)

## Q. Did the school administration, teachers, staff, and parents embrace food, nutrition, gardening and wellness activities?

| September | June |
| :---: | :---: |
| (previous <br> school year) | (current <br> school year) |

Check ALL that were regularly done at the school:
Administration encouraged and provided teachers with professional development for food and nutrition education, gardening activities and developing connections between core curriculum and nutrition education and garden lessons


Administration provided support (e.g., additional pay, class release time, time/support to write grants) for teachers or other staff who were enthusiastic about food and nutrition education/gardening/ healthy school meals to mentor and support teachers who are not yet involved

There was a champion ${ }^{\mathrm{n}}$ for healthy food, nutrition and gardening (not including FoodCorps service member)

School staff (e.g., school nurse, office staff security guards, custodians) supported a healthy school food culture and/or the school's gardening program


Parents supported ${ }^{\circ}$ (e.g., financially if the Parent Teacher Association raises funds and/or volunteering time) food, nutrition and gardening activities
$\square \quad \square \quad$ Other:


| $\square$ | $\square$ | Administration encouraged and provided teachers with professional development for food and nutrition education, gardening activities and developing connections between core curriculum and nutrition education and garden lessons | How did you obtain these answers? I participated in making these activities happen directly observed these activities happen <br> - talked to school administration, teachers and/or staff <br> [ surveyed school administration, teachers, and/or staff other: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ | $\square$ | Administration provided support (e.g., additional pay, class release time, time/support to write grants) for teachers or other staff who were enthusiastic about food and nutrition education/gardening/ healthy school meals to mentor and support teachers who are not yet involved |  |  |  |  |
| $\square$ | $\square$ | There was a champion ${ }^{\mathrm{n}}$ for healthy food, nutrition and gardening (not including FoodCorps service member) |  |  |  |  |
|  | $\square$ | School staff (e.g., school nurse, office staff security guards, custodians) supported a healthy school food culture and/or the school's gardening program |  |  |  |  |
| $\square$ | $\square$ | Parents supported ${ }^{\circ}$ (e.g., financially if the Parent Teacher Association raises funds and/or volunteering time) food, nutrition and gardening activities |  |  |  |  |
| $\square$ | $\square$ | Other: |  |  |  |  |
| $\square$ | $\square$ | None of these were regularly done |  |  |  |  |

## Confidence in responses:

s J
O O very confident
O O confident
O O somewhat confident
O O not so confident

[^10]FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Domain 4: Culture (continued)

## R. Did the school have a culture of respect and care for food and healthy eating?

| September <br> (penious <br> school year) | June <br> (curent <br> school year) | Check $A L L$ that were true at the school: |
| :---: | :---: | :--- |
| $\square$ | $\square$ | School meals were seen as a respected and integrated part of the school day (e.g., <br> teachers and administrators were present at least sometimes during school meals <br> and/or ate with students, there were the same student expectations of behavior <br> and style of discipline used during school meals as other times of day) |
| $\square$ | $\square$ | Student groups were involved in developing creative and descriptive names for <br> school meal menu items and/or creating F\&V artwork or signage for the cafeteria <br> or other areas in the school |
| $\square$ | $\square$ | Older students served as mentors or role models to encourage younger students <br> to eat F\&Vs (e.g., helping with salad bar in the cafeteria, teaching lessons in the <br> classroom) |
| $\square$ | $\square$ | Students, teachers, and/or administrators announced (e.g., over loudspeaker or as <br> students lined up to get lunch) what was being served for lunch and encouraged <br> students to eat F\&Vs |
| $\square$ | $\square$ | Local celebrities (e.e., farmers, chefs, politicians, sports heroes, media <br> personalities) dined (at least once) with students in the cafeteria and encouraged <br> them to eat F\&V |
| $\square$ | $\square$ | Other: |
| $\square$ | $\square$ | None of these were done in the school over the past year |
| $\square$ |  |  |

Confidence in responses:
S J
O $O$ very confident
$\bigcirc$ ○ confident
$\bigcirc$ somewhat confident
$\bigcirc$ O not so confident

How did you obtain these answers?
$\square$ I participated in making these activities happen
$\square$ directly observed these activities happen
$\square$ talked to school administration, teachers and/or staff
$\square$ surveyed school administration, teachers, and/or staff
$\square$ other:

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## S. Were there opportunities for family involvement in and education about food?

| September (previous school year) | June current school year) | Check ALL that were done at the school: |
| :---: | :---: | :---: |
|  | $\square$ | Helped families access healthy foods (e.g., told them where they can sign up for Supplemental Nutrition Assistance Program (SNAP) or about food pantries or other programs in their community, reminded them about farmers markets and community supported agriculture (CSAs) - especially those that take SNAP), etc |
|  |  | Provided at least two workshops or events for families that focused on eating more F\&Vs (e.g., cooking, gardening, eating on a budget, healthy eating, sharing foods from families' cultural backgrounds) |
|  |  | There was a farmers market and/or CSA pick up at or very close to the school AND school was actively involved in or at least promoted the farmers market or CSA to families [both parts, before and after the AND need to be true to check this item] |
| $\square$ | $\square$ | Newsletters were sent home to families with motivational and inspirational messages about eating $\mathrm{F} \& \mathrm{~V}$ s, simple $\mathrm{F} \& \mathrm{~V}$ recipes, and/or shopping tips etc. |
| $\square$ | $\square$ | Parents or other adult family members were encouraged to volunteer ${ }^{p}$, in the cafeteria during meals and/or during nutrition education lessons, school garden lessons, and/or during school-wide food-related events |
| $\square$ | $\square$ | Other: |
| $\square$ | $\square$ | None of these were regularly done |

## Confidence in responses:

S J
$\bigcirc$ ○ very confident
$\bigcirc$ ○ confident
$\bigcirc$ ) somewhat confident
$\bigcirc$ ○ not so confident
How did you obtain these answers?

- I participated in making these activities happen
$\square$ directly observed these activities happen
- talked to school administration, teachers and/or staff
- surveyed school administration, teachers, and/or staff
$\square$ other:
p "Encouraged to volunteer" is the most important part of this question. In most schools only a few parents will actually volunteer (due to time/ interests/ competing priorities etc.). However, when families feel that they would be welcome to volunteer during these activities it makes them feel this is an important part of the school culture.

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## T. Did students have other opportunities to learn about food production, local farms, and/or composting?

| September <br> (previous <br> school year) | June <br> (churent <br> school year) | Check $A L L$ that were regularly done at the school: |
| :--- | :--- | :--- |
| $\square$ | $\square$ | Opportunities for at least several classes to meet local farmers (e.g., local farmers <br> visiting schools, exchanging letters with local farmers) |
| $\square$ | $\square$ | Fieldtrips for at least several classes that were related to learning about food and <br> the food system (e.g., farm or community gardens, farmers markets, local food <br> processors, restaurants that use local foods) |
| $\square$ | $\square$ | School events (either food related or other such as students reading poetry, <br> singing, or displaying art) took place in school garden or close-by community <br> gardens or farms |
| $\square$ | $\square$ | Students learned about what foods are locally available through different seasons <br> (e.g., Harvest of the Month) |
| $\square$ | The school has a compost program (e.g., composts waste from school meals, <br> families can bring in food scraps from home for composting) |  |
| $\square$ | None of these were regularly done at the school |  |
| $\square$ | $\square$ |  |

Confidence in responses:
S J
O $O$ very confident
$\bigcirc$ confident
$\bigcirc$ somewhat confident
$\bigcirc$ not so confident

How did you obtain these answers?

I I participated in making these activities happen

- directly observed these activities happen
$\square$ talked to school administration, teachers and/or staff
$\square$ surveyed school administration, teachers, and/or staff
$\square$ other:

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Questions P-T Comments: Use this page to comment and elaborate on your answers. This may include questions you had difficulty answering and why. Explain how different members of the schools community supported or hindered a positive healthy school food culture.

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## Scoring for Questions A-T

Below shows how the questions are scored. All questions can receive $0-5$ points. You do not have to score the Progress Report.

| Questions: | Questions: | Questions: |
| :--- | :--- | :--- |
| A, B, C, F, G, H, I, \&N | D, K, M, O, P, Q, R, S, \& T | $E, J, \& L$ |
| (choose ONE answer) | (ALL that apply with 5 | (ALL that apply with 10 |
| First option: 0 points | options + "none") | options + "none") |
| Second option: 1 point | 1 point for each item checked for | Checking "none" (last option) or 1 <br> Third option: 2 points <br> up to 5 points (if the last item <br> Fourth option: 3 points <br> Fifth option: 4 points <br> Sixth Option: 5 points |
| for this question). |  |  |$\quad$| Checking 2 or $3=1$ point |
| :--- |
| Checking 4 or $5=2$ points |
| Checking 6 or $7=3$ points |
| Checking 8 or $9=4$ points |
| Checking all $10=5$ points |

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## Policy Questions

This section asks questions about policy. These questions will not be part of the school score on the Progress Report. They will be used to help understand how the policy context influences programming. Please answer these questions based on the 2014-15 school year.

1. Were there state-level or district-level nutrition education (NE) standards ${ }^{\text {q }}$ ? (check all that apply)
$\square$ The state had NE standards

- The district had NE standards
- No known NE standards

2. If there were nutrition education standards, was following them a priority for the district or school? (check all that apply)

- Yes, standards and school district had staff to offer guidance and monitor compliance
- Yes, standards and school had a teacher or other staff to offer guidance and monitor compliance
- Yes, standards but no support offered
$\square$ Not applicable, no known NE standards

3. If there were nutrition education standards, were they met? (check all that apply)

- Met (fully or mostly) by all grades
$\square$ Met (fully or mostly) by some grades
$\square$ Met (fully or mostly) by one grade
- Partially met by one or more grades
$\square$ Not met
D. No way to know if they were met
- Not applicable, no known NE standards

4. Does the district have a preferred nutrition curriculum and does the curriculum have a farm to school (FTS) focus? (choose one answer)
O Yes, preferred curriculum with FTS focus Curriculum
O Yes, preferred curriculum but not FTS focused Curriculum
O No known preferred curriculum
5. If there is a preferred nutrition curriculum, is it used at your school? (choose one answer)
O All grades use preferred curriculum and fully implement it
O All grades use preferred curriculum but not all fully implemented
O Some grades use preferred curriculum (fully or partially)
O One grade uses preferred curriculum (fully or partially)
O Preferred curriculum not used
O Unknown how much preferred curriculum used
O No known preferred curriculum
6. Did the district have a wellness plan or policy? (choose one answer)
O Yes
O No known wellness plan or policy
7. If there was a district wellness plan or policy, did it follow a template (e.g., National Alliance for Nutrition and Activity) (choose one answer)
O Yes, template followed exactly Template used $\qquad$
O Yes, template modified Template used
O No known template used
8. If a district wellness plan or policy existed, what content was included? (check all that apply)

- Healthy eating and nutrition
- School gardens

Food policies (e.g., for celebrations, rewards, bake sales, fundraisers)

- Promoting local foods
$\square$ Unknown what content was in wellness policy or plan
$\square$ Not applicable, no known wellness plan or policy

9. If a district wellness plan or policy existed, who was it communicated to? (check all that apply)

- School administrators
- Teachers
$\square$ School staff
- Food service workers
- Parents
- Students
- Don't know or not communicated to anyone

Share what you know about how the wellness policy was communicated (e.g., newsletters, at meetings, bulletin boards etc)
10. Did the school have a wellness committee? (choose one answer)
O Yes, active, worked on food-related issues
O Yes, active, did not work on food-related issues
O Yes, not active
O No known wellness committee

[^11]FoodCorps Healthy School Progress Report = Draft for Service Member Pilot Test, June 26, 2015 Policy Questions (continued)
11. If there is a active wellness committee, who were the active members? (check all that apply)

- Students
- Parents
- Food service staff
- Other school staff
- Teachers
- Administrators
- Other:
- Not applicable, no committee or not active

12. Does the district have a preferred garden education curriculum? (choose one answer)
O Yes: Curriculum
O No known preferred curriculum
13. If there is a preferred garden education curriculum, is it used at your school? (choose one answer)
O All grades use preferred curriculum and fully implement it
O All grades use preferred curriculum but not all fully implemented
O Some grades use preferred curriculum (fully or partially)
O One grade uses preferred curriculum (fully or partially)
O Preferred curriculum not used
O Unknown how much preferred curriculum used
O No known preferred curriculum
14. Did the state and/or school district have a policy to allow and/or encourage geographic preference for local food procurement'?
(choose one answer)
O Yes, please share what you know:

O No known geographic preference policy
15. If there was a state, and/or district policy for geographic preference to what extent was the policy implemented? (choose one answer)
O Products from local growers or distributors were regularly requested or sought out in bids or orders
O Products from local growers or distributors were sometimes requested or sought out in bids or orders
O Local products may be supplied but were not specified in bids or orders
O Even though policy existed, it was not implemented
O No known geographic preference policy
16. Was school garden produce allowed to be used in school meals? (choose one answer)
O Yes
O No
O Unsure

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## Indicators

A. What percentage of students received nutrition education lessons focused on fruits and vegetables ( $\mathrm{F} \& \mathrm{Vs}$ )?
B. Among classes that received nutrition education (Question A), how many lessons on average were focused on F\&Vs?
C. Among the classes that received nutrition education (Question A) how many lessons included tasting or eating $\mathrm{F} \& \mathrm{~V}$ s?
D. Among the classes that received nutrition education (Question A) did lessons include activities specifically geared toward getting students excited and motivated to eat F\&Vs?

In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).

In the field of behavioral nutrition education on of the key components to effective behavior change is to enhance motivation. To investigate the best way to do this nutrition education researchers have worked closely with colleagues in the field of psychology to explore what kind of information (e.g., talking about the benefits of healthier behavior or helping people think about the barriers they might face in changing and ways to overcome them) is most likely to motivate people to change behavior (Contento, 2011)
These kinds of information are called "determinants" since they "determine" how much people change their behaviors from an intervention. Researchers often put many determinants together into a "theory" and then cover all the determinants in the theory during the intervention. This is called "theory-based nutrition education" and makes interventions more likely to change behavior (Contento, 2011). One theory that has been used extensively in school-based nutrition education is social cognitive theory (Contento 2011). This has also been used specifically in evaluations of Farm to School (Roche et al 2012; Berlin et al 2013). The Roche study (2012) found three determinants led to the most behavior change: 1) decrease fear of trying new foods (neophobia); 2) increase perception that it is socially desirable and acceptable to eat vegetables and fruits (social norms); and 3) increase confidence in abilities to eat fruits and vegetables (self-efficacy). This study also found that students respond very well to having "food system knowledge" as the base of the education. The Berlin article (2013) called for more systematic inclusion of determinants of social cognitive theory into farm to school program.
Additionally, more recent analyses have investigated how overall psychosocial theories work for changing children's fruit and vegetable consumption (Di Noia and Bryd-Bredbenner, 2014: Diep et al, 2014), with the Diep (2014) study calling for more research to understand the practical- and experience-based procedures that can compliment theory to make interventions effective at changing behavior.
Overall, changing fruit and vegetable intake through school based education programs has had modest results (Evan et al, 2012) and more research is needed.

A second key component of making nutrition education effective is to facilitate ability to make behavior change. This means providing the specific factual knowledge (e.g., we need to eat at least five different fruits and vegetables each day) and procedural skills (how to make a color salad from the salad bar) that are needed to do the desired behavior (Contento, 2011).
Cooking is also used to facilitate ability. When students prepare in their classrooms the specific recipes that are served in the lunchroom, they are more likely to eat them at lunch (Liquori et al, 1998) and research has found that when students are given recipes to prepare at home that those children who do make the recipes at home are more likely to change their behavior (Cullen et al, 2007). Additionally, a qualitative evaluation of a kitchen garden program in Australia (Gibbs et al, 2013) indicated that when students were involved in a kitchen garden activities their willingness to try new foods increased and many children talked about cooking what they prepared in school with their families.

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## Indicators

F. What percentage of students participated in garden-based activities (GBAs)?
G. Among the classes that participated in GBAs (Question F) how many lessons did they have?
H. Among the classes that participated in GBAs (Question F) how many included tasting or eating F\&Vs?
I. Among classes that participated in GBAs (Question F), were the GBAs connected to the curriculum?
J. Among the classes that participated in GBAs (Question F) did the GBAs include activities to motivate students and build knowledge and skills for eating F\&Vs?

## Evidence and Justification for Indicators

There is evidence that students who participate in garden lessons have increased fruit and vegetable consumption (McAleese and Ratkin, 2007; Ratcliffe et al 2009; Wright and Rowell 2010; Langellotto and Gupta 2012).

There seems to be evidence that garden-based intervention that included more overall visits to the garden were the intervention that were more likely students are to increase fruit and vegetable consumption (McAleese and Ratkin, 2007; Ratcliffe et al 2009; Wright and Rowell 2010; Langellotto and Gupta 2012).

In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).

Garden programs are often integrated into the core curriculum to enable teachers to spend more time in the garden (Lineberger, 1998). This has been reinforced more recently, "unless teachers perceive school gardens as outdoor classrooms critical to teaching the skills and content they're responsible for imparting, students will have limited exposure to any school garden experience." (Hirschi, 2012)

As discussed above in the knowledge section, indicator E, when students learn specific skills, particularly those that are about growing, preparing and eating fruits and vegetables they will be more likely to eat then in the future.
K. Was the meal line set up to promote consumption of fruits and vegetables?
L. Was salad bar present with high quality (e.g., fresh, attractive, healthy) food and a wide variety of $\mathrm{F} \& \mathrm{~V}$ ?
M. Did students and families have opportunities to participate in tastings of $\mathrm{F} \& \mathrm{~V}$ s served at school meals?
N. At school meals, was "local" food (e.g., from local farms or school garden) served and promoted? (exclude milk)
O. Was the cafeteria atmosphere conducive to eating?

The Cornell Center for Behavioral Economics that is within Child Nutrition Program has worked since 2009 to create research-based lunchrooms designed to guide students to healthier choices (Smarter Lunchroom Self Assessment, 2014). For this indicator the cafeteria will be assessed for specific Smarter Lunchroom strategies related on "promoting vegetables \& salad" and "focusing on fruit."

Studies that assess children fruit and vegetable intake before and after introduction of a salad bar in the lunchroom have found salad bars to contribute to increased fruit and vegetable intake (Adams, 2005, Slusser et al, 2007).

In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).

The foundation of the Farm to School movement is to provide students with experiences eating local foods (Taylor and Johnson, 2013). Although there is not much research that directly links local food consumption, specifically, when local foods are used they can be tasted to build preferences and local foods can be used to enhance motivation, using connections with where it was grown to get children excited about eating the food.

As with above (Access indicator A) the Smarter Lunchroom Self Assessment has key changes to make to the eating atmosphere to help assure that students will eat what is served at school meals, these will be used for this indicator.

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## Indicators

P. Were eating $F \& V$ s and healthy foods a natural part of day-today life in the school?
Q. Did the school administration, teachers, staff, and parents embrace food, nutrition, gardening and wellness activities?
R. Did the school have a culture of respect and care for food and healthy eating?
S. Were there opportunities for family involvement and education about food?
T. Was a "Farm to school" philosophy integrated into the school culture?

## Evidence and Justification for Indicators

The food that is available at classroom and school events can have a powerful influence over students eating habits (Centers for Disease Control and Prevention and Bridging the Gap Research Program, 2014). As of the beginning of school 2006, all schools have been required to have wellness policies (mandates around wellness policies are currently being updated as part of the 2010 Healthy Hungry Free Kids Act). Standards for food are a recommended part of wellness policies to build a culture of healthy food that can support changing eating behaviors.

In order to create a culture of health in schools, both administrators and teachers need to be receptive to and embrace a culture of health (Center for Disease Control and Prevention, 2011). Additionally, administrative and teacher support has been found to be a key factor in developing successful school garden programs (Ozer, 2006).

Decreasing marketing and promotion of less healthful foods and promoting healthful foods can help to promote positive eating behaviors (Institute of Medicine, 2005).

A review of what makes nutrition education programs effective at changing behavior found that family involvement, particularly for children in elementary grades (Roseman, 2011).

Although there has been limited peer-reviewed publications on Farm to School work (despite its widespread implementation) (Taylor and Johnson, 2009), there has been called for more research and more overall adoption and integration into the school culture (Roche et al, 2012; Berlin et al, 2013)

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## FoodCorps Progress Report Development and Evaluation Retreat

July 2015


## Cognitive Testing

- Ensures meaning and intentions of questions are clearly understood
- Will be conducted 10 service members in fall 2015 after completion of Progress Report
- Will be done with telephone interviews


## Revised Study Design

## Aims:

1. To conduct cognitive testing and evaluation of the validity of the Progress Report
2. To conduct a cross-sectional study to examine the association between the Progress Report score and fruit and vegetable ( $\mathrm{F} \& \mathrm{~V}$ ) consumption
3. To conduct a process evaluation to better understand how the Progress Report and FoodCorps implementation tools are used to support service member goals during the year

## Process Evaluation

- Purpose: to determine how the Progress Report, Service Member goals, and FoodCorps supports can effectively work together to help FoodCorps schools increase Progress Report scores
- Research questions, data collection tools, and sampling frame: to be planned today


## Results: Validation to date

- Content validity
- expert
- assessed in June 2015
- 7 experts in school-based nutrition education comment incorporated into tool
- as an example, Amy Paxton commented that in questions B \& C there were two ways to ask about "how many lessons," response options were revised to make these similar


## Results: Validation to date

- Content validity (continued)
- face
- assessed in June 2015
- $\sim 10$ service members and fellows reviewed PR to see if questions were reasonable FC activities in schools that promote $\mathrm{F} \& \mathrm{~V}$
- in addition, $\sim 12$ donors, FC advisors, and board members reviewed the tool and gave feedback


## Results: Validation to date

- Construct validity
- is the new Progress Report acting how we would expect?
- used Landscape Assessment to determine
"Rockstars" and "Emerging" schools
- Rockstars (top 40)

Landscape Assessment Range: 47-67

- Emerging (bottom 70)

Landscape Assessment Range 6-19

## Results: Validation to date

- Construct validity
- selected 22 service members ( $\sim 11$ of each) to complete the Progress Report for Spring 2015 and retrospectively for Fall 2014
- Survey Monkey and paper versions used


## Progress Report Overview

- Four domains
- Each with 5 indicators; 5 points each; range 0-25
- D1: Knowledge (Indicators A-E)
- D2: Engagement (Indicators F-J)
- D3: Access (Indicators K-O)
- D4: Culture (Indicators P-T)
- Total possible score: 0-100

Emerging Schools vs. Rockstar Schools

| Time | Domain | Mean (SD) |  | Mean difference | p -value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Emerging ( $\mathrm{n}=9$ ) | Rockstar ( $\mathrm{n}=10$ ) |  |  |
|  | Total | 22.2 (12.0) | 42.4 (13.0) | 20.2 | 0.714 |
|  | Range (fall): | 9-46 | 23-66 |  |  |

Emerging Schools vs. Rockstar Schools

| Time | Domain | Mean (SD) |  | Mean differenceRockstar - Emerging | p-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Emerging ( $\mathrm{n}=9$ ) | Rockstar ( $\mathrm{n}=10$ ) |  |  |
| Fall | Total | 22.2 (12.0) | 42.4 (13.0) | 20.2 | 0.714 |
|  | Knowledge | 7.8 (6.9) | 11.6 (5.3) | 3.8 | 0.353 |
|  | Engagement | 4.8 (6.8) | 9.9 (4.2) | 5.1 | 0.190 |
|  | Access | $5.2(2.3)$ | 11.7 (4.5) | 6.5 | 0.008** |
|  | Culture | 4.4 (2.4) | 9.2 (4.0) | 4.8 | 0.328 |

Emerging Schools vs. Rockstar Schools

| Time | Domain | Mean (SD) |  | Mean differenceRockstar - Emerging | p -value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Emerging ( $\mathrm{n}=9$ ) | Rockstar ( $\mathrm{n}=10$ ) |  |  |
| Fall | Total | 22.2 (12.0) | 42.4 (13.0) | 20.2 | 0.714 |
|  | Knowledge | 7.8 (6.9) | 11.6 (5.3) | 3.8 | 0.353 |
|  | Engagement | 4.8 (6.8) | 9.9 (4.2) | 5.1 | 0.190 |
|  | Access | 5.2 (2.3) | 11.7 (4.5) | 6.5 | 0.008** |
|  | Culture | 4.4 (2.4) | $9.2(4.0)$ | 4.8 | 0.328 |
|  | Total | 41.4 (5.9) | 56.2 (13.1) | 14.8 | 0.007** |
|  | Range (spring): | 31-49 | 29-74 |  |  |




## Sources for Answers

- Details found on Table 3
- "Self" largest source
- "Talking" to school personnel (e.g., teachers, food service staff) also frequently used
- Sources typically similar across all indicators within a domain


## Fall vs. Spring Scores

Table 2. Paired $t$-test results between Fall 2014 and Spring 2015 scores in domains of the Food Corps Progress Report within
Emerging or Rockstar schools and independent $t$-test results in differences in change scores betw Emerging or Rockstar schools and independent t-test results in differences in change scores between Emerging and Rockstar
schools

|  | Emerging ( $n=9$ ) |  |  |  | Rockstar (n=10) |  |  |  | Difference in change scores$(\mathbf{n}=19)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (SD) |  | $\begin{gathered} \substack{\text { Mean } \\ \text { difference } \\ \text { (SD) }} \\ \hline \text { Spring-Fall } \end{gathered}$ | p-value | Mean (SD) |  | $\begin{gathered} \substack{\text { Mean } \\ \text { difference } \\ \text { (SD) }} \\ \hline \text { Spring.Fall } \end{gathered}$ | ${ }^{\text {p.value }}$ | $\begin{gathered} \text { Rockstar - } \\ \text { Emerging change } \\ \text { scores } \end{gathered}$ | p-value |
|  | Fall | Spring |  |  | Fall | Spring |  |  |  |  |
| Total | 22.2 (12.0) | 41.45 .9 ) | 19.2(11.5) | 0.001** | 42.4 (13.0) | 56.2 (13.1) | 13.8 (9.6) | 0.001** | 5.4 | ${ }^{0.320}$ |
| Knowledge | 7.8 (6.9) | 14.4 (3.1) | $6.774 .6)$ | 0.002** | 11.6 (5.3) | 16.0 (4.3) | 4.4 (5.0) | $0.021^{*}$ | 2.3 | 0.190 |
| Engagement | 4.8 (6.8) | 12.8 (5.1) | 8.0 (6.4) | 0.006** | $9.9(4.2)$ | 14.5 (3.9) | 4.6 (3.8) | 0.004** | 3.4 | 0.825 |
| Access | $5.2(2.3)$ | $6.92(2.8)$ | $1.7(1.7)$ | $0.020^{*}$ | 11.7 (4.5) | 13.2(4.2) | 1.51 .5 ) | 0.012* | 0.2 | 0.755 |
| Culture | ${ }^{4.4(2.4)}$ | 7.3 (1.7) | $2.92(2.3)$ | 0.005 ** | 9.2 (4.0) | 12.5 (4.6) | 3.3 (3.2) | 0.010* | -0.4 | 0.279 |
| $\mathrm{p}^{* * 0.05 ; ~} \mathrm{p}^{* * *<0.01}$ |  | Change Ra | ange: 0-34 |  |  |  |  |  |  |  |

Fall vs. Spring Scores


## Confidence in Answers

- Details found on Table 4
- Confidence higher for Spring than Fall
- Confidence in culture domain tended to be lower
- Varied for each indicator


## Each Indicator

- Frequency data for each answer choice in Table 5
- Most individual indicators showed some increase from Fall to Spring
- Least change in Access Domain



## Indicator D (motivation)



Knowledge
Indicator E (knowledge \& skills)

| $\begin{array}{c}\text { E. }\end{array} \begin{array}{c}\text { Among the classes that received nutrition education (Question A) did students learn specific knowledge } \\ \text { and skills for eating F\&Vs? }\end{array}$ |  |
| :---: | :---: | :---: | :---: |
| Fall | Spring | \(\begin{aligned} \& Students have: <br>

\& (check ALL that apply):\end{aligned}\)


## Indicator M (tastings in the cafeteria)

| M. Did students and families have opportunities to participate in tastings of F\&VS served at school meals? |  |  |
| :---: | :---: | :---: |
| Fall | Spring | Check ALL school meal tasting opportunities that were done at least twice during the school year: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} \mathrm{N}(\%)=19 \\ (100) \end{gathered}$ |  |
| ${ }^{6}$ (32) | 6 (32) | M1. A tasting table was set up in a high traffic area of the cafeteria for students to taste F\&Vs served that day or in upcoming days +1 |
| 3 (16) | 6 (32) | M2. Students prepared and ate a recipe that was part of the school lunch menu (in their classroom, cafeteria or other location) +1 |
| 1 (5) | 3(16) | M3. Adult(s) walked around the cafeteria offering a taste of a vegetable served on the salad bar (e.g., a red pepper strip served in paper tasting cup) +1 |
| 5 (27) | 7 (37) | M4. Opportunities were provided to families to taste the F\&Vs that were served in school meals (e.g., before school, after school, or at school events) AND/OR parents were invited to eat school lunch $\boldsymbol{+ 1}$ |
| 4 (21) | 8 (42) | M5. Results from taste testing (e.g., how many students liked the food) were tallied and shared with the school community (e.g., placed on bulletin board in prominent spot in school, on school website, included in newsletter or email blast) +1 |
| 11 (58) | 8 (42) | M6. None of these tasting opportunities were offered, or they were offered fewer than two times a year +0 |

## Scores for Each Indicator by Individual School

- Details found on Table 6
- This table has each indicator with Fall and Spring score as well as Landscape Assessment score


## Concurrent validity <br> To be completed fall 2015

- Measures how well the Progress Report concurs with another measure (ideally a gold standard)
- To be completed with 5 continuing FoodCorps schools
- Service Member Weekly Logs key data source
- Each domain has additional sources


## Indicator Q (support)

| Fall | Spring | Check ALL that were regularly done at the school: |
| :---: | :---: | :---: |
| $\begin{aligned} & N(\%)=19 \\ & (100) \end{aligned}$ | $\mathbf{N ( \% ) = 1 9}$ |  |
| 5 (26) | 8 (42) | Q1. Administration encouraged and provided teachers with professional development for food and nutrition education, gardening activities and developing connections between core curriculum and nutrition education and garden lessons $\mathbf{+ 1}$ |
| 2 (11) | $9(47)$ | Q2. Administration provided support (e.g., additional pay, class release time, time/support to write grants) for teachers or other staff who were enthusiastic about food and nutrition education/gardening/healthy school meals to mentor and support teachers who are not yet involved +1 |
| 11 (58) | 13 (68) | Q3. There was a champion for healthy food, nutrition and gardening (not including FoodCorps service member) $\boldsymbol{+ 1}$ |
| 8 (42) | 14 (74) | Q4. School staff (e.g., school nurse, office staff security guards, custodians) supported a healthy school food culture and/or the school's gardening program +1 |
| 7 (37) | 11 (58) | Q5. Parents supported ${ }^{\circ}$ (e.g., financially if the Parent Teacher Association raises funds and/or volunteering time) food, nutrition and gardening activities +1 |
| $5(26)$ | 1 (5) | Q6. None of these were regularly done +0 |

## Predictive Validity To be completed Spring 2015

- Cross-sectional study
- 20 FoodCorps Schools
- Determine if there is an association between the Progress Report scores and F\&V consumption
- F\&V consumption measured by digital photography (comparison of before and after meal photos)


## Qualitative Feedback from Service Members

- Strengths
- liked the breath of the questions
- liked the addition of the culture section
- liked rating confidence per question
- very few chose to add other options for check all that apply boxes


## Qualitative Feedback from Service Members

- Limitations (suggestions to improve)
- needed more clarity on number of lessons vs. classroom vs. grades for NE and GBAs
- wanted an explanation box for every question
- provided suggestions for specific changes to add more clarity

Revised Progress Report

## Process Evaluation

- Goals are:
- Research questions
- Sampling frame
- Data collection tools


## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

All Domains (Domain 1: Knowledge, 2: Engagement, 3: Access, and 4: Culture)

Table 1. Mean comparison and independent t-test results in domains of the FoodCorps Progress Report between Emerging schools and Rockstar schools

| Time | Domain | Mean (SD) |  | Mean difference | $p$-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Emerging ( $\mathrm{n}=9$ ) | Rockstar ( $\mathrm{n}=10$ ) | Rockstar - Emerging |  |
| Fall | Total | 22.2 (12.0) | 42.4 (13.0) | 20.2 | 0.714 |
|  | Knowledge | 7.8 (6.9) | 11.6 (5.3) | 3.8 | 0.353 |
|  | Engagement | 4.8 (6.8) | 9.9 (4.2) | 5.1 | 0.190 |
|  | Access | 5.2 (2.3) | 11.7 (4.5) | 6.5 | 0.008** |
|  | Culture | 4.4 (2.4) | 9.2 (4.0) | 4.8 | 0.328 |
| Spring | Total | 41.4 (5.9) | 56.2 (13.1) | 14.8 | 0.007** |
|  | Knowledge | 14.4 (3.1) | 16.0 (4.3) | 1.6 | 0.382 |
|  | Engagement | 12.8 (5.1) | 14.5 (3.9) | 1.7 | 0.418 |
|  | Access | 6.9 (2.8) | 13.2 (4.2) | 6.3 | 0.001** |
|  | Culture | 7.3 (1.7) | 12.5 (4.6) | 5.2 | 0.007** |

$\mathrm{p}^{* *}<0.01$

Table 2. Paired t-test results between Fall 2014 and Spring 2015 scores in domains of the Food Corps Progress Report within Emerging or Rockstar schools and independent t-test results in differences in change scores between Emerging and Rockstar schools

|  | Emerging ( $\mathrm{n}=9$ ) |  |  |  | Rockstar ( $\mathrm{n}=10$ ) |  |  |  | Difference in change scores$(n=19)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | (SD) | Mean difference (SD) | p -value | Mean (SD) |  | Mean difference (SD) | $p$-value | Rockstar Emerging change scores | $p$-value |
|  | Fall | Spring | Spring-Fall |  | Fall | Spring | Spring-Fall |  |  |  |
| Total | 22.2 (12.0) | 41.4 (5.9) | 19.2(11.5) | 0.001** | 42.4 (13.0) | 56.2 (13.1) | 13.8 (9.6) | 0.001** | 5.4 | 0.320 |
| Knowledge | 7.8 (6.9) | 14.4 (3.1) | 6.7 (4.6) | 0.002** | 11.6 (5.3) | 16.0 (4.3) | 4.4 (5.0) | 0.021* | 2.3 | 0.190 |
| Engagement | 4.8 (6.8) | 12.8 (5.1) | 8.0 (6.4) | 0.006** | 9.9 (4.2) | 14.5 (3.9) | 4.6 (3.8) | 0.004** | 3.4 | 0.825 |
| Access | 5.2 (2.3) | 6.9 (2.8) | 1.7 (1.7) | 0.020* | 11.7 (4.5) | 13.2 (4.2) | 1.5 (1.5) | 0.012* | 0.2 | 0.755 |
| Culture | 4.4 (2.4) | 7.3 (1.7) | 2.9 (2.3) | 0.005** | 9.2 (4.0) | 12.5 (4.6) | 3.3 (3.2) | 0.010* | -0.4 | 0.279 |

$p^{\star<0.05 ;} ; p^{\star *}<0.01$

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

Table 3. Frequencies of response sources on each domain ( $n=19$ )

| Domain 1: Knowledge |
| :--- | :---: | :---: | :---: | :---: | :---: |


| Domain 2: Engagement | Conducted GBAs myself | Directly observed others who conducted GBAs | Talked to one or more teachers | Surveyed all teachers | Reviewed curriculum/ lesson plans used for GBAs | Compared GBAs to standards and/or mapped GBAs onto standards |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F. What percentage of students participatedf in any garden-based activities (GBAs)? | 17 | 9 | 10 | 2 | 2 | n/a |
| G. Among the classes that participated in GBAs (Question F) how many lessonsh on averagei did they have? | 15 | 8 | 7 | 2 | 1 | n/a |
| H. Among the classes that participated in GBAs (Question F) how many lessons included tasting F\&Vs? | 17 | 6 | 8 | 1 | 1 | n/a |
| I. Among classes that participated in GBAs (Question F), were the GBAs connected to the curriculum? | 14 | 7 | 10 | 1 | 4 | 2 |
| J. Among the classes that participated in GBAs (Question F) did students learn knowledge and skills for eating $\mathrm{F} \& \mathrm{~V}$ s? | 16 | 7 | 7 | 1 | 2 | 2 |


|  | Spent time in the <br> cafeteria helping <br> with school meals <br> and observing | Talked to school food <br> service staff | Talked to one or <br> more teachers |
| :--- | :---: | :---: | :---: |
| Somarveyed school <br> food service staff |  |  |  |
| K. Was the meal line set up to promote consumption of fruits and <br> vegetables? <br> L. Was a salad bar present with high quality (e.g., fresh, attractive, <br> healthy) food and a wide variety of F\&Vs? <br> M. Did students and families have opportunities to participate in <br> tastings of F\&Vs served at school meals? <br> N. At school meals, was "local food" or food from the school garden <br> served? (exclude milk) <br> O. Was the cafeteria atmosphere conducive to eating? | 17 | 7 | 3 |


| Domain 4: Culture | I participated in making these activities happen | Directly observed these activities happen | Talked to school administration, teachers, and/or staff | Surveyed school administration, teachers, and/or staff |
| :---: | :---: | :---: | :---: | :---: |
| P. Were eating F\&Vs and healthy foods a natural part of day-to-day life in the school? | 6 | 16 | 10 | 0 |
| Q. Did the school administration, teachers, staff, and parents embrace food, nutrition, gardening and wellness activities? | 13 | 12 | 12 | 0 |
| R. Did the school have a culture of respect and care for food and healthy eating? | 7 | 17 | 8 | 0 |
| S. Were there opportunities for family involvement in and education about food? | 12 | 10 | 6 | 0 |
| T. Did students have other opportunities to learn about food production, local farms, and/or composting? | 9 | 8 | 8 | 1 |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

## Table 4. Frequencies and percentages of each indicator

## Domain 1: Knowledge (nutrition education)

A. What percentage of students received any nutrition education lessons ${ }^{a}$ focused ${ }^{b}$ on fruits and vegetables ( $\mathrm{F} \& \mathrm{Vs}$ )?

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $3(16)$ | $0(0)$ | A1. No one received nutrition education focused on F\&Vs +0 |
| $4(21)$ | $2(11)$ | A2. One or two classes or a small group of students had nutrition <br> education focused on F\&Vs ( $\sim$ c 5-10\% of all students in the school) +1 |
| $1(5)$ | $3(16)$ | A3. Several classes or small groups of students had nutrition education <br> focused on F\&Vs (~ 25\% of all students in the school) +2 |
| $3(16)$ | $2(11)$ | A4. About half the classes had nutrition education focused on F\&Vs <br> $(\sim 50 \%)+\mathbf{3}$ |
| $3(16)$ | $4(21)$ | A5. About three-quarters of the classes had nutrition education focused <br> on F\&Vs (~75\%) +4 |
| $5(26)$ | $8(42)$ | A6. All classes had nutrition education focused on F\&Vs (~100\%) +5 |
| $19(100)$ | $19(100)$ | Total |

B. Among classes that received nutrition education (Question A), how many lessons on average ${ }^{\text {d }}$ focused on F\&Vs?

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $2(11)$ | $0(0)$ | B1. None focused on F\&Vs (or no one received nutrition education <br> focused on F\&Vs) +0 |
| $6(32)$ | $3(16)$ | B2. One or two lessons focused on F\&Vs +1 |
| $6(32)$ | $1(5)$ | B3. Three or four lessons focused on F\&Vs +2 |
| $1(5)$ | $4(21)$ | B4. Five or six lessons focused on F\&Vs +3 |
| $2(11)$ | $5(26)$ | B5. Seven to nine lessons focused on F\&Vs +4 |
| $2(11)$ | $6(32)$ | B6. Ten or more lessons focused on F\&Vs +5 |
| $19(100)$ | $19(100)$ | Total |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

C. Among the classes that received nutrition education (Question A) how many lessons on average ${ }^{\text {d }}$ included tasting or eating F\&Vs? (note: opportunities for tasting or eating foods grown in the garden and foods served at school lunch will be asked separately in later questions, this question relates to tastings in the classroom)

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $4(21)$ | $0(0)$ | C1. No lessons had tastings +0 |
| $7(37)$ | $5(26)$ | C2. One or two lessons had tastings +1 |
| $3(16)$ | $2(11)$ | C3. Three or four lessons had tastings +2 |
| $2(11)$ | $7(37)$ | C4. Five or six lessons had tastings +3 |
| $1(5)$ | $3(16)$ | C5. Seven to nine lessons had tastings +4 |
| $2(11)$ | $2(11)$ | C6. Ten or more lessons had tastings +5 |
| $19(100)$ | $19(100)$ | Total |

D. Among the classes that received nutrition education (Question A) did lessons include activities specifically geared toward getting students excited and motivated to eat $F \& V s$ ?

| Fall | Spring | Students had activities that: (check ALL that apply): |
| :---: | :---: | :---: |
| $\begin{aligned} & (\%)=19 \\ & (100) \end{aligned}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 10 (53) | 18 (95) | D1. Increased perceptions that eating $F \& V$ s is socially desirable (e.g., students shared their favorite $\mathrm{F} \& \mathrm{~V}$ and talked about times they eat them) +1 |
| 13 (68) | 18 (95) | D2. Taught health benefits of eating F\&Vs (e.g., learned health benefits of different colored $F \& V$ s, such as blue is good for the brain and red for the heart, or teaching about "eat the rainbow") +1 |
| 4 (21) | 7 (37) | D3. Discussed that eating a larger portion of $\mathrm{F} \& \mathrm{~V}$, instead of meat and other foods from animals, or processed foods, creates a healthier planet +1 |
| 6 (32) | 11 (58) | D4. Discussed strategies for decreasing barriers/fears of trying new F\&Vs (e.g., told stories about people who started liking foods they did not like in the past) +1 |
| 12 (63) | 15 (79) | D5. Included cooking ${ }^{\text {e }}$ and eating $\mathrm{F} \& \mathrm{~V}$ s as a group +1 |
| 5 (26) | 0 (0) | D6. None, lessons did not include any of these activities +0 |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

E. Among the classes that received nutrition education (Question A) did students learn specific knowledge and skills for eating F\&Vs?

| Fall | Spring | Students have: <br> (check $A L L$ <br> that apply): |
| :---: | :---: | :--- |
| $\mathbf{N ( \% ) = 1 9}$ | $\mathbf{N}(\%)=19$ |  |
| $(100)$ | $(100)$ |  |


| 8 (42) | 13 (68) | E1. Learned about MyPlate's recommendation to make half their plate $\mathbf{F \& V}$ at every meal $\mathbf{+ 1}$ |
| :---: | :---: | :---: |
| 4 (21) | 9 (47) | E2. Learned about proper serving sizes for F\&Vs +1 |
| 4 (21) | 8 (42) | E3. Learned practical skills for how to eat more F\&Vs in school meals (e.g., how to make a colorful salad at the salad bar, where the fruit is placed in the lunch line) +1 |
| 5 (26) | 9 (47) | E4. Compared the nutritional value (e.g., vitamins and minerals) in snack foods (e.g. chips, candy) to the nutritional value specific F\&Vs (e.g., apple, carrots) +1 |
| 1 (5) | 4 (21) | E5. Set personal goals for increasing their consumption of $\mathrm{F} \& \mathrm{~V}$ s $\boldsymbol{+ 1}$ |
| 0 (0) | 1 (5) | E6. Monitored progress toward their goals for eating more F\&Vs +1 |
| 2 (11) | 2 (11) | E7. Learned basic cooking skills such as chopping, measuring ingredients, stirring +1 (response option not included on Survey Monkey) |
| 5 (26) | 8 (42) | E8. Cooked simple recipes with fruits and vegetables that they will see on the school lunch menu (identical recipes to the school lunch menu, if possible) +1 |
| 11 (58) | 16 (84) | E9. Cooked simple recipes (e.g., dips for vegetables and smoothies) that they could prepare at home with their family +1 |
| 2 (11) | 4 (21) | E10. Been asked to make a public commitment (e.g., raise their hand, sign a form or place a sticker on poster) to eat more F\&Vs either at school lunch or at home with their families +1 |
| 4 (21) | 1 (5) | E11. None (students did not do any of these) +0 |

## Domain 2: Engagement (school gardens)

F. What percentage of students participated ${ }^{f}$ in any garden-based activities (GBAs) ${ }^{9}$ ?

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $4(21)$ | $0(0)$ | F1. No one did GBAs +0 |
| $6(32)$ | $3(16)$ | F2. One or two classes or one or a few small groups of students had <br> GBAs ( $\sim 5-10 \%$ of all students in the school) +1 |
| $2(11)$ | $5(26)$ | F3. Several classes or groups of students had GBAs $(\sim 25 \%$ of all students <br> in the school) +2 |
| $0(0)$ | $4(21)$ | F4. About half the classes had GBAs $(\sim 50 \%)+\mathbf{3}$ |
| $2(11)$ | $1(5)$ | F5. About three-quarters of the classes had GBAs $(\sim 75 \%)+\mathbf{4}$ |
| $5(26)$ | $6(32)$ | F6. All classes had GBAs $(\sim 100 \%)+\mathbf{5}$ |
| $19(100)$ | $19(100)$ | Total |

G. Among the classes that participated in GBAs (Question F) how many lessons ${ }^{h}$ on average ${ }^{i}$ did they have?

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $4(21)$ | $0(0)$ | G1. None +0 |
| $8(42)$ | $3(16)$ | G2. One or two lessons with GBAs +1 |
| $2(11)$ | $3(16)$ | G3. Three or four lessons with GBAs +2 |
| $3(16)$ | $3(16)$ | G4. Five or six lessons with GBAs +3 |
| $1(5)$ | $5(26)$ | G5. Seven to nine lessons with GBAs +4 |
| $1(5)$ | $5(26)$ | G6. Ten or more lessons with GBAs +5 |
| $19(100)$ | $19(100)$ | Total |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

H. Among the classes that participated in GBAs (Question F) how many lessons included tasting F\&Vs?

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $7(37)$ | $1(5)$ | H1. No lessons had tastings +0 |
| $8(42)$ | $5(26)$ | H2. One or two lessons had tastings +1 |
| $1(5)$ | $4(21)$ | H3. Three or four lessons had tastings +2 |
| $2(11)$ | $9(47)$ | H4. Five or six lessons had tastings +3 |
| $1(5)$ | $0(0)$ | H5. Seven to nine lessons had tastings +4 |
| $0(0)$ | $0(0)$ | H6. Ten or more lessons had tastings +5 |
| $19(100)$ | $19(100)$ | Total |

I. Among classes that participated in GBAs (Question F), were the GBAs connected to the curriculumi?

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $6(32)$ | $0(0)$ | I1. No GBAs +0 |
| $4(21)$ | $1(5)$ | I2. GBAs not connected to curriculum (e.g., garden activities were stand <br> alone with no real connections to any classroom lessons) +1 |
| $3(16)$ | $5(26)$ | I3. Actively working toward connecting GBAs to curriculum (but not <br> connected now) +2 |
| $3(16)$ | $6(32)$ | I4. GBAs connected to curriculum (but were not specifically designed to <br> meet state or local educational standards) +3 |
| $1(5)$ | I5. GBAs connected to curriculum and were specifically designed to <br> meet standards in one core subject (e.g., National Common Core |  |
| $2(11)$ | Standards (English and math) Next Generation Science Standards, state <br> level standards or local standards or "scope and sequence") +4 |  |
| $19(100)$ | $19(100)$ | I6. GBAs connected to curriculum and were specifically designed to <br> meet standards in more than one core subject (e.g., National Common <br> Core Standards (English and math) Next Generation Science Standards, <br> state standards, or local "scope and sequence") +5 |
| Total |  |  |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

J. Among the classes that participated in GBAs (Question F) did students learn knowledge and skills for eating $F \& V s$ ?

Fall Spring Students have:
(check ALL that apply):

| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| :---: | :---: | :---: |
| 7 (37) | 14 (74) | J1. Learned about health or environmental benefits of eating fruits and vegetables grown in the garden $\mathbf{+ 1}$ |
| 7 (37) | 13 (68) | J2. Discussed strategies for overcoming barriers/fears for trying new F\&Vs +1 |
| 4 (21) | 7 (37) | J3. Learned about MyPlate's recommendation to make half your plate F\&Vs every day +1 |
| 4 (21) | 4 (21) | J4. Learned about proper serving sizes for $\mathrm{F} \& \mathrm{Vs}$ +1 |
| 7 (37) | 19 (100) | J5. Learned gardening skills (such as growing food in small pots) that students could do at home +1 |
| 1 (5) | 3 (16) | J6. Set personal goals for increasing their consumption of $\mathrm{F} \& \mathrm{Vs}+1$ |
| 0 (0) | 2 (11) | J7. Monitored progress toward their goals for eating more F\&Vs +1 |
| 5 (26) | 12 (63) | J8. Cooked simple recipes and ate what they prepared +1 |
| 3 (16) | 11 (58) | J9. Learned about various cultures that use different foods in the garden and how they use them $\boldsymbol{+ 1}$ |
| 2 (11) | 2 (11) | J10. Made a public commitment (e.g., raised their hand, signed a form or placed a sticker on poster) to eat more F\&Vs either at school lunch or at home with their families $\boldsymbol{+ 1}$ |
| 7 (37) | 0 (0) | J11. None, lessons did not include any of these activities +0 |

## Domain 3: Access (school meals) ${ }^{\mathrm{k}}$

K. Was the meal line set up to promote consumption of fruits and vegetables?

| Fall | Spring | Check ALL practices the school does regularly: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 16 (84) | 16 (84) | K1. F\&Vs (excluding those on salad bar) were not wilted, browning or otherwise damaged +1 |
| 13 (68) | 13 (68) | K2. Daily F\&V (excluding those on salad bar) options could be easily seen by students of average height for your school +1 |
| 4 (21) | 4 (21) | K3. Some trays had pre-plated vegetables, to help establish vegetables as a social norm +1 |
| 10 (53) | 10 (53) | K4. Fruit displayed nicely (e.g., in bowls or baskets on serving line or by register) and/or was made easier to eat by cutting into halves or quarters (when appropriate, e.g., oranges) +1 |
| 3 (16) | 4 (21) | K5. F\&V options were given creative or descriptive names and these names were written on menu boards and/or on signs that were displayed next to the fruit/vegetable +1 |
| 1 (5) | 1 (5) | K6. None of these practices were done regularly in the cafeteria $\boldsymbol{+ 0}$ |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

L. Was a salad bar present with high quality (e.g., fresh, attractive, healthy) food and a wide variety of F\&Vs?

| Fall | Spring | Check ALL salad bar features done regularly: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $N(\%)=19$ <br> (100) |  |
| 5 (26) | 5 (26) | L1. Salad bar was highly visible and located in a high traffic area +1 |
| 5 (26) | 5 (26) | L2. Salad bar was part of or very near the meal line, so all students had to walk by +1 |
| 4 (21) | 4 (21) | L3. Salad bar was at the proper height for students AND there was space for students to put down their tray at the salad bar [only check this response if BOTH of these are true] +1 |
| 5 (26) | 5 (26) | L4. Salad bar had at least three different fruits or vegetables +1 |
| 5 (26) | 5 (26) | L5. Items on salad bar were not wilted, browning or otherwise damaged $+1$ |
| 5 (26) | 5 (26) | L6. Self-serve salad bar utensils were appropriate size and type for students to handle +1 |
| 5 (26) | 5 (26) | L7. An adult examined the salad bar regularly to replenish as needed and made sure the salad bar looked neat +1 |
| 4 (21) | 4 (21) | L8. An adult stood by the salad bar to encourage students to take salad and helped students as appropriate $\mathbf{+ 1}$ |
| 0 (0) | 1 (5) | L9. An adult made a salad in a large serving bowl and went around to offer it to students who were sitting and eating +1 |
| 2 (11) | 2 (11) | L10. Students saw adults (teachers, principals, staff, etc.) taking and eating from the salad bar +1 |
| 2 (11) | 2 (11) | L11. None, there was a salad bar but none of these features were present $\mathbf{+ 0}$ |
| 13 (68) | 13 (68) | L12. None, there was no salad bar +0 |

M. Did students and families have opportunities to participate in tastings of F\&Vs served at school meals?

| Fall | Spring | Check ALL school meal tasting opportunities that were done at least twice during the school year: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 6 (32) | 6 (32) | M1. A tasting table was set up in a high traffic area of the cafeteria for students to taste $\mathrm{F} \& V$ s served that day or in upcoming days +1 |
| 3 (16) | 6 (32) | M2. Students prepared and ate a recipe that was part of the school lunch menu (in their classroom, cafeteria or other location) +1 |
| 1 (5) | 3 (16) | M3. Adult(s) walked around the cafeteria offering a taste of a vegetable served on the salad bar (e.g., a red pepper strip served in paper tasting cup) +1 |
| 5 (27) | 7 (37) | M4. Opportunities were provided to families to taste the $F \& V$ s that were served in school meals (e.g., before school, after school, or at school events) AND/OR parents were invited to eat school lunch +1 |
| 4 (21) | 8 (42) | M5. Results from taste testing (e.g., how many students liked the food) were tallied and shared with the school community (e.g., placed on bulletin board in prominent spot in school, on school website, included in newsletter or email blast) +1 |

N. At school meals, was "local food"| or food from the school garden served? (exclude milk)

| Fall | Spring | Choose ONE answer per column: |
| :---: | :---: | :--- |
| $\mathbf{N}(\%)$ | $\mathbf{N}(\%)$ |  |
| $5(28)$ | $2(11)$ | N1. No local food was served in school meals +0 |
| $5(28)$ | $6(32)$ | N2. Local food was served once or twice during the school year (e.g., <br> as part of a harvest celebration) +1 |
| $3(17)$ | $4(21)$ | N3. Local food was served about three to nine times during the school <br> year (e.g., once a week through the harvest season, or every day <br> during a harvest week-long celebration) +2 |
| $3(17)$ | $2(16)$ | N4. Local food was served about 10-20 times during the school year <br> (e.g., once or twice a month throughout the school year, or many <br> harvest celebrations) +3 |
| $1(6)$ | $0(11)$ | N5. Local food was served about 21-39 times during the school year <br> (e.g., several times a month or once a week or more during a long <br> harvest season) +4 |
| $0(0)$ | N6. Local food was served at least 40 times during the school year <br> (e.g., at least once a week) +5 |  |
| $18(100)$ | $19(100)$ | Total |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

O. Was the cafeteria atmosphere conducive to eating?

| Fall | Spring | Choose ALL that were done in the cafeteria: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 18 (95) | 18 (95) | O1. When students entered the lunchroom it looked clean (e.g., tables were clear, not much on the floor, garbage can not overflowing) +1 |
| 6 (32) | 9 (47) | O2. There were decorations that made the cafeteria and serving line inviting (e.g., student artwork, colorful posters of F\&Vs, colorful paint on walls, flowers on tables, table clothes) +1 |
| 15 (79) | 15 (79) | O3. Noise and chaos levels were reasonable (e.g., no fighting, yelling, whistle blowing) +1 |
| 7 (37) | 8 (42) | O4. Food service staff was supportive and enthusiastic about getting students to eat more $\mathrm{F} \& V$ s and/or regularly encouraged the students to take and eat $F \& V s+1$ |
| 5 (26) | 7 (37) | O5. At least once a week, one or more adults (non including food service staff) modeled healthy behaviors (e.g., dined in the lunchroom with students, encouraged students to eat what was served at school lunch) +1 |
| 1 (5) | 1 (5) | O6. None of these regularly applied to the cafeteria +0 |

## Domain 4: Culture (healthy school environment)

P. Were eating $F \& V$ s and healthy foods a natural part of day-to-day life in the school?

| Fall | Spring | Check ALL that were done most of the time: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=18 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 3 (17) | 7 (37) | P1. When there was food for classroom snacks, celebrations, or rewards there was a conscious effort (in most classes) to serve F\&Vs and limit less healthy foods ${ }^{m} \boldsymbol{+ 1}$ |
| 5 (28) | 8 (42) | P2. When there was food at school events, there was a conscious effort to serve $\mathrm{F} \& \mathrm{~V}$ s and limit less healthy foods +1 |
| 10 (56) | 12 (63) | P3. When the school had bake sales there was a conscious effort to limit less healthy foods and promote healthier, homemade baked goods, (e.g., carrot cake, apple bread) and/or have F\&Vs as an option - also check this item if the school had NO bake sales +1 |
| 7 (39) | 9 (47) | P4. School had fundraisers with healthy items (e.g., oranges, seed packets, healthy recipe cookbooks) and/or avoided selling unhealthy food for fundraising <br> — also check this item if the school had NO fundraisers +1 |
| 14 (78) | 14 (74) | P5. There was a conscious effort to have healthier options in the vending machines <br> - also check this item if the school had NO vending machines +1 |
| 1 (6) | 1 (5) | P6. None of these were done $\boldsymbol{+ 0}$ |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

Q. Did the school administration, teachers, staff, and parents embrace food, nutrition, gardening and wellness activities?

| Fall | Spring | Check ALL that were regularly done at the school: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 5 (26) | 8 (42) | Q1. Administration encouraged and provided teachers with professional development for food and nutrition education, gardening activities and developing connections between core curriculum and nutrition education and garden lessons +1 |
| 2 (11) | 9 (47) | Q2. Administration provided support (e.g., additional pay, class release time, time/support to write grants) for teachers or other staff who were enthusiastic about food and nutrition education/gardening/ healthy school meals to mentor and support teachers who are not yet involved +1 |
| 11 (58) | 13 (68) | Q3. There was a champion ${ }^{n}$ for healthy food, nutrition and gardening (not including FoodCorps service member) +1 |
| 8 (42) | 14 (74) | Q4. School staff (e.g., school nurse, office staff security guards, custodians) supported a healthy school food culture and/or the school's gardening program +1 |
| 7 (37) | 11 (58) | Q5. Parents supported ${ }^{\circ}$ (e.g., financially if the Parent Teacher Association raises funds and/or volunteering time) food, nutrition and gardening activities +1 |
| 5 (26) | 1 (5) | Q6. None of these were regularly done +0 |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

R. Did the school have a culture of respect and care for food and healthy eating?

| Fall | Spring | Check ALL that were true at the school: |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ |  |
| 13 (68) | 13 (68) | R1. School meals were seen as a respected and integrated part of the school day (e.g., teachers and administrators were present at least sometimes during school meals and/or ate with students, there were the same student expectations of behavior and style of discipline used during school meals as other times of day) +1 |
| 2 (11) | 2 (11) | R2. Student groups were involved in developing creative and descriptive names for school meal menu items and/or creating F\&V artwork or signage for the cafeteria or other areas in the school $\mathbf{+ 1}$ |
| 1 (5) | 2 (11) | R3. Older students served as mentors or role models to encourage younger students to eat F\&Vs (e.g., helping with salad bar in the cafeteria, teaching lessons in the classroom) +1 |
| 2 (11) | 2 (11) | R4. Students, teachers, and/or administrators announced (e.g., over loudspeaker or as students lined up to get lunch) what was being served for lunch and encouraged students to eat $\mathrm{F} \& \mathrm{Vs} \boldsymbol{+ 1}$ |
| 1 (5) | 3 (16) | R5. Local celebrities (e.g., farmers, chefs, politicians, sports heroes, media personalities) dined (at least once) with students in the cafeteria and encouraged them to eat $\mathrm{F} \& \mathrm{~V}+1$ |
| 6 (32) | 5 (26) | R6. None of these were done in the school over the past year +0 |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

S. Were there opportunities for family involvement in and education about food?

| Fall | Spring | Check ALL that were done at the school: 1 EACH |
| :---: | :---: | :---: |
| $\mathbf{N}(\%)=18$ | $\mathbf{N}(\%)=19$ |  |
| $(100)$ | $(100)$ |  |


| $4(22)$ | $6(32)$ | S1. Helped families access healthy foods (e.g., told them where they can <br> sign up for Supplemental Nutrition Assistance Program (SNAP) or about <br> food pantries or other programs in their community, reminded them <br> about farmers markets and community supported agriculture (CSAs) - <br> especially those that take SNAP), etc +1 |
| :---: | :---: | :--- |
| $4(22)$ | $8(42)$ | S2. Provided at least two workshops or events for families that focused <br> on eating more F\&Vs (e.g., cooking, gardening, eating on a budget, <br> healthy eating, sharing foods from families' cultural backgrounds) +1 |
| $2(11)$ | $3(16)$ | S3. There was a farmers market and/or CSA pick up at or very close to <br> the school AND school was actively involved in or at least promoted the <br> farmers market or CSA to families [both parts, before and after the AND <br> need to be true to check this item] +1 |
| $6(33)$ | $8(42)$ | S4. Newsletters were sent home to families with motivational and <br> inspirational messages about eating F\&Vs, simple F\&V recipes, and/or <br> shopping tips etc. +1 |
| $3(17)$ | $7(37)$ | S5. Parents or other adult family members were encouraged to <br> volunteerp ,in the cafeteria during meals and/or during nutrition <br> education lessons, school garden lessons, and/or during school-wide <br> food-related events +1 |
| $6(33)$ | S6. None of these were regularly done +0 |  |
| 3(16) |  |  |

## Appendix F - Results from Pilot with Emerging and Rockstar Schools (continued)

T. Did students have other opportunities to learn about food production, local farms, and/or composting?

| Fall | Spring | Check ALL that were regularly done at the school: 1 EACH |
| :---: | :---: | :---: |
| $\begin{gathered} N(\%)=19 \\ (100) \end{gathered}$ | $\begin{gathered} N(\%)=18 \\ (100) \end{gathered}$ |  |
| 3 (16) | 2 (11) | T1. Opportunities for at least several classes to meet local farmers (e.g., local farmers visiting schools, exchanging letters with local farmers) +1 |
| 6 (32) | 9 (50) | T2. Fieldtrips for at least several classes that were related to learning about food and the food system (e.g., farm or community gardens, farmers markets, local food processors, restaurants that use local foods) +1 |
| 4 (21) | 8 (44) | T3. School events (either food related or other such as students reading poetry, singing, or displaying art) took place in school garden or close-by community gardens or farms +1 |
| 8 (42) | 11 (61) | T4. Students learned about what foods are locally available through different seasons (e.g., Harvest of the Month) +1 |
| 1 (5) | 2 (11) | T5. The school has a compost program (e.g., composts waste from school meals, families can bring in food scraps from home for composting) +1 |
| 7 (37) | 3 (17) | T6. None of these were regularly done at the school $\boldsymbol{+ 0}$ |

Instructions: Complete the FoodCorps Healthy School Progress Report (Progress Report) with your school team. Your school team might be a brand new "healthy school team," or it might be an existing group, like a school wellness committee, farm to school team, or a parent teacher group. Ideally this team will include a decision-maker from school leadership, teacher, food service staff, school community member, and the FoodCorps service member and their supervisor. Then, use your responses to set goals and create an Action Plan for the year to come.
During the school year, school teams will complete the Progress Report twice:

- Fall: Record what happened at the school during the past school year (2014-15). Due to FoodCorps by October 31, 2015.
- Spring: Record what happened at the school over the current school year (2015-16). Due to FoodCorps by June 1, 2016.

FoodCorps serves to connect kids to real food and help them grown up healthy. The FoodCorps Progress Report is a tool that can be used to help school teams, with the assistance of their FoodCorps service member, plan for and track what changes are happening across their schools and which program components contribute the most to healthy eating behaviors, in particular, fruit and vegetable consumption. Because the various components of the Progress Report are evidence-based, we believe that if a school increases their Progress Report score by making a conscious effort to add food-based educational activities, experiences, and practices, students will eat more fruits and vegetables. This hypothesis will be tested in an evaluation that will look at the association between Progress Report scores and students' fruit and vegetable consumption at school lunch.

## The Progress Report has four sections:

SECTION 1 of the Progress Report is general information about the FoodCorps school, service site, and service member.

SECTION 2 assesses four focus areas. Three of the focus areas are the FoodCorps pillars (Knowledge, Engagement, Access). Knowledge (nutrition education) questions ask whether there are lessons for students to learn about food, nutrition, and cooking and, if so, if the lessons are grounded in theory. Engagement (school gardens) questions ask about students' experiences in school gardens. Access (school meals) questions ask if healthy, local foods are served at school meals and if the cafeteria is designed to promote increased fruit and vegetable consumption. A fourth focus area, School Community (school culture), intersects the other focus areas and includes questions that capture if the school environment and culture is supportive of wellness. This section provides schools information about how they are progressing toward becoming a healthy school with staying power.
SECTION 3 is on "staying power." These questions ask about supports and practices that indicate how much the school has institutionalized work in the four focus areas covered in section 2.

SECTION 4 is the policy section, which captures what school, district, and state-level policies support this work.


## FOUR FOCUS AREAS FOR MAKING PROGRESS TOWARD A HEALTHY SCHOOL FOOD ENVIRONMENT

Focus Area 1: Knowledge (nutrition education)

There are many factors that make nutrition education more likely to be effective at changing behavior. First, the education has to be targeted to the behavior the educator wants to change, which for FoodCorps is to eat more fruits and vegetables along with other healthy food. Second, the education other healthy food. Second, the education has to be of adequate intensity (number of sessions) and duration (amount of the, across multiple weeks and months). Third, there is strong evidence that nutrition
education needs to contain three education needs to contain three components to be effective. It needs to: $\boldsymbol{a}$ ) increase students' personal desire to want to do the targeted behavior (e.g.,
opportunities to taste and eat healthy foods have been shown to increase desire
to eat them); b) teach knowledge and skill to eat them); $\boldsymbol{b}$ ) teach knowledge and skills
that will help students be able to do the that will help students be able to do the targeted behavior; and c) create an environment that is supportive of the targeted behavior (these factors are covered in the Access and School Community focus areas).

Focus Area 2: Engagement (school gardens)

When students spend adequate time engaged in garden-based activities, they are more likely to eat fruits and vegetables. Similar to nutrition education (Focus Are 1) there needs to be adequate intensity (number of sessions) and duration (amount of time, e.g., amount of time, across multiple weeks and months) of garden-based activities and they need to be done in ways that increase desire to eat fruits and vegetables and teach appropriat knowledge and in is part of core subjects garden education is part of core subjects, students see these connections and are more likely to make the desired change. School administrators and teachers more fully embrace garden-based activities when
they are tied to core subjects, which also they are tied to core subjects, which also helps students to change behavior

Focus Area 3: Access (school meals)

School meals are the most consistent experience that students have with food in schools. Students learn a lot about eating, food, meal etiquette, and the value of health during school meals - whether this learning is intentionally planned or not. Many practices can create a cafeteria atmosphere conducive to eating fruits and vegetables. Evidence shows that: 1) having a meal line that is set up to make eating a meal line that is set up to make eating fruts a) having a salad bar; 3) having a option; 2) having a salad bar; 3) having a cafeteria atmosphere conducive to eating
can increase fruit and vegetable can increase fruit and vegetable consumption; 4) having opportunities for students to taste fruits and vegetables served in school meals; and 5) serving and promoting local/seasonal foods.

Focus Area 4: School Community (school culture)

For students to eat fruits and vegetables, they need an environment in which fruits and vegetables, as well as other healthy foods are available, valued, and foods are available, valued, and vegetables are available at school meals, classroom events, and school events. Additionally, teachers, administrators, school staff, other students, families and school staff, other students, families and
special guests can encourage students to eat fruits and vegetables - and the combination of encouragement from man sources is powerful. Finally, a healthy sources is powerful. Finally, a healthy
school food environment goes beyond jus school food environment goes beyond just adding fruits and vegetables and other healthy foods. A conscious effort must also be made to decrease access to unhealthy foods and create an environment and culture where whenever and wherever food is offered in school, the healthy choices are easy, accessible, celebrated, respected, and most importantly normative.

## Definitions for common terms used in the Progress Report

- Nutrition education: Nutrition education provides experiences that empower people to understand and navigate their food environment and champion change on a personal level and beyond. It provides hands-on and minds-on (meaning activities that have students critically think about, analyze or synthesize what is being covered) experiences that are culturally responsive and investigates issues related to food system sustainability and social justice. It includes experiences gardening (for this tool, garden-based activities are so important they are pulled out and represented in the Engagement Focus Area), cooking, eating, and critically analyzing food issues. It is directed at specific behaviors (such as eating more fruits and vegetables). Finally, it is grounded in theory from the fields of psychology and social sciences to include activities to motivate and inspire change, appropriately teach how-to skills, and create a supportive environment in which it is easy for people to make the healthy choice the easy choice.
- Garden-based activities: Garden-based activities include everything related to growing food, from planting seeds to harvesting. In the school context, garden-based activities should be connected to the curriculum to help teachers meet educational standards and to help students feel like gardening is interwoven into the school experience.
- Meal line: The meal line is the line where students get school meals. This can include food that is part of the United States Department of Agriculture (USDA) reimbursable school meals program, as well as foods that are offered a la carte to students.
- Salad bar: Salad bar is a specific addition to the meal line where vegetables (and maybe some fruits) are served in addition to the reimbursable school meal.


## Appendix G - Healthy School Progress Report Version 4, PY2016 (continued)

## SECTION 1: GENERAL INFORMATION

This section contains background facts about your school and FoodCorps program. If there is information you do not know, please write "DK" for "don't know."

1. School Name $\qquad$ 2. School City: $\qquad$ State
2. Service Member Name: $\qquad$ 4. Service Site Name:
3. \# Years Service Site with FoodCorps: $\qquad$ 6. \# Years School with FoodCorps: $\qquad$ 7. School Total Enrollment

|  | Total | K | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | Afterschool ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. What grades are in the school? |  | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 9. How many classes in each grade? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

10. Minutes students have to eat school lunch: $\qquad$ If varies by grade, please explain:
11. Recess before lunch: YES NO If varies by grade, please explain:
12. Please list and briefly describe other food, nutrition, gardening, and wellness programs in the school besides FoodCorps:
$\qquad$
$\qquad$
$\qquad$
13. Does your school participate in any of the following programs? (check all that apply)

- Breakfast in the classroom
- Fresh Fruit \& Vegetable Program (FFVP)

Team Nutrition

- Coordinated School Health
- USDA Farm to School Grant Program
- Alliance for a Healthier Generation Healthy Schools Program
- HealthierUS Schools Challenge: Smarter Lunchrooms
${ }^{\text {a }}$ After-school programs are configured differently in each school. Do the best you can of filling in the total number of different afterschool "groups" that meet, which may be by grade, clubs, topic area classes, etc.


## SECTION 2: HEALTHY SCHOOL PROGRESS REPORT

## FOCUS AREA 1: KNOWLEDGE (Nutrition Education)

For each question, answer for each grade that is in your school. Leave the rest of the grades blank.

| Total | K | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | Afterschool | Confidence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. How many classes in each grade received nutrition education lessons focused on fruits and vegetables? <br> (if answer is "o" for all grades, skip to Question E) <br> For these questions lessons are at least 20 minutes and focused means at least part of the lesson. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | very confident <br> O confident <br> O somewhat <br> confident <br> not confident |
| B. Among the classes in each grade that received fruit and vegetable-focused nutrition education lessons, how many lessons did each class get (on average)? |  |  |  |  |  |  |  |  |  |  |  |  |  |  | very confident <br> O confident <br> O somewhat <br> confident <br> O not confident |
| C. How many of these lessons (Question B) had opportunities for eating fruits and vegetables, either through tastings or cooking (e.g., chopping, mixing, adding ingredients)? |  |  |  |  |  |  |  |  |  |  |  |  |  |  | very confident <br> O confident <br> somewhat confident <br> not confident |
| D. Did these lessons (Question B) have activities on: |  |  |  |  |  |  |  |  |  |  |  |  |  |  | very confident <br> O confident <br> O somewhat <br> confident <br> Onot confident |
| 1. increasing social desirability of fruits and vegetables (e.g., students shared favorites)? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 2. health benefits of eating fruits and vegetables (e.g., some help the brain to think better, red ones good for heart)? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \mathrm{O} \text { Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 3. learning about eating for a healthy environment and/or about food justice? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 4. decreasing fears of trying new fruits and vegetables (e.g., stories about kids liking items they didn't before)? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 5. MyPlate's recommendation to make half their plate fruits and vegetables at every meal? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | O Yes | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |


| 6. skills for including more fruits and vegetables at school meals (e.g., making a colorful salad at the salad bar)? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. comparing the nutritional value of fruits and vegetables versus snack foods? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 8. setting goals (personal or group) for increasing consumption of fruits and vegetables? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | O Yes O No | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | O Yes | O Yes | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 9. monitoring progress toward goals for eating more fruits and vegetables? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 10. encouraging students to ask their families to buy more fruits and vegetables? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | - Yes O No | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | - Yes O No | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | - Yes O No | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |

${ }^{\text {a }}$ For after-school programs-Question A: Fill in how many of the afterschool "groups" (from the General Information section, above) had nutrition education focused on fruits and vegetables. Question B: Fill in how many lessons, on average, each of these afterschool groups got. Question C: Fill in how many lessons, on average, had an opportunity to eat fruits and vegetables (either through tastings or cooking) for each of these afterschool groups.

## Please share explanations or other important context for Focus Area 1

How did you obtain these answers? (check all that apply)

Team members:

- Conducted this education ourselves

Directly observed others doing this education
Talked to one or more teachers, administrator, staff or parents

- Surveyed all teachers

Reviewed curriculum/lesson plans used

- Other:


## FOCUS AREA 2: ENGAGEMENT (School Gardens)

For each question, answer for each grade that is in your school. Leave the rest of the grades blank.

|  | Total | K | 1st | 2nd | 3rd | 4th | $5^{\text {th }}$ | 6th | 7th | 8th | 9th | 10th | 11th | 12th | Afterschool | Confidence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E. How many classes in each grade received garden-based activities? <br> (if answer is " 0 " for all grades, skip to Question I) <br> Garden-based activities are any activities related to growing food. For these questions garden-based activities are at least 20 minutes. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | O very confident confident somewhat confident not confident |
| F. Among the classes in each grade that received garden-based activities, how many garden-based activities did each class get (on average)? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | O very confident confident somewhat confident not confident |
| G. How many of these garden-based activities (Question F) had opportunities for eating fruits and vegetables, either through tastings or cooking (e.g., chopping, mixing, adding ingredients)? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | O very confident confident somewhat confident not confident |
| H. Did these garden-based activities (Question F) have activities on: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | O very confident <br> O confident <br> O somewhat confident <br> O not confident |
| 1. increasing social desirability of frui vegetables (e.g., students shared favorit fruits and vegetables)? |  | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 2. increasing appreciation about plants (e.g., what plants need to grow, life cyc photosynthesis)? |  | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 3. benefits of eating fruits and vegetabl grown in the garden (e.g., healthy, loca for the environment)? | good | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 4. working in the garden (e.g., planting weeding, watering, checking plant grow |  | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |
| 5. harvesting what was grown in the garden? |  | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |  |


| 6. decreasing fears of trying new fruits and vegetables (e.g., have students smell herbs before trying them)? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. MyPlate's recommendation to make half their plate fruits and vegetables at every meal? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 8. increasing appreciation for how different cultures traditionally cook various fruits and vegetables? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 9. setting goals (personal or group) for increasing consumption of fruits and vegetables? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |
| 10. monitoring progress toward personal or group goals for eating more fruits and vegetables? | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ | $\begin{aligned} & \text { O Yes } \\ & \text { O No } \end{aligned}$ |

${ }^{\text {a For }}$ afterschool - Question E: Fill in how many of the afterschool "groups" (from the General Information section, above) had garden-based activities. Question F: Fill in how many garden-based activities, on average, each of these afterschool groups got. Question G: Fill in how many garden-based activities, on average, had an opportunity to eat fruits and vegetables (either through tastings or cooking) for each of these afterschool groups.

## Please share explanations or other important context for Focus Area 2

How did you obtain these answers? (check all that apply)

## Team members:

T Team members conducted these garden-based activities themselves

- Directly observed others doing these garden-based activities
Talked to one or more teachers, administrator, staff or parents
- Surveyed all teachers

Reviewed curriculum/lesson plans used

- Other:


## FOCUS AREA 3: ACCESS (School Meals)

I. Did the school serve lunch to students?

O Yes
O No (if No, skip to Question Q)
J. Was the lunch line set up so that: (choose 1 answer per row)

| 1. fruits and vegetables (excluding those on salad bar) were appealing (e.g., brightly colored, not wilted)? | O Never | O Seldom | O Often | O Most or all days | O very confidentO confidentO somewhat confidentO not confident |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. trays had pre-plated vegetables to help establish vegetables as a social norm? | O Never | O Seldom | O Often | O Most or all days |  |
| 3. fruit was displayed nicely (e.g., in bowls or baskets)? | O Never | O Seldom | O Often | O Most or all days |  |
| 4. fruit was made easier to eat by cutting into halves or quarters (as appropriate, e.g., oranges)? | O Never | O Seldom | O Often | O Most or all days |  |
| 5. fruit and vegetable recipes were given creative or descriptive names that were posted on menu boards or signs? | O Never | O Seldom | O Often | O Most or all days |  |

K. Did the school offer a salad bar at lunch?

O Yes
O No (if No, skip to Question M)
L. Was the salad bar: (choose 1 answer per row)

| 1. highly visible (e.g., part of lunch line, high traffic area)? | O Never | O Seldom | O Often | O Most or all days | $\bigcirc$ very confident <br> O confident <br> somewhat <br> confident <br> not confident |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. a proper height for students? | O Never | O Seldom | O Often | O Most or all days |  |
| 3. structured so that students could put down their tray while taking salad? | O Never | O Seldom | O Often | O Most or all days |  |
| 4. filled with at least three different fruits and vegetables? | O Never | O Seldom | O Often | O Most or all days |  |
| 5 appealing (e.g., kept neat, filled with fresh-looking fruits and vegetables)? | O Never | O Seldom | - Often | O Most or all days |  |
| 6. supplied with serving utensils that were appropriate size and type for students? | O Never | O Seldom | O Often | O Most or all days |  |
| 7. replenished as needed? | O Never | O Seldom | O Often | O Most or all days |  |
| 8. manned with an adult to encourage and help students to take salad? | O Never | O Seldom | O Often | O Most or all days |  |
| 9. encouraged by having an adult put salad bar items on a plate \& bring around to students as they ate? | O Never | O Seldom | O Often | O Most or all days |  |
| 10. used by adults (e.g., teachers, principals, staff, etc.) to model salad eating behavior? | O Never | O Seldom | O Often | O Most or all days |  |

Several of the indicators and answer options in "Focus Area 3: Access" and a few of the cafeteria-related questions in "Focus Area 4: School Community" are adapted from the Smarter Lunchroom Self Assessment (2014), developed by Food \& Brand Lab, The Cornell Center for Behavioral Economics, Child Nutrition Program.

## Appendix G - Healthy School Progress Report Version 4, PY2016 (continued)

## FOCUS AREA 3: ACCESS (School Meals), continued

M. The cafeteria was: (choose 1 answer per row)

| 1. clean (e.g., tables and floors clear, garbage cans were not overflowing). | O Never | O Seldom | O Often | O Most or all days | O very confident <br> O confident <br> O somewhat confident <br> O not confident |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. decorated to make the cafeteria and serving line inviting (e.g., student artwork, colorful posters, colorful paint on walls). | O Never | O Seldom | O Often | O Most or all days |  |
| 3. at a reasonable noise level (e.g., no fighting, yelling, whistle blowing). | O Never | O Seldom | O Often | O Most or all days |  |
| 4. staffed by food service workers who encouraged students to take and eat fruits and vegetables. | O Never | O Seldom | O Often | O Most or all days |  |
| 5. staffed by one or more adults (not including food service staff) who encouraged students to take and eat fruits and vegetables. | O Never | O Seldom | O Often | O Most or all days |  |

N. Does the school have tastings of fruits and vegetables offered at school meals?

O Yes
O No (if No, skip to Question P)
O. Tastings of fruits and vegetables in school meals: (choose 1 answer per row)

| 1. were offered by having tastings in high traffic areas of the cafeteria. | O Never | O 1-5 times total | O 6-9 times total | O 10 times or more | very confidentconfidentsomewhat confidentnot confident |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. were offered through students preparing and eating recipes from the school lunch menu (count total, for example if 5 classes each prepared 2 different recipes that would be 10 times). | O Never | O 1-5 times total | O 6-9 times total | O 10 times or more |  |
| 3. were offered by providing families opportunities to taste fruits and vegetables served in school meals (e.g., before school, after school, or at school events). | O Never | O 1-5 times total | O 6-9 times total | O 10 times or more |  |
| 4. involved teacher, principal, school staff, or other students offering fruits and vegetables to students. | O Never | O 1-5 times total | O 6-9 times total | O 10 times or more |  |
| 5. were summarized based on who liked and didn't like the fruits and vegetables and results were posted for the school community (e.g., bulletin board, school website, newsletter, email blast). | O Never | O 1-5 times total | O 6-9 times total | O 10 times or more |  |

P. How many times was local food served in school lunch (exclude milk)? (choose 1 answer)
"Local food" (in general) does not have an established definition. Some base it on number of miles, others on state boundaries, etc. For this question, use whatever your school defines as "local food." Please add a comment on how your school defines local foods and what local foods were primarily served on the explanation page for this focus area.
O No local food was served.

O Local food was served 1-2 times during the year (e.g., as part of a harvest celebration).
O Local food was served 3-9 times during the year (e.g., once a week through the harvest season or every day during a week-long harvest celebration).

O Local food was served about 10-20 times during the school year (e.g., once or twice a month throughout the school year, or many harvest celebrations).

O Local food was served about 21-39 times during the school year (e.g., several times a month or once a week or more during a long harvest season).
O Local food was served at least 40 times during the school year (e.g., at least once a week).

Please share explanations or other important context for Focus Area 3

How did you obtain these answers? (check all that apply)

Team members:

- Spent time in the cafeteria helping with school meals and observing
Talked to school food service staff
Talked to one or more teachers, school administrators or other school staff
- Surveyed school food service staff O Other:


## Appendix G - Healthy School Progress Report Version 4, PY2016 (continued)

## FOCUS AREA 4: SCHOOL COMMUNITY (School Culture)

Q. The school made a conscious effort to have fruits and vegetables and other healthy foods as the dominant choice: (choose 1 answer per row)

| 1. at classroom snacks, celebrations, or rewards. | O Never | O Sometimes | O Most of the time | O Does not have these | O very confidentconfidentsomewhat confidentnot confident |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. at school events. | O Never | O Sometimes | O Most of the time | O Does not have these |  |
| 3. at bake sales (healthy foods can include healthier, homemade baked goods such as carrot cake or apple bread). | O Never | O Sometimes | O Most of the time | O Does not have these |  |
| 4. as part of fundraisers (e.g., selling oranges, seed packets, healthy recipe cookbooks instead of candy bars). | O Never | O Sometimes | O Most of the time | O Does not have these |  |
| 5 . in vending machines (this can also include nuts, seeds, healthy bars). | O Never | O Sometimes | O Most of the time | O Does not have these |  |

R. The school respected healthy eating by: (choose 1 answer per row)

1. having school meals integrated into the school day (e.g., same student behavior expectations and style of discipline during O Yes O No school meals as other times of day, teachers and administrators present during school meals).
2. getting student groups involved in developing creative and descriptive names for school meal menu items.
3. having older students serve as mentors or role models to encourage younger students to eat fruits and vegetables (e.g., helping with salad bar in the cafeteria, teaching lessons in the classroom).
4. providing announcements (e.g., over loudspeaker or as students lined up to get lunch) about what was being served for lunch and encouraged students to eat fruits and vegetables.
5. hosting local celebrities (e.g., farmers, chefs, politicians, sports heroes, media personalities) to dine (at least once) with students in the cafeteria.

O very confident
O confident
O somewhat confident
O not confident
S. The school encouraged families to eat more fruits and vegetables by: (choose 1 answer per row)

| 1. improving access to healthy foods (e.g., providing information about where to sign up for Supplemental Nutrition Assistance Program (SNAP), SNAP-based incentives such as double bucks at farmers markets, and/or locations of food pantries). | O Yes | O No | O very confidentconfidentsomewhat confidentnot confident |
| :---: | :---: | :---: | :---: |
| 2. offering at least two workshops or events for families that focused on eating more fruits and vegetables (e.g., cooking, gardening, eating on a budget, healthy eating, sharing foods from families' cultural backgrounds). | O Yes | O No |  |
| 3. actively promoting farmers market, CSAs, or other places where local foods are available. | O Yes | O No |  |
| 4. sending home newsletters with motivational and inspirational messages about eating fruits and vegetables, simple fruit and vegetable recipes, and/or shopping tips. | O Yes | O No |  |
| 5. providing opportunities for adult family members to volunteer in the cafeteria during meals and/or during nutrition education lessons, school garden lessons, and/or during school-wide food-related events. | O Yes | O No |  |

## FOCUS AREA 4: SCHOOL COMMUNITY (School Culture), continued

T. Students had opportunities to learn about food production, local farms, or composting by: (choose 1 answer per row)

| 1. having several classes interacting with local farmers (e.g., local farmers visiting schools, exchanging letters with local farmers). | O Yes | O No | O very confidentconfidentsomewhat confidentnot confident |
| :---: | :---: | :---: | :---: |
| 2. providing field trips for at least several classes that were related to learning about food and the food system (e.g., farm or community gardens, farmers markets, local food processors, restaurants that use local foods). | O Yes | O No |  |
| 3. hosting school events (either food related or other such as students reading poetry, singing, or displaying art) in school garden or at close-by community gardens or farms. | O Yes | O No |  |
| 4. providing opportunities for students to learn about what foods are locally available through different seasons (e.g., Harvest of the Month). | O Yes | O No |  |
| 5. having a composting program (e.g., compost school meal waste, families bring scraps from home to school garden compost). | O Yes | O No |  |

U. The school's physical space was set up to support eating fruits and vegetables and other healthy foods by: (choose 1 answer per row)

| 1. posting student work from nutrition education or garden-based activities (e.g., writing projects, poems, science projects) on bulletin boards or other prominent places. | O Yes | O No | very confidentconfidentsomewhat confidentnot confident |
| :---: | :---: | :---: | :---: |
| 2. having photos of gardens, farms or fruits and vegetables in stairwells, hallways and other places. | O Yes | O No |  |
| 3. posting signs with what is served in school meals around the school. | O Yes | O No |  |
| 4. having a dedicated space for providing food-related resources for families (e.g., SNAP info, fruit and vegetable recipes). | O Yes | O No |  |
| 5. having a dedicated room for nutrition ed and/or garden-based activities (e.g., cooking classroom, indoor garden room). | O Yes | O No |  |

Please share explanations or other important context for Focus Area 4

How did you obtain these answers? (check all that apply)

Team members:
Participated in making these activities happen

- Directly observed these activities happen
- Talked to school administrators, teachers or, other school staff
- Surveyed school administrators, teachers, or other school staff - Other:


## Appendix G - Healthy School Progress Report Version 4, PY2016 (continued)

## SECTION 3: STAYING POWER

This section asks questions about the process of institutionalizing activities across the four focus areas.

Focus Area 1: Knowledge (nutrition education)

1. The school administration supports nutrition education by:
(check all that apply)

- providing time for professional development for teachers to learn about teaching nutrition lessons.
- providing supports (e.g., additional pay, class release time, time and support to write grants) for nutrition education lesson development
participating in nutrition education activities (e.g., visiting classrooms during lessons).
- none of these.

2. The teachers support nutrition education by (check all that apply)

- using their "prep periods" to plan for teaching nutrition education lessons.
- making classroom time to teach nutrition lessons.
sharing successes and challenges with other teachers (e.g., discussing nutrition education at grade level meetings).
- none of these.

3. How was nutrition education connected to the curriculum?
(choose 1 answer)
O no nutrition education.
O nutrition education not connected to curriculum.
O actively working to connect nutrition education to the curriculum (but not connected now).
O nutrition education connected to curriculum (but were not specifically designed to meet standards).
O nutrition education connected to curriculum and specifically designed to meet standards in one core subject (e.g., National Common Core Standards [English and Math], Next Generation Science Standards, state level standards, or local scope and sequence").
O nutrition education connected to curriculum and specifically designed to meet standards in $\mathbf{2 +}$ core subjects (same standard examples as above).

Focus Area 3: Access (school meals)
9. The school administration supports healthy school meals by:
(check all that apply)

- supporting the food service director in making changes (e.g., procuring local food, tweaking line design to nudge students to healthier options).
- providing ample staff in the lunchroom for managing students so they focus on eating lunch.
$\square$ being a positive presence in the cafeteria (e.g., encouraging students to eat, eating with students).
- none of these.

10. The school food service director supports healthy meals by:
(check all that apply)
d dedicating time and effort to procuring food from local sources.

- preparing recipes from scratch for school meal items.
- avoiding use of prepared, processed food items
- supporting a salad bar with a wide variety of items.
- supporting use of food grown in the school garden in school meals.
. being receptive to making changes that will nudge students toward healthy options (e.g., changing line arrangement and placement, decorations, creative names for fruit and vegetable dishes).
- providing encouragement to all food service staff to get students excited about eating school meals (e.g. use the creative names of fruit and vegetable dishes, remind students what food is local or from the garden, encourage students to try new foods).
- none of these.

11. Teachers support healthy meals by: (check all that apply)

- reminding students what is being served for lunch and encouraging them to eat fruits and vegetables.
asking students about what they thought of lunch when they return to the classroom
being with their students at least once in a while during school lunch.

4. Parents support nutrition education by: (check all that apply)

- raising funds to support nutrition education.
- encouraging administration and teachers to make time for nutrition education
- assisting during nutrition education activities (during the school day).
- assisting students doing nutrition education homework, particularly setting and monitoring goals for behavior change (this can be tracked by having goal sheets parents sign and return).
․ none of these.
Focus Area 2: Engagement (school garden)

5. The school administration supports the school garden by:
(check all that apply)

- providing time for professional development for teachers to learn about conducting garden-based activities.
- providing supports (e.g., additional pay, class release time, time and support to write grants) for teachers to develop garden-based activities and/or maintain the school garden.
- participating in garden-based activities (e.g., visiting garden or classroom during garden-based activities).
- none of these.

6. The teachers support the school garden by: (check all that apply)
using their "prep periods" to plan for conducting garden-based activities.

- making classroom time for conducting gardenbased activities.
- working together (e.g., at grade level meetings) to share successes and challenges with conducting garden-based activities.
. maintaining the garden and/or being member of the school garden committee or club
b none of these.

12. Parents support healthy meals by (check all that apply)

- working with food service staff on how to create healthy meals (e.g., being on nutrition committee, reviewing menus).
- volunteering to help during school meals (at least a few parents).
- none of these.

Focus Area 4: School Community (culture)
13. School administration implements practices around healthy eating by:
(check all that apply)

- providing resources to teachers and parents about what healthy foods are acceptable and unhealthy foods are not acceptable for serving in
the class and at school events.
enforces that only healthy foods are served in the classroom and at school events.
avoids having fundraisers that sell unhealthy food (e.g., candy bars).

14. The school staff, besides teachers and administrators, (e.g., school nurse, office staff, security guards, custodians) supports a healthy school food environment and/or the school's gardening program.
(choose 1 answer)
O no, school staff not supportive.
O yes, school staff supportive, but not actively involved.
O yes, school staff are supportive and actively involved.
15. How many healthy food, nutrition, and gardening "champions" (e.g., a person who promotes healthy food issues and gets others excited) does the school have (could be teacher, staff or parent; don't count the FoodCorps member)?
(choose 1 answer)
O one champion.
O two champions.
three or more champions.
16. How were garden-based activities connected to the curriculum?
(choose 1 answer)
O no garden-based activities
O garden-based activities not connected to the curriculum.
O actively working to connect garden-based activities to the curriculum (but not connected now).
O garden-based activities connected to curriculum (but were not specifically designed to meet standards).
O garden-based activities connected to curriculum and specifically designed to meet standards in one core subject (e.g., National Common Core Standards (English and Math), Next Generation Science Standards, state level standards, or local "scope and sequence").
O garden-based activities connected to curriculum and specifically designed to meet standards in 2+ core subjects (same standard examples as above).
17. Parents support nutrition education by: (check all that apply)

- raising funds to support the school garden.
- encouraging administration and teachers to institutionalize the school garden.
maintaining the garden program (e.g., work in the garden, participate in garden committee/club, help when classes are in the garden doing gardenbased activities).
- none of these.

16. Did the school have a wellness committee or club
(choose 1 answer)
O no known wellness committee/club.
O yes, but meets irregularly and/or distributes healthrelated resources (no planning or implementing activities).
O yes, meets regularly to plan and implement healthy food-related activities for the school.
17. If there is an active wellness committee or club, who were the active members?
(check all that apply)

- not applicable, no committee or not active
- students.
- parents.
- food service staff
other school staff
- teachers.
- administrators
- other:

For all Staying Power Section questions, how did you obtain the answers? (check all that apply)

## Team members:

- Talked to one or more school administrators
- Talked to one or more teachers
- Attended teacher meeting(s)

Talked to one or more parents
Attended parent association meeting(s)

- Talked to other school staff
- Reviewed school "handbook" (paper or online)
- Observed supportive practices (e.g., healthy foods being served at school events, healthy fundraisers administrator visiting garden during garden-based activities)
Attended wellness or garden committee/club meetings


## Appendix G - Healthy School Progress Report Version 4, PY2016 (continued)

12. Did the state and/or school district have a policy about geographic preference for local food procurement?
(check all that apply)
A geographic preference provides a competitive advantage to local, minimally processed foods.

- Yes for state, please share what you know:
$\square$ Yes for district, please share what you know:
$\square$
- No known geographic preference policy.

13. If there was a state, and/or district policy for geographic preference to what extent was the policy implemented?
(choose 1 answer)
O products from local growers or distributors were regularly requested or sought out in bids or orders.
O products from local growers or distributors were sometimes requested or sought out in bids or orders.
O local products may be supplied but were not specified in bids or orders.
O even though policy existed, it was not implemented.
O no known geographic preference policy.
14. Was school garden produce allowed to be used in school meals? (choose 1 answer)
yes.
O no.
O unsure.

For all Policy Section questions, how did you obtain the answers?
(check all that apply)

## Team members:

- Talked with school administrator
- Talked with district curriculum administrator
- Talked with district food service administrator
- Talked with state level administrator (e.g., State Department of Education)
- Talked with host site staff
- Talked with state FoodCorps fellow
- Reviewed state level policy (paper or online)
- Reviewed district level policy (paper or online)
- Attended a district level policy meeting
- Attended a different meeting (describe):
- Other:

FoodCorps Healthy School Progress Report — Evidence for Questions in Each Focus Area

Question A: How many classes in each grade received nutrition education lessons focused on fruits and vegetables?

Question B: Among classes in each grade that received nutrition education lessons that focused on fruits and vegetables how many lessons did each class get?
Question C: How many of these lessons (Question B) had opportunities for eating fruits and vegetables, either through tastings or cooking (e.g., chopping, mixing, adding ingredients)?
Question D: Did these lessons (Question B) have activities on: (this prompt is followed by a list of 10 types of activities that are "theory-based determinants of change")

The nutrition education literature has found that nutrition education with school children improves eating behaviors (Kann et al, 2007; Contento 2011). Also, nutrition education is more effective when it is behaviorally focused (Contento 2011; Roseman et al 2011). This means that it is specifically targeted at what eating pattern the intervention wants the audience to change (e.g., fruits and vegetables).

Research has found that interventions with more total lessons, as well as lessons spaced over a longer period of time (e.g., over most or all of the school year) are more likely to be effective at changing behavior (SobelGoldberg et al, 2013; Shaya, 2008; Van Cauwenberghe et al, 2010).
In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences, that can occur from both tasting and cooking fruits and vegetables, has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).
In the field of behavioral nutrition education on of the key components to effective behavior change is to enhance motivation. To investigate the best way to do this nutrition education researchers have worked closely with colleagues in the field of psychology to explore what kind of information (e.g., talking about the benefits of healthier behavior or helping people think about the barriers they might face in changing and ways to overcome them) is most likely to motivate people to change behavior (Contento, 2011)
These kinds of information are called "determinants" since they "determine" how much people change their behaviors from an intervention. Researchers often put many determinants together into a "theory" and then cover all the determinants in the theory during the intervention. This is called "theory-based nutrition education" and makes interventions more likely to change behavior (Contento, 2011). One theory that has been used extensively in school-based nutrition education is social cognitive theory (Contento 2011). This has also been used specifically in evaluations of Farm to School (Roche et al 2012; Berlin et al 2013). The Roche study (2012) found three determinants led to the most behavior change: 1) decrease fear of trying new foods (neophobia); 2) increase perception that it is socially desirable and acceptable to eat vegetables and fruits (social norms); and 3) increase confidence in abilities to eat fruits and vegetables (self-efficacy). This study also found that students respond very well to having "food system knowledge" as the base of the education. The Berlin article (2013) called for more systematic inclusion of determinants of social cognitive theory into farm to school program.
Additionally, more recent analyses have investigated how overall psychosocial theories work for changing children's fruit and vegetable consumption (Di Noia and Bryd-Bredbenner, 2014: Diep et al, 2014), with the Diep (2014) study calling for more research to understand the practical- and experience-based procedures that can compliment theory to make interventions effective at changing behavior.
Overall, changing fruit and vegetable intake through school based education programs has had modest results (Evans et al, 2012) and more research is needed.
A second key component of making nutrition education effective is to facilitate ability to make behavior change. This means providing the specific factual knowledge (e.g., we need to eat at least five different fruits and vegetables each day) and procedural skills (how to make a colorFUL salad from the salad bar) that are and vegetables each day) and procedural skills (how
needed to do the desired behavior (Contento, 2011).
Cooking is also used to facilitate ability. When students prepare in their classrooms the specific recipes that are served in the lunchroom, they are more likely to eat them at lunch (Liquori et al, 1998) and research has found that when students are given recipes to prepare at home that those children who do make the recipes at home are more likely to change their behavior (Cullen et al, 2007). Additionally, a qualitative evaluation of a kitchen garden program in Australia (Gibbs et al, 2013) indicated that when students were involved in a kitchen garden activities their willingness to try new foods increased and many children talked about cooking what garden activities their willingness to try new
they prepared in school with their families.

## Appendix G - Healthy School Progress Report Version 4, PY2016 (continued)

## Question E: How many classes in each grade received garden-based activities?

There is evidence that students who participate in garden lessons have increased fruit and vegetable consumption (McAleese and Ratkin, 2007; Ratcliffe et al 2009; Wright and Rowell 2010; Langellotto and Gupta 2012).
Question F: Among the classes in each grade who received garden-based activities, how many garden-based activities did each class get?

Question G: How may of these garden-based activities (Question F) had opportunities for eating fruits and vegetables, either through tastings or cooking (e.g., chopping mixing, adding ingredients)?

Question H: Did these garden-based activities (Question F) have activities on: (this prompt is followed by a list of 10 types of activities that are "theory-based determinants of change")
the intervs to be evidence that garden-based intervention that included more overall visits to the garden were Ratkin, 2007; Ratiffere more likely students are to increase fruit and vegetable consum

In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preferences has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).

Garden programs are often integrated into the core curriculum to enable teachers to spend more time in the garden (Lineberger, 1998). This has been reinforced more recently, "unless teachers perceive school gardens as outdoor classrooms critical to teaching the skills and content they're responsible for imparting, students will have limited exposure to any school garden experience." (Hirschi, 2012).
As discussed above in the Knowledge Focus Area, Question D, when students learn specific skills, particularly those that are about growing, preparing and eating fruits and vegetables they will be more likely to eat then in the future.

If Question J: Was the meal line set up so that: (this prompt is followed by a list of 5 practices that could increase fruit and vegetable consumption)

Question L: Was salad bar... (this prompt is followed by a list of 10 practices that could increase salad bar consumption)

Question M: The cafeteria was... (this prompt is followed by a list of 5 practices that will make the cafeteria atmosphere more conducive to eating)

Question O: Tasting of fruit and vegetables in school meals: (this prompt is followed by a list of 5 different tasting opportunities)

Question P: How many times was local food served in schoo lunch (exclude milk)?

Question Q: The school made a conscious effort to have frui and vegetables and other healthy foods as the dominant choice: (this prompt is followed by 5 practices that could make fruits and vegetables and other healthy foods readily available)

Question R: The school respected healthy eating by: (this prompt is followed by 5 practices that would create an atmosphere where healthy eating is respected

Question S: The school encouraged families to eat more fruits and vegetables by: (this prompt is followed by five activities that would provide families increased access, motivation, knowledge and skills to eat fruits and vegetables)

Question T: Students had opportunities to learn about food production, local farms, or composting by: (this prompt is followed 5 activities that can help student get more connected to farms and food production)
Question U: The school's physical space was set up to support eating fruit and vegetables and other healthy foods by: (this prompt is followed by 5 practices that would create health promoting school environment)

The Cornell Center for Behavioral Economics that is within Child Nutrition Program has worked since 2009 to create research-based lunchrooms designed to guide students to healthier choices (Smarter Lunchroom Self Assessment, 2014). For this indicator the cafeteria will be assessed for specific Smarter Lunchroom strategies related on "promoting vegetables \& salad" and "focusing on fruit."

Studies that assess children fruit and vegetable intake before and after introduction of a salad bar in the lunchroom have found salad bars to contribute to increased fruit and vegetable intake (Adams, 2005, Slusser et al, 2007).

As with above (Question J) the Smarter Lunchroom Self Assessment has key changes to make to the eating atmosphere to help assure that students will eat what is served at school meals, these will be used for this indicator.

In the nutrition education literature, there is evidence that providing tastings to fruits and vegetables can increase preferences (Wong et al, 2012; Chu et al, 2013) for fruits and vegetables. Also, increasing preference has been found to increase consumption (Baxter and Thompson 2002; Cullen et al 2003; Brug et al, 2008; Di Noia and Byrd-Bredbenner, 2014).
The foundation of the Farm to School movement is to provide students with experiences eating local foods (Taylor and Johnson, 2013). Although there is not much research that directly links local food consumption, specifically, when local foods are used they can be tasted to build preferences and local foods can be used to enhance motivation, using connections with where it was grown to get children excited about eating the food.

The food that is available at classroom and school events can have a powerful influence over students eating habits (Centers for Disease Control and Prevention and Bridging the Gap Research Program, 2014). As of the beginning of school 2006, all schools have been required to have wellness policies (mandates around wellness policies are currently being updated as part of the 2010 Healthy Hungry Free Kids Act). Standards for food are a recommended part of wellness policies to build a culture of healthy food that can support changing eating behaviors.
Decreasing marketing and promotion of less healthful foods and promoting healthful foods can help to promote positive eating behaviors (Institute of Medicine, 2005).

In order to create a culture of health in schools, both administrators and teachers need to be receptive to and embrace a culture of health (Center for Disease Control and Prevention, 2011). Additionally, administrative and teacher support has been found to be a key factor in developing successful school garden programs (Ozer, 2006).

A review of what makes nutrition education programs effective at changing behavior found that family involvement, particularly for children in elementary grades (Roseman, 2011).

Although there has been limited peer-reviewed publications on Farm to School work (despite its widespread implementation) (Taylor and Johnson, 2009), there has been called for more research and more overall adoption and integration into the school culture (Roche et al, 2012; Berlin et al, 2013)

A study that showed that a social marketing campaign could be a method to increase fruit and vegetable consumption (Thompson, 2007). Others have stated that combining social marketing, which creates a positive physical environment can also be a way to reinforce the education and experiences students have with healthy food.

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## Appendix H - Scoring Rubric for Healthy School Progress Report PY2016

## Scoring the FoodCorps Healthy School Progress Report

SECTION 1: General Info (0 points total)
This section is background information about you, your service site, and your school.

| Question | Points <br> Possible | Steps |
| :--- | :---: | :--- |
| 8. What grades are in the school? | - | Calculate Total grades: Add up the total number of "yes" boxes (not counting after school) written <br> across the row. |
| 9. How many classes in each grade? | - | Calculate Total classes: Add up all classes in each grade (not counting after school) written across <br> the row. |

SECTION 2: Healthy School Progress Report ( 100 points total)
This section asks questions specific to the four focus areas that contribute to healthy schools. This section also asks about afterschool programming for planning purposes, but these questions will not contribute to the final score. Each focus area is worth 25 points.

Focus Area 1: Knowledge (nutrition education, NE) 25 points

| Question | Points Possible | Steps |
| :---: | :---: | :---: |
| A. How many classes in each grade received nutrition education lessons focused on fruits and vegetables? | 5 | 1. Calculate Classes receiving NE: Add up all classes in each grade (not counting after school) written across question A. <br> 2. Score Formula: (Classes receiving NE / Total classes) X 5 <br> 3. If score is a 0 for question $A$, also assign a score of 0 for questions $B, C$, and $D$ and then skip to question E . |
| B. Among the classes in each grade that received nutrition education lessons that focused on fruits and vegetables, how many lessons did each class get? | 5 | 1. Convert number of lessons written in on question $B$ to points for each grade: <br> 1-2 lessons $=1$ point <br> 3-4 lessons $=2$ points <br> $5-6$ lessons $=3$ points <br> $7-9$ lessons $=4$ points <br> $10+$ lessons $=5$ points <br> 2. Calculate Total points per grade: For each grade: (points) X (answer on question A ) <br> 3. Calculate Total points question B: Add up all total points for all grades <br> 4. Score formula: Total points question B / Classes receiving NE (from question A) |


| C. How many of these lessons (question B) had opportunities for eating fruits and vegetables, either through tastings or cooking? | 5 | 1. Convert number of opportunities for eating fruits and vegetables written in on question C to points for each grade: <br> 0 opportunities for eating fruits and vegetables $=0$ points <br> $1-2$ opportunities for eating fruits and vegetables $=1$ point <br> $3-4$ opportunities for eating fruits and vegetables $=2$ points <br> $5-6$ opportunities for eating fruits and vegetables $=3$ points <br> $7-9$ opportunities for eating fruits and vegetables $=4$ points <br> $10+$ opportunities for eating fruits and vegetables $=5$ points <br> 2. Calculate Total points per grade: For each grade: (points) X (answer on question A ) <br> 3. Calculate Total points question C: Add up all total points for all grades <br> 4. Score formula: Total points question C/Classes receiving NE (from question A) |
| :---: | :---: | :---: |
| D. Did these lessons (question B) have activities on: (check all that apply) | 10 | 1. Calculate Grades receiving NE: Add up total number of grades (not classes) receiving nutrition education not counting afterschool (use data from question A). <br> 2. Calculate Total "yes" checked: Add up all the times "yes" was checked from D1 to D10. <br> 3. Score formula: Total "yes" checked / Grades receiving NE |

Focus Area 2: Engagement (school gardens) 25 points

| Question | $\begin{gathered} \hline \text { Points } \\ \text { Possible } \\ \hline \end{gathered}$ | Steps |
| :---: | :---: | :---: |
| E. How many classes in each grade received garden-based activities (garden-based activities)? | 5 | 1. Calculate Classes receiving garden-based activities: Add up all classes in each grade (not counting after school) written across question E . <br> 2. Score Formula: (Classes receiving garden-based activities / Total classes) X 5 <br> 3. If score is a 0 for question E , also assign a score of 0 for questions $\mathrm{F}, \mathrm{G}$, and H and then skip to question I. |
| F. Among the classes in each grade that received garden-based activities, how many garden-based activities did each class get? | 5 | 1. Convert number of garden-based activities written in on question $F$ to points for each grade: <br> $1-2$ garden-based activities $=1$ point <br> 3-4 garden-based activities $=2$ points <br> 5-6 garden-based activities $=3$ points <br> 7-9 garden-based activities $=4$ points <br> $10+$ garden-based activities $=5$ points <br> 2. Calculate: Total points per grade: For each grade: (points) $X$ (answer on question $E$ ) <br> 3. Calculate: Total points question F : Add up all total points per grade <br> 4. Score formula: Total points question F / Classes Receiving garden-based activities (from question E ) |


| G. How many of these garden-based activities (question F) had opportunities for eating fruits and vegetables, either through tastings or cooking (e.g., chopping, mixing, adding ingredients)? | 5 | 1. Convert number of opportunities for eating fruits and vegetables written in on question G to points for each grade: <br> 0 opportunities for eating $\mathrm{F} \& \mathrm{Vs}=0$ points <br> 1-2 opportunities for eating $\mathrm{F} \& \mathrm{Vs}=1$ point <br> $3-4$ opportunities for eating $\mathrm{F} \& \mathrm{Vs}=2$ points <br> 5-6 opportunities for eating $\mathrm{F} \& \mathrm{Vs}=3$ points <br> $7-9$ opportunities for eating F\&Vs $=4$ points <br> $10+$ opportunities for eating fruits and vegetables $=5$ points <br> 2. Calculate Total points per grade: For each grade: (points) X (answer on question E ) <br> 3. Calculate Total points question $G$ : Add up all total points per grade <br> 4. Score formula: Total points question G / Classes receiving garden-based activities (from question E ) |
| :---: | :---: | :---: |
| H. Did these garden-based activities (question F ) have activities on: (check all that apply) | 10 | 1. Calculate Grades receiving garden-based activities Add up total number of grades (not classes) receiving garden based activities not counting afterschool (use data from question E) <br> 2. Calculate Total "yes" checked: Add up all the times "yes" was checked from H1 to H10. <br> 3. Score formula: total "yes" checked / Grades receiving garden-based activities |

Focus Area 3: Access (school cafeteria) 25 points

| Question | Points <br> Possible | Steps |
| :--- | :---: | :--- |
| I. Did the school serve lunch to students? | - | If No, score questions J-P as 0 and then skip to question Q. <br> If Yes, go to question J. |
| J. Was the lunch line set up so that: | $\mathbf{5}$ | R.Convert response options to points for each of the five rows: <br> Never $=0$ points <br> Seldom $=0.33$ points <br> Often $=0.66$ points <br> Most or all days $=1$ point <br> Score formula: Add total points from J1 to J5. <br> K. Did the school offer a salad bar at lunch? |
| - | If No, score question L as 0 and then skip to question M. <br> If Yes, go to question L. |  |


| L. Was the salad bar: | 5 | 1. Convert response options to points for each of the ten rows: <br> Never $=0$ points <br> Seldom $=0.33$ points <br> Often $=0.66$ points <br> Most or all days $=1$ point <br> 2. Calculate total points: Add up all the points from L1 to L10. <br> 3. Score formula: total points / 2. |
| :---: | :---: | :---: |
| M . The cafeteria was: | 5 | 1. Convert response options to points for each of the five rows: <br> Never $=0$ points <br> Seldom $=0.33$ points <br> Often $=0.66$ points <br> Most or all days $=1$ point <br> 2. Score formula: Add total points for M1 to M5. |
| N. Does the school have tastings of fruits and vegetables offered at school meals? |  | If No, score question O as 0 and skip to question P . If yes, go to question $O$. |
| O. Tastings of fruits and vegetables in school meals: | 5 | 1. Convert response options to points for each of the five rows: <br> Never $=0$ points <br> $1-5$ times total $=0.33$ points <br> 6-9 times total $=0.66$ points <br> 10 or more times $=1$ point <br> 2. Score formula: Add total points for O1 to O5. |
| P. How many times was local food served in school lunch (exclude milk)? (choose 1 answer) | 5 | 1. Convert response option to points: <br> 0 points $=$ No local food was served. <br> 1 points = Local food was served 1-2 times during the year (e.g., as part of a harvest celebration). <br> 2 points =Local food was served 3-9 times during the year (e.g., once a week through the harvest season or every day during a week-long harvest celebration). <br> 3 points $=$ Local food was served about $10-20$ times during the school year (e.g., once or twice a month throughout the school year, or many harvest celebrations). <br> 4 points = Local food was served about 21-39 times during the school year (e.g., several times a month or once a week or more during a long harvest season). <br> 5 points $=$ Local food was served at least 40 times during the school year (e.g., at least once a week). <br> 2. Score formula: Points equal to score |

## Appendix H - Scoring Rubric for Healthy School Progress Report PY2016 (continued)

Focus Area 4: School Community (school culture) 25 points

| Question | Points Possible | Steps |
| :---: | :---: | :---: |
| Q. The school made a conscious effort to have fruits and vegetables and other healthy foods as the dominant choice: (choose 1 answer per row) | 5 | 1. Convert response options to points for each of the five rows: <br> Never $=0$ points <br> Sometimes $=0.5$ points <br> Most of the time $=1$ point <br> Do not have these $=1$ point <br> 2. Score formula: Add total points for Q1 to Q5. |
| R. The school respected healthy eating by: (choose 1 answer per row) | 5 | 1. Convert response options to points for each of the five rows: $\begin{aligned} & \text { "yes" }=1 \text { point } \\ & \text { "no" }=0 \text { points } \end{aligned}$ <br> 2. Score formula: Add total points |
| S. The school encouraged families to eat more fruits and vegetables by: (choose 1 answer per row) | 5 | 1. Convert response options to points for each of the five rows: $\begin{aligned} & \text { "yes" }=1 \text { point } \\ & \text { "no" }=0 \text { points } \end{aligned}$ <br> 2. Score formula: Add total points |
| T. Students had opportunities to learn about food production, local farms, or composting by: (choose 1 answer per row) | 5 | 1. Convert response options to points for each of the five rows: $\begin{aligned} & \text { "yes" }=1 \text { point } \\ & \text { "no" }=0 \text { points } \end{aligned}$ <br> 2. Score formula: Add total points |
| U. The school's physical space was set up to support eating fruits and vegetables and other healthy foods by: (choose 1 answer per row) | 5 | 1. Convert response options to points for each of the five rows: $\begin{aligned} & \text { "yes" }=1 \text { point } \\ & \text { "no" }=0 \text { points } \end{aligned}$ <br> 2. Score formula: Add total points |

For total score on Focus area 1, add up points from Questions A, B, C, and D (Range 0-25).
For total score on Focus area 2, add up points from Questions E, F, G, and H (Range 0-25).
For total score on Focus area 3, add up points from Questions J, L, M, O, and P (Range 0-25).
For total score on Focus area 4, add up points from Questions Q, R, S, T, and U (Range 0-25).
For total score on Section 2: Healthy School Progress Report, add up points from Questions A, B, C, D, E, F, G, H, J, L, M, O, P, Q, R, S, T, U and round to the nearest whole number (Range 0-100).

SECTION 3: Staying Power ( 60 points)
This section asks questions about the process of institutionalizing activities in the four focus areas.

| Question | Points Possible | Steps |
| :---: | :---: | :---: |
| Focus Area 1: Knowledge (nutrition education) |  |  |
| 1. The school administration supports nutrition education by: (check all that apply) | 3 | 1. Convert each response option checked to 1 point. The "none of these" option counts as 0 points. <br> 2. Score formula: Add total points |
| 2. The teachers support nutrition education by: (check all that apply) | 3 | 1. Convert each response option checked to 1 point. The "none of these" option counts as 0 points. <br> 2. Score formula: Add total points |
| 3. How was nutrition education connected to the curriculum? (choose 1 answer) | 5 | 1. Convert response option to points: <br> 0 points $=$ no nutrition education. <br> 1 points $=$ nutrition education not connected to the curriculum. <br> 2 points $=$ actively working to connect nutrition education to the curriculum (but not connected now). <br> 3 points $=$ nutrition education connected to curriculum (but were not specifically designed to meet standards). <br> 4 points = nutrition education connected to curriculum and specifically designed to meet standards in one core subject (e.g., National Common Core Standards [English and Math], Next Generation Science Standards, state level standards, or local "scope and sequence") <br> 5 points = nutrition education connected to curriculum and specifically designed to meet standards in more than one core subject (same standard examples as above). <br> 2. Score formula: Points equal to score |
| 4. Parents support nutrition education by: (check all that apply) | 4 | 1. Convert each response option checked to 1 point. The "none of these" option counts as 0 points. <br> 2. Score formula: Add total points |
| Focus Area 2: Engagement (school gardens) |  |  |


| 5. The school administration supports the <br> school garden by: (check all that apply) | $\mathbf{3}$ |  | 1. |
| :--- | :--- | :--- | :--- |
| 2. The teachers support the school garden <br> by: (check all that apply) | Convert each response option checked to 1 point. The "none of these" option counts as 0 <br> Score formula: Add total points |  |  |


| Focus Area 4: School Community |  |  |
| :---: | :---: | :---: |
| 13. School administration implements practices around healthy eating by: (check all that apply) | 3 | 1. Convert each response option checked to 1 point. The "none of these" option counts as 0 points. <br> 2. Score formula: Add total points |
| 14. The school staff, besides teachers and administrators, (e.g., school nurse, office staff, security guards, custodians) supports a healthy school food environment and/or the school's gardening program. (choose 1 answer) | 2 | 1. Convert response option to points using the following key: <br> 0 points = no, school staff not supportive <br> 1 points = yes, school staff supportive, but not actively involved. <br> 2 points = yes, school staff are supportive and actively involved. <br> 2. Score formula: Points equal to score |
| 15. How many health food, nutrition, and gardening "champions" (e.g., a person who promotes healthy food issues and gets others enthusiastic) does the school have (could be teacher, staff or parent, but do not count the FoodCorps service member)? (choose 1 answer) | 3 | 1. Convert response option to points using the following key: <br> 1 points = one champion. <br> 2 points = two champions. <br> 3 points $=$ three or more champions. <br> 2. Score formula: Points equal to score |
| 16. Did the school have a wellness committee or club? (choose 1 answer) | 2 | 1. Convert response option to points using the following key: <br> 0 points $=$ no known wellness committee/club. <br> 1 points = yes, but meets irregularly and/or distributes health-related resources (no planning or implementing activities). <br> 2 points $=$ yes, meets regularly to plan and implement healthy food-related activities for the school. <br> 2. Score formula: Points equal to score |
| 17. If there is an active wellness committee or club, who were the active members? (check all that apply) | 5 | 1. Convert each response option checked to 1 point. The "not applicable, no committee or not active" and "other" response options count as 0 points. <br> 2. Score formula: Add total points. |

For a total score on Section 3: Staying Power, add up points from Questions 1 through 17 (Range 0 - 60).
SECTION 4: Policy (not scored)
This section asks questions about the policies on the state, district, and school level that could support a healthy school.

## Process Evaluation Interview Feedback

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## SUMMARY QUESTIONS

Service Member Interview Purposes:

- To better understand the process of completing the progress report from the Service Member perspective.
- To conduct cognitive testing of the Progress Report questions and response options.
- To determine how the Progress Report could be modified to improve accuracy of answers.
- To obtain suggestions for how the Progress Report experience could be more positive for Service Members, Service Sites Supervisors, and school personnel.

Supervisor and School Team Member Interview Purposes:

- To better understand the process of completing the Progress Report from the Service Site Supervisor and School Team Member perspective.
- To determine how the Progress Report could be modified to improve accuracy of answers.
- To obtain suggestions for how the Progress Report experience could be increasingly beneficial for Service Members, Service Sites Supervisors, and school personnel.

1. What needs to be changed about the instrument itself?
a. Which questions need to be clarified or changed? Why?

See orange bullets in the yellow boxes, particularly in the focus areas, staying power, and policy sections.
b. Were there specific questions that had a lot of discrepancies in how the service member interpreted the meaning of the question and/or answered it?

Service members had a lot of trouble, particularly in the fall, answering questions about how much nutrition education students received. This could have been under or over estimated.

Gardening seemed to be more accurate, as at most schools one person seemed to know about garden education.

Access focus area questions were completed mostly by talking to people (primarily food service staff) in the fall, more often by observation in the spring. Service members typically reported the food service staff to be accurate, although a few said that once they spent time in the cafeteria they realized some items food service staff said were happening really were not.

School culture, some service members reported that for the fall the person they got the information from for the school culture section somewhat exaggerated, giving more favorable answers than what the reality seemed to be.

Service members reported that it was easier to be more accurate in the spring, with a year of experience in the school. However, a few noticed inaccurate answers as they viewed the spring progress report during the interview.

Despite all of this, in many of the interviews people commented on the clarity of the questions and, while some terms such as "food justice" and "tracking progress on goals" could have been clarified, understanding seemed to be high.
i. What does this issue imply in terms of analysis for the current dataset as well as future updates to the tool?

Overall, it appears that the fall progress report scores may have been a little bit falsely high, particularly for focus areas 3 and 4 . Focus Area 1 could have been falsely high or low. As an example, some people if they were new to FoodCorps put zeros for all of Focus Area 1 when some teachers might have been doing some nutrition education in the past.
c. Should we be concerned that there is a lot of double-counting between Focus Areas 1 and 2 ?

From what was discussed in these interviews, most people thought these were pretty separate so this does not seem to be an issue.
d. We use the phrase "garden-based activities" in the Progress Report. Did service members interpret and report on this as "lessons," or something separate/in addition to established "lessons"?

This seemed to be interpreted as educational experiences in the garden, as it was intended.
e. Were there questions that should be removed? Why?

Despite people saying it was long, several people commented that all questions seemed to be important. From these interviews it does not seem to be that any questions need to be removed.

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

Report
f. Do we need the grade level grid? Or could we get away with a worksheet that informs the end response?

Service members, service site supervisors, and school team members overwhelmingly liked having it grade by grade. They said that it helped them to see what grades were having less education, helped new service members understand the school, helped with planning process, and in the spring could reflect the teaching that occurred. These interviews seem to be in line with what the service members that were part of the July 2015 pilot indicated. When specifically asked if a percentage of students would get at the same answer, most people thought that it could be less accurate and more often they said it would be less helpful. It is interesting that in the one-on-one nature of the interviews in July 2015 and this year, the responses seems to be different than the group meetings at the regional gatherings.
g. Were there questions that need to be removed because they were too hard to answer across the board?

No, from these interviews no questions needed to be removed. Goal setting and monitoring progress on goals were not understood and need to be clarified. We are also creating the tool for this. In school culture the question about learning about local farms, food production and composting seemed to be misplaced by some. That could be moved to hands-on learning.
h. For the instrument as a whole, how do you (TC) feel about the state of its development and a set of constructs? If you had to give it a "rating" or value?

This is a great question and a hard one to answer.

## Negatives:

Challenging to collect accurate baseline data. This is particularly true for new service members in new schools.

Hard to overcome school personnel's desire to rate their school in a positive way.
Times where something that a service member thought was a lot of work (e.g., developing a fundraiser to sell smoothies or cookbooks with recipes from families) that took significant planning and changing and may have had a positive impact on students and families may only change one question on the Progress Report, one point on the four point scale answer.
To date a validation study (where we would measure these constructs in a different way to see if we get the same answers) has not been completed.

## Positives:

Developed using the research based evidence for what activities in a school could change eating behaviors.
A thorough compilation of questions that could (when fully developed and used in an outcome evaluation study) provide a more accurate assessment of the students experience with education, healthy food, and a positive school culture to understand how this impacts outcomes, particularly eating behaviors, across the board and for individual factors.

Cognitive testing with these interviews has been completed, particularly for the school culture focus area and somewhat for the access focus areas as well as the knowledge and engagement focus areas and overall showed high level of understanding of the questions.

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

Since accuracy seems to be higher for service members who have been in a school the entire school year, this tool will be able to accurately measure change over the years of FoodCorps being in the school. That is changes from year 1 to 2,2 to 3 , and 3 to 4 may be more accurate than measuring the changes that happen during the first year of FoodCorps (due to challenges of getting accurate baseline data).

Many comment that questions were general enough to be able to be adapted to different curricula and schools. Liked that what to do was clear but could be adapted to the culture, needs, and philosophies of different schools.

Overall, people thought that all questions were relevant to FoodCorps mission and "good ideas." People used these as they planned their goals and action plans and also thought about them throughout the year.
i. Do the interview conversations about confidence level corroborate the Progress Report confidence ratings themselves?

Service members seemed to really think about confidence level and thought about the right issues, e.g., observing something or conducting something themselves gives higher confidence than talking to someone else. See question 1 b above also.
2. What additional framing is needed to make this a successful tool?

Important to frame the tool as capturing the experiences of students in the school, not as a tracking of the work of service members, other organizations, teachers, or other school staff. This framing will help develop the lens of having students at the center to capture their learning and hands-on experiences, school meal experiences, school norms, and school culture experiences.
3. What ideas surfaced about how the Progress Report results could be summarized, scored, grouped, or communicated that could lead to understanding or action?

See "Summary Score or Snapshot Score" section below.
4. What additional guidance or training is needed for service members or supervisors in using this tool?

Several people suggested a glossary of terms. Several people commented on how much they liked the descriptions of each of the four focus areas at the beginning of the Progress Report. A few said they had not noticed this until later and once they did thought it was very valuable to share and helped to build a positive understanding of why the Progress Report was important.

A few service site supervisors reported understanding the Progress Report better after the regional gathering and thought if possible they would like to learn more about it sooner.
5. Were there certain people or factors that kept surfacing through the interviews as drivers of success in this process?

People who felt confident that they knew who to go to for information seemed to report a more positive experience and more success. Service members who reported having active and supportive service site supervisors seemed to report more success.

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Big Picture

## Comments and Recommendations

- Important to make the framing clear for what were the four focus areas, what will become "Hands-on Learning, Healthy School Meals, and Schoolwide Culture of Health," that this is about the experience of the STUDENTS. Important to capture everything that was part of the students' experience, whether by FoodCorps, other programs, teachers, or other school staff.
- For new schools who will be completing this for the first time in the fall, it needs to be made clearer (and have reminders throughout) that they are assessing what students experienced in the previous school year.
- Also can be framed as providing suggestions and opportunities for growth to help programming, particularly school personnel see this as different from a compliance survey where any "no" answers will have negative ramifications.
- Provide guidance on whom at the school can provide answers to which questions. Service members realize this may vary by schools, but wanted some guidance on who could provide what information.
- Most service members recommend one-on-one conversations with key people, from the school, service site or other programs, for gathering information and then recommended a meeting for setting goals and making action plans. This is what needs input, buy-in, and commitment throughout the school year.
- Some service members where able to have meetings, typically about every other month, throughout the school year to follow-up on goals and action plans. Those service members reported this as a very positive experience.
- For summary, see next box on "process of gathering information..." below.


## Process of Gathering Information for the Progress Report in the Fall

## Comments and Recommendations

- While the team approach for completing the Progress Report worked for some schools, individual meetings worked better for most schools. Several people found meetings hard to plan and not the recommended for the gathering of information, as school personal are busy and usually only involved in one area.
- However, some felt that when team meetings might be beneficial is during the process of reviewing potential action plan goals, as it is important to get everyone involved choosing goals and creating action plans to meet these goals.
- Almost universally service members felt it was easy to do the Progress Report at the end of the school year, once they were familiar with the school. A few discussed how they had a much better understanding of the importance of gathering accurate information at the end of the school year.
- The level of involvement of the service site supervisors varied. This seemed to be due to their different roles, either within the school or with a partner organization. However, one very telling story was from George Elementary where the service site supervisors discussed how helpful the FoodCorps regional meeting was for understanding the FoodCorps 4 pillars and how after this meeting the service site supervisors explained this to everyone and this seemed to increase engagement in FoodCorps.
- The school team members interviewed had varying levels of involvement in completing the progress report.
- From these interviews, it seems as though the approach that may work well in many schools is to recommend having one-on-one meetings to gather information, which is a good use of people's time on what they know best. Then after all the information is gathered, have a group meeting to review what is found and discuss ideas for the school action plan, plan steps, and who is involved for achieving the plan.


## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

Report


# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
Report

| Ronan | SM: Said 60 hours [not sure if this was misheard in translation, could have been 6-8 hours but did seem like completing it <br> was quite a process]. Had a team of 4 people worked closely with on the Progress Report. Two group meetings, Doled out <br> sections for different people to answer. However, said later that getting everyone to the meetings was a lot of work and it <br> might have just been easier to have individual meetings. |
| :--- | :--- |
| Put stars by things not doing but wanted to do to help with action plan. Said second time was faster, did meet with team but |  |
| also SM had the confidence to know what had happened in the school over the year. |  |
| SS: Reviewed it a few times with SM, it took a few times to go through it because SS time limited as she has many duties at |  |
| the school. |  |
| ST: Was part of the team. Everyone looked through about 3 times before it was submitted. |  |

## How service members and others felt while completing Progress Report

(mostly from service members, first interview only)

## Comments and Recommendations

- Almost all SM who were interviewed thought the process of completing the Progress Report and Action Plan was positive. Even if getting the information was difficult, once the information was obtained the sense was, knowing this was better than not knowing.
- While a few people felt defeated (when specifically asked if they felt defeated), most said that they did not and in the end realized it was a learning experience. However, several felt as though there were more negative feelings on the part of school personnel who found it more difficult to see all of what they were not doing.
- A few described thinking about the Progress Report as a menu of options and this made them feel better. Framing it in this way in the next version may help to reduce anxiety and promote a more positive experience.
- Several service members either described themselves, or their service site supervisor and/or school personnel as having a hard time comprehending the importance of the Progress Report and Action plan at the beginning of the school year. The more the redesign can make it clear that the purpose is to collect data or information about the school to assess where things are at and be able to plan for and track changes, the more people may be able to buy into the process.
- Almost all SM reported liking the process of setting action plans and all who were interviewed at the end of the school year reported positive experiences of reviewing their action plans and seeing what had been accomplished, what had not been accomplished and reflecting on how priorities had shifted during the school year.
- A few suggested that the action plan be a living document that they can go back and add to and adapt as the school year progresses.
- From these interviews, despite some frustrations, most people reported a positive experience of completing the Progress Report and action plan. The more people can understand the long term goal of assessing where the school is at when they start FoodCorps and tracking changes, the more they will buy into the process.

Site specific information:

| Site | Summary |
| :---: | :--- |
| Valley Springs | SM: Some questions were hard to choose the answer because the answers were too general (gave example if question asked <br> are teachers on board, what do you say if you have one superstar, several that are really supportive and several that don't <br> even know about the work yet). Hard to decide what to choose. <br> SM found the cafeteria part the most challenging, the cafeteria staff saw it as a judgment of what they were not doing. <br> Whereas the service member, particularly for the garden part felt as though it was more about seeing strengths and <br> weaknesses and what needs to be worked on. <br> SM had trouble locating the completed Progress Report and Action Plan after it was submitted and wanted to be able to <br> refer back to it during the year to check in (particularly the action plan). <br> SM2nd: SM said it was really important to see what areas they were excelling in and what areas they still needed to work <br> on. |

[^13]
# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

Report
$\left.\begin{array}{|l|l|}\hline \text { Texas Avenue } & \begin{array}{l}\text { SM: Most valuable part was getting a "sense of what's happening in the school before you got there...really good way to } \\ \text { kind of start the conversation." } \\ \text { However, completing the progress report and seeing how much the school was not doing was kind of a set back. Yet, it also } \\ \text { gave ideas for what the school could be doing. }\end{array} \\ \hline \text { Albert S. Hall } & \begin{array}{l}\text { School } \\ \text { SM: what was most challenging was "realizing the situation we were starting off in and my supervisor especially." SM and } \\ \text { supervisor realized "how little they were currently doing to promote the healthy of their students and how the odds were } \\ \text { stacked against them." "Getting the information was fairly easy but looking at it was a bit harder." Hard to realize that they } \\ \text { were doing so little. } \\ \text { What was most valuable was setting goals. This allowed the SM to "be on same page" as supervisor and understand what } \\ \text { the community was like before the SM got there and what was needed. Helped to pull SM into "the reality of the situation. }\end{array} \\ \hline \text { Cibecue } & \begin{array}{l}\text { Glementary }\end{array} \\ \hline \text { SM: People at the school had a hard time understanding the importance of the Progress Report and action plan and did not } \\ \text { feel tied to FoodCorps, they felt tied to the service site, Johns Hopkins, which had worked with the school for a while. } \\ \text { For the SM the Progress Report was a good idea generator. SM thought of it as a school that answered yes to everything on } \\ \text { the progress report would be an ideal school so it gave the service member ideas for what the school could have. } \\ \text { SM really liked how the Progress Report helped to get an understanding of where the school was and thought it was } \\ \text { valuable that it was so comprehensive. } \\ \text { Thought the most valuable part of completing the Progress Report the second time was to help set up for the service }\end{array}\right\}$

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
Report

|  | For the process of completing, liked working with service site supervisor because the service site supervisor helped the SM be more intentional and not rush through it. <br> Felt annoyed that the due date was so soon, wished due date was later. <br> At the end of the year looking back at the goals was good. Helped them to see that they had diverged. Many goals were not reached, even though still important because they were "put on back burner" while they worked on other things. Really liked having to re-evaluate their focus. <br> Came back to this later in the interview and said, "it's not disheartening in any way. It's just like you read it and you're like oh my gosh, I'm not really doing any of that. So it's a good to see all these questions and remember like oh my gosh this is all, this is everything I really need to be doing. And so puts a little pressure but it's also really good to be focused back on to like that mission of all these specific things that we're trying to do." <br> Also stated excited to fill out Progress Report again at the end of the year because it seems more attainable in June than it did at the beginning of the school year. |
| :---: | :---: |
| Ronan | SM: Like that all of the questions were backs by what research has shown, that they were a valid approach and that is why the questions were being asked. Liked learning the reasoning behind the questions. Also liked setting goals and understanding the school environment. At the end of the year really liked being able to look back and see what was accomplished. <br> Also felt awkward. Felt awkward to have to ask people questions before SM even knew them. It felt judgmental (do you keep cafeteria clean?). SM also had the feeling that the school felt as though FoodCorps required a lot of paperwork and Progress Report was contributing to this feeling. <br> ST: Discussed how the process felt: "I think it's a good experience though for everyone to get together, sit down, visit about something like this, and just see what has been done in the community. One thing that was good was just visiting about the different areas... ‘Okay, what's done in the food service? What's done in the classrooms? What's done in the school, in general?' A lot of schools don't get together and visit about that. "Well, what are you doing? Well, what are you doing?" Are they crossing over on their information or just even what is happening in that area. I know a lot of people, they have no idea what's done in the food service department. They don't have a clue what's happening in the school and a lot of the different areas, if they don't work in those areas. Which was kind of interesting for us to be able to visit and know what plans were out there, what progress you are doing. Even with the schools with so much, oh, change, with the Obama administration, the healthcare meals and etcetera, etcetera, a lot of people don't even have a clue. They just look at it as, 'That's your lunch,' but we were able to explain what we were doing, how we were doing it, that we were already using local foods, and purchasing local foods, and I think that information was good to get out to other people within the district. |

## Different in spring than fall?

(asked only in service members 2nd interview)

## Comments and Recommendations

- Progress report described as easier in the spring. Also higher levels of confidence since felt like they knew the school and much of what they were reporting on now was work they had done themselves or as part of the team that did the work.
- Completing the spring Progress Report was reported as a positive, even important, experience and service members enjoyed the opportunity to think about what had changed at their school. They also enjoyed having conversations to both reflect back on the work and to plan for next steps and longer-term goals. However, one service member reported that it was more helpful at the beginning of service to generate ideas than it was at the end of service.
- Service members really liked the form being pre-populated with the answers from the fall. However, a few Service Members (as well as Service Site Supervisors) reported seeing places that they "forgot to change" in reviewing their spring progress report for the interview.
- Service Members reported having a very hard time talking to school personnel at the "hectic" end of the school year.
- Service members reported completing the spring Progress Report as a positive experience. Rewarding to review progress. Yet, had harder time getting information from school personnel who were busy with the end of the school year.


## Appendix I-Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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| Site specific information: |  |
| :---: | :--- |
| Site | Salley Springs |
| SM2nd: In the fall relied on everyone else. Now it involves me and FoodCorps people are the most knowledgeable. Many |  |
| fewer meetings. Mostly SM and FoodCorps supervisor. |  |
| Took a lot less time and much less stress, little confusion. |  |
| "I felt like it was kind of acknowledging my work like something changing and progressing. I thought it was fun to see |  |
| like... Well, fun is not a good word. I thought it was really important for me to see what I still need to work on. I'm really |  |
| excelling in some areas but it makes it obvious that I need to work in the cafeteria a little bit more and work with them a |  |
| little bit more." |  |$|$| SM2nd: Much smoother in the spring since felt like had to gather a lot less information (e.g., how many students etc) than |
| :--- | :--- |
| the fall). |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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|  | Some of the SM from other schools found it defeating because realized how much they had not done. <br> Thought it was going to take all week to fill out the spring Progress Report, but took much shorter. "It's not that hard. I just had some really good conversations with some principals and some other teachers... It was great as a reflective tool and it didn't cause me much stress to fill it out. |
| :---: | :---: |
| Postville | In the fall met with 2 key stakeholders together and then with other teachers and administrators. In spring could not get them together, met with each individually for 30 min and then also met with another teacher who became actively involved over the year, but was not involved in Progress Report or creating goals, but big part of spring assessment. Also had a meeting with all administrators, which was an important way to show them what had been done over the year and get continued and increased support. <br> "The most valuable parts were definitely reflecting with individuals and taking a minute to reflect on how we've progressed in our goals and also a chance to like explicitly list how we wanna grow in those goals for next year. But, a big challenge is that, is like both of us knowing that it's not gonna be me jumping into this role in the fall, so all this knowledge that I carry within me is gonna be a little bit lost in translation. I mean, we'll do the best we can to get the new person up-to-speed, but that's definitely a challenge that is like apparent throughout the whole process." <br> Most valuable part was reflecting on the goals and seeing how nicely they all aligned and then thinking about "how we want to continue to grow next year." |
| George <br> Elementary | SM2nd: Much easier this time and talked to fewer people because had more confidence in knowing what was happening at the school. For the spring, liked method of SM trying to complete Progress Report and then reviewing with service site supervisor. <br> Really liked having to re-evaluate where they were at with their goals. Realized that many goals were still important but had not been completed because they had other priorities. |
| Ronan | SM2nd: Easier and faster since already had a crew of people to work on it. Also fun because celebratory. Also, "it's fun to look into the future and dream, scheme, plan and think about the next year and the next many years." <br> To complete the spring one had a team meeting. Printed out the pre-populated version and asked people what needed to be changed. Did not feel like it went well. It felt too vague. People got distracted and talked to each other. Do not think people really focused on what needed to be changed so things got missed. <br> However, then reviewed goals and that part was really nice. Great to see what was achieved, what was not, and what happened instead. Then thought about the next year and years to come. <br> Then the service member took this and carefully went through Progress Report to determine what had changed. Also summarized what they had said about goals and added a lot more. <br> Even though the group meeting about the Progress Report did not go well, SM said it took so much time to highlight at the beginning that does not think would do that again. |

## General Information and Focus Area 1, knowledge - nutrition education. Questions A-D

## Comments and Recommendations

## General information:

- Number of students in the school and number of classes for each grade was challenging to get, particularly for some new service members for each school. However, reported as not that hard for many. [this confirms our experience with reviewing Progress Reports, seems to be hard for particular schools]
- For question 13 with the list of programs, add who is the key contact for those programs (which would be helpful to future service members).


## Focus Area 1:

- One person who had reviewed "lots of similar tools" reported that this section was great (this focus area in particular and also the entire tool).
- Since many service members had done a lot of nutrition education during the year, filling out this section in the spring was rewarding.
- Much discussion about question D. First, overall liked that it was specific and liked when there were examples, such as in benefits section helps our brain think better or red ones good for the heart. Overall people liked when it was


## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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more specific and gave ideas. People liked that food justice was included. A few mentioned either here or later that farming, local food production, and composting from school culture section could be here. One person mentioned that MyPlate never used by their school and service site.

- Many discussed that goal setting and monitoring progress was not clear. A few misunderstood this as monitoring how eating behaviors changes (more of evaluation), instead of what it was intended as a lesson activity where students create action plans to detail what they will do to make positive changes to their eating behaviors.
- One person suggested more of a focus on cooking lessons.
- Ask who conducted the lessons: FoodCorps Service Member, classroom teacher, educators from another organization etc. This would be helpful in knowing that all lessons from different sources were captured and would also help to get at how different programs and teachers are contributing to the overall education.
- For each grade have a check box "receives 'regular' nutrition education" [this would need to be quantified, perhaps at least twice a month].


## Site specific information:

| Site | Summary |
| :---: | :---: |
| Valley Springs | SM: From the fall reported having a really hard time determining the number of classes in the school and not knowing who in the school would have that information. Also reported on relying on the previous FoodCorps service member who was at the school. Did not know who else may know this information. Thought all the questions were clear, just hard to know who would know the information. <br> SS: Felt these questions were pretty straight forward and also for things that answered no gave ideas for what they could be doing (e.g., traditional values, goal setting). <br> ST: Well done. <br> SM2nd: Reported loving filling out this section in the spring because the SM had done a lot of nutrition education throughout the year. However, specifically reported not understanding the setting group or individual goal question, SM reported this seemed like "such a blanket statement" and a "goofy question" and "didn't know how to answer it." |
| Texas Avenue | SM: Found Questions A-C easy because school had a SNAPEd program in which all of this had to be tracked. Also D was easy since they had the lesson plans that were taught and could review those. <br> SS: Has reviewed lots of similar tools and overall this tool is great. For this section does not see anything to add or take away, "it's a good screenshot." <br> ST: Easy to read very straightforward. <br> SM2nd: Question B much easier this time, "knew directly how many lessons and everything. A couple of them were easier specifically cause I conducted the education, rather than someone else doing it." |
| Albert S. Hall School | SM: Found general information easy because small school and SM located at school itself. <br> Determining number of lessons since service site supervisor was the one spearheading most education, but realized that teachers could be doing their own nutrition education lessons, would be difficult to get all teachers (even in this school of only 12 teachers) to "write down if they'd taught nutrition education." Realized how hard it is to get this section to be fully complete and accurate. <br> For question D felt as though the meaning of some things (e.g., food justice) could have been elaborated on some more. <br> SS: Recommended adding questions about lessons on local fruits and vegetables (big focus of the FoodCorps work this service site does). <br> SM2nd: The last couple monitoring progress towards goals for eating more fruits and vegetables and encouraging them to ask their families to buy more, were things we realized we didn't focused on or include at all throughout this year. We did the vegetable preference surveys to see kids who preferred more fruits and vegetables or had tried more by the end of the year, but aside from that, we didn't monitor any progress ourselves or try and calculate how much the kids were eating of those things. So those are some ideas we were wondering about if that should be something we need to be more aware of next year and... Because a way we can promote the program better." |
| Cibecue Elementary | SM: Found these questions easy since service site supervisor fully aware of what happened in the school the previous year. SS: Question C could be clearer but did not have a suggestion for how to make it clearer. <br> SM2nd: Easier since classes SM was teaching. |
| Grove Park | SM: Worked with one person to get estimates, was not able to contact SM from previous year, but overall did not think |

Key: SM Service Member 1st interview SS Service site Supervisor ST School Team Member SM2nd = service member 2nd interview Orange bullets = specific recommendations for change | Page 13 |

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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$\left.\begin{array}{|l|l}\hline \text { Elementary } & \begin{array}{l}\text { many lessons had happened the pervious year. For question D she mostly judged that the previous SM "got her stuff right, } \\ \text { so she probably taught them this kind of thing...feeling somewhat confidence just from knowing her that she would teach } \\ \text { these topics." [therefore, no official review of curricula used etc.] }\end{array} \\ & \begin{array}{l}\text { About question D, "they are all good questions, but I guess part of it is that when you are teaching kids about vegetables and } \\ \text { eating healthy vegetables, it seems like a lot of these things just come with it. It's hard to teach about... Decreasing fears, but } \\ \text { also teaching about the health benefits, and they kind of wrap up together." } \\ \text { SS: For the programs listed on page 1, maybe add key contacts for each program. } \\ \text { If the school has Fresh fruit and Vegetables Program or Alliance for a Healthier Generation they would know the answers } \\ \text { since they have to answer similar surveys. They also have connects to district wellness people and nutrition wellness } \\ \text { people. SS realizes suggestion is to develop a team, and "some format protocol for developing those teams would be } \\ \text { helpful." }\end{array} \\ \text { "It's just a whole lot of questions, so I'm wondering if there could be a way to reduce them for, like particularly for Nutrition } \\ \text { Education, Part D has 10 different questions with it. Again, I just don't know at what confidence you can answer all of } \\ \text { those, and so maybe you can look at the feedback that you got and see if there's a few of those that seemed more important } \\ \text { to track than others." } \\ \text { Social desirability, food justice, and skills to ask for fruits and vegetables at home "really interesting." Setting and } \\ \text { monitoring progress on goals is really difficult to track across the school. } \\ \text { SM2nd: Suggested that for each grade ask how many of those classes are you "regularly seeing." More confident in the }\end{array}\right\}$

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 


#### Abstract

on at the middle and high school grades. For question D, talked to the second grade teacher and the food educator and filled in what they said. "One thing that I'm thinking about, and I think because we didn't have a garden at our school, I was thinking about how to get kids connecting hands-on and developing a relationship with their food without a garden. My class is focused a lot on cooking food, and so, the kids are really learning to make their own foods and connect to it in that way. And I think that having that hands-on experience is a really important part of what FoodCorps talks about doing. I'd like to see it in a question about that, like, "What are things that you get kids working?" I don't know exactly what they would be, but the hands-on cooking lessons. I would like to see that on here." SS: Questions with concrete answers are the easiest to answer. ST: Looks pretty good. SM2nd: Not a lot changed in this section so it was pretty simple to complete.


## Focus Area 2, engagement - school garden. Questions E-H

## Comments and Recommendations

- Sometimes since gardening experiences are informal they can be harder to accurately track.
- Some discussion about making sure it is adaptable to what goes on in schools in Native American reservations. They are not teaching about different cultures, purposefully not teaching about different cultures to revitalize traditional cultures. Yes, most people commented on the importance of teaching about different cultures.
- Perhaps add to culture question "teach about different or traditional cultures."
- Comment on timing of lessons, Progress Report says at least 20 minutes whereas other similar tools say 30 to 60 minutes.
- Comment that people liked comparing which grades got more or less nutrition education and garden-based activities.
- Make sure it is clear that experiences at local community gardens or farms and growing food in classrooms or other indoor locations also counts (not only school gardens).

Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | SM: Similar to Focus Area 1, what was difficult about this is that getting the information relied on knowing what had <br> happened in the past. <br> SM found some of the questions in this focus area to feel more like opinions (e.g., "show interest") that were hard to judge. <br> Discussed that the only reason she had high confidence in her answers was because she could talk to the SM from the <br> previous school year. <br> SS: Same comments as focus area 1, and also got easier once got the hang of filling out the Progress Report. <br> ST: Well done. <br> SM2nd: Had more information this time, did not feel like it was just opinions. |
| Texas Avenue | SM: Found this straight forward since one 4th grade teacher worked in garden (also with other classes). <br> Suggested incorporating question G with \#8 in question H. <br> SS: Like this section, actually said would like to use it with other schools they are working with that have garden programs. <br> ST: No comments. <br> SM2nd: Really like Question H-2, appreciation about plants. This question "was very useful, especially working with <br> teachers, I feel like that question in general is useful, because they can adapt it to the curriculum." |
| Albert S. Hall | SM: Hard to determine all the garden questions because even though it was the service site supervisor who had been doing <br> all the garden-based education for the last 5 years, it "wasn't standardized or written into a curriculum, so it wasn't <br> something that had accurate records... outside of official record keeping... mostly that was based on her recollection." <br> SS: Maybe add questions to say if the gardening is indoors or outdoors. Also about working in the garden with special |

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# Appendix I-Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | needs populations. <br> SM2nd: "I felt like all the questions were really good. Again, it was the last couple in this section that we realized we hadn't really focused on, so things like appreciation for our different cultures, traditionally cooking various fruits and vegetables. We had a few cooking lessons throughout the year that were focused on cultural foods, but for the school as a whole we didn't really promote that, so that was one thing we wanted to be more inclusive of next year. And then some of the things like incorporating MyPlate or setting goals again wasn't really a focus either this year. So those questions are helpful in just realizing where you can grow the program, definitely." |
| :---: | :---: |
| Cibecue Elementary | SM: Found this section easy, as with Focus Area 1, talked to serve site supervisor. For question H, these were easy since the curriculum is a "behavioral health research program" it contains similar activities as are in the questions, making completing this easier. However, found H question 8 hard (about cultures) since their focus is on revitalizing traditional knowledge of their native community. Thus, it was purposeful to not focus on diversity. This may be unique to native and immigrant communities. <br> SS: No suggestions. <br> SM2nd: Easier since SM implemented. No suggestions on the questions. |
| Grove Park Elementary | SM: Estimated the same way as for Focus Area 1, talking to one person. <br> Question H: "We wrote yes for all of them, and I think that's because it's similar to the last one is that they kind of wrap up together. When you're working in the garden you also are probably harvesting, it's just like a... I guess it is an assumption, but I feel pretty confident that the things would all be happening." <br> Number 8: appreciation of different cultures, "It's a good one, keep that one." <br> SS: Questions, hard to answer with high confidence because "so many teachers are doing different things... without asking every single teachers in the school these questions.... I do wonder if there's a sort of a simpler way to get at the same information that's a little bit less quantitative. Questions are clear, "but how to get good answers to them is not clear." Having a program guide to help service members organize the garden committee in such a way to be able to get better answers. <br> Benefits of fruits and vegetables and harvesting could be connected. Huge piece missing is if garden-based activities "help you learn about the other disciplines that you're studying in schools." Also suggested how many garden-based activities used to teach standards. "Get a sense of how many teachers are using the garden for standards-based learning, or system, or project-based learning, those kind of things instead of just a nutrition education." [in staying power] <br> SM2nd: Some of H was a little repetitive [I think meaning with D] but then said they only come up when in the garden and not unhelpful either [a bit unclear.] Also suggested talking about food justice be added. |
| Moulton Elementary School | SM: For question H most of the questions were good. But did not like the question about creating and monitoring behavior change goals. This service member was not doing that (said, "I didn't love that one" but then added, "but I guess there's probably service members that are doing that, so it probably is relevant for some people." <br> Added onto this, "I guess just because we don't focus on that and that's not a goal that I think we're having. And we don't do journaling or goal setting for goals as much... Goal setting for how many fruits and vegetables we eat. So maybe that's just a personal thing, that we're not doing that as much at our service site. But I'm sure that people are doing that." [This make the creating action plans booklet seem like it could be very useful to help service members become more comfortable with this.] <br> SS: Timing of lessons on here at least 20 minutes and other places 30 or 60 minutes. <br> ST: Asking a question if students get to give input on what is planted in the garden and also planting based on the culture and background of the families in the school. <br> SM2nd: Discussed with Focus Area 1. |
| Postville | SM: One key person was in charge of all that happened in the garden who helped to answer most of these questions. This person also helped SM to learn about some initial teachers who were champions of healthy eating. <br> Liked having the question on setting and monitoring goals as it idea for something to incorporate into lessons, as that is not something most service members would do automatically. <br> SS: There is a community garden students engage in. There was not a lot of ability "to bring that into play." Did not record that since not a school garden. Could be made clearer that any garden experience at school garden or other local garden could count. <br> SM2nd: Since built gardens and SM involved in garden-based lessons this was easier to complete. |
| George Elementary | SM: This was the same as focus area 1, zero for everything for the same reason, school said they were starting at zero (also said that GardenCorps-- specific to Arkansas -- did not work out and so that is why school felt as they it starting over). <br> SS: Section very clear, liked all the sub-sections under H. <br> ST: No comments. |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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|  | SM2nd: Good to see which grade had more garden-based activities compared to more nutrition education. The questions <br> were a good "reminder of what we're aspiring to do and so it was helpful to see everything." |
| :--- | :--- |
| Ronan | SM: School did not have a garden and created a plan this year. Realize now that it would have been good to look at Progress <br> Report when making plan. Felt good that much of what is in the Progress Report is part of the plan. |
|  | SS: Building a garden now, the questions seem like something they could answer once they have a garden. <br> ST: Liked having it broken down by grade level. |
|  | SM2nd: Now have a garden. Nice to be able to put down those changes. Wondered if gardened-based activities had to be in <br> the garden. Put all activities where growing food "Go Greens in windows" in garden-based activities. |

## Focus Area 3, access - school food. Questions I-P

## Comments and Recommendations

- Some questions such as noise level were seen as subjective.
- Liked how these questions gave very clear recommendations for things to do. Made it easy to plan for changes. Also people liked the four-point answer scale and found it easy to use. However, sometimes service members thought cafeteria managers gave a bit higher ratings than they felt appropriate.
- If salad bar only occasional (e.g., one time per week) make it clear how to answer -- is it for when salad bar served or an average.
- Have a reminder in this section that all of these are based on evidence and maybe all are in compliance with USDA school meal standards. Also more of a set-up for why this section is important (this could be for all sections).
- Can be challenging for K-12 schools were only certain grade levels (e.g., middle and high school) have salad bar to know how to answer. Make this clearer.
- For salad bar question instead of just yes/no make answers: everyday, several days a week, about once a week, 2-3 times a month, rarely or never. Then make it clear that the questions are all for when salad bar served. Not sure if also worth adding which grade have access to salad bar.
- Add to salad bar a question on if foods are labeled (as that can build familiarity and encourage students to eat the food).
- Put in a question that is about in what ways and how much local foods are promoted, in addition to how often local foods are served. Also might ask about tastings of local foods specifically.
- Ask specifically about nutrition education prior to serving particular fruits and vegetables.
- Suggested even more questions about how staff in lunchroom interact with students and if adults eat with students and are role models and more questions that get at the environment in the cafeteria.
- Several suggestions for service members to rate how appealing vegetables and fruit looked in the cafeteria.
- Make it clear that cafeteria tastings do not only have to be in the cafeteria (that is tasting of food from the cafeteria in classroom can count as a school food tasting).

Site specific information:

| Site | Summary |
| :---: | :--- |
| Valley Springs | SM: The hardest part about doing these questions was the cafeteria and how food is presented changes (starts out excellent <br> in first few lunch periods and then gets much worse). Should it be judged on the best it looks? Worst it looks? <br> However, overall liked this focus area because the questions gave lots of ideas for things to look for and what could be done <br> in the future. <br> SS: Really liked that this focus area has check boxes with never, seldom often, just having to click the boxes felt easier. <br> Also gave ideas for what to set goals on, such as having an adult at the salad bar to encourage consumption. <br> Really liked questions that had specific numbers or targets as it helped when used to set goals. Also for specific questions |

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## Appendix I-Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

|  | through about that for this year want to be able to move from sometimes to most of the time. <br> Even though all of the questions seemed a bit overwhelming, when they sat back and thought about it, it got easier when they were able to step back a bit and focus on three things to want to focus on this year. <br> Also discussed thinking about it as progression over multiple year to work toward FoodCorps graduation, "whole picture it'd be over time, and as FoodCorps wanting to graduate out of sites or whatever it's like, "Hey, where are the areas that we can improve here and let's pick off these three this year." And then if you're looking at a five-year plan you can kind of start thinking about what needs to... And there's some things that you're looking at, some things have to be done before you get to the other things." <br> Additionally, each item on the Progress Report is really, "listed in that way, the baby step to get to other places." The more it can be made clear to people that they only need to pick a few things and to think about the order that makes sense to do those things then "that'll prepare us to start moving across the spectrum on the next area." <br> ST: Well done. <br> SM2nd: This was a harder area because of the school, but nothing to change on the questions. Also still feels like they feel like they are being tested and should say yes. |
| :---: | :---: |
| Texas Avenue | SM: Liked having questions about how food is placed (easy to reach) and presented (fruit cut up) because these help to make the food accessible to kids. <br> Overall SM felt these questions were appropriate and there was enough information to choose the appropriate answer. <br> SS: Maybe more on recycling and composting in the cafeteria. Also more on food waste. <br> ST: No comments. <br> SM2nd: Not much changed since did not do much with school meals, so a lot was the same as the fall. |
| Albert S. Hall School | SM: Described question J as, "what the school was doing currently to not just provide the fruits and vegetables that they require, but to make them appealing to students and encourage students to consume them." <br> Question M described as, "more of the eating environment once the kids have their food. A space and encouragement and even time they have for eating, kind of a big factor especially in elementary schools. Kids don't have a lot of time and normally would rather talk in their little bit of free time than eat before they go outside. So creating a more conducive environment for eating healthy is definitely important." <br> SM found it hard to determine reasonable noise level as, "cafeteria is a very distracting place so noise level is kind of impossible to pin down to any one kind of level." <br> Suggested having a question that would get more at the kind of relationship staff is having with the students during lunch and if and how they are being a positive role model. <br> For question P (local food) felt as though what was more important to measure was how much local food is being promoted, "In no way are they promoting that as a positive thing or even a kind of relevant thing to make the kids aware of. So we've been trying to hype that up this year." <br> SS: Recommended adding (maybe to section 1) percentage of students who quality for free/reduced price lunch [we get this from common core data] <br> Ask, "does the school do any type of nutrition education before serving particular vegetables or fruits? We found that to be critical in getting kids to eat certain foods." <br> Add do adults sit side-by-side with students to eat with the students to be role models. <br> SM2nd: Not much changed in this area from filing out in the fall to the spring. Completing the questions again was a good reminder of what they want to do, (e.g., getting principal and teachers more involved in school lunch). |
| Cibecue Elementary | SM: Felt it was funny to separate the appealing-ness and creating desire (e.g., pre-plating) vegetables when the vegetables may be very unappealing. SM said, "Yes, they're pre-plated, but that doesn't mean that is a positive thing." Because I think the kids... What I've learned is the kids have responded better to choices and being able to choose the vegetables they eat. Though I'm sure that pre-plating might be a requirement of the USDA for elementary schools." Also concerned about not wanting to make social norm unappealing vegetables or canned fruit in syrup. Suggested having a question on if fruit and vegetables are fresh, frozen, or canned. <br> Question N: SM said it mean, "How the cafeteria's aesthetic environment encouraged kids for healthier food." <br> Question P (local food). Because they are a reservation community, they think of local in a hyper local sense. Service member thought it would be important to have a space to fill in what local means to the community and what it means to the school. Also might want to acknowledge choosing local to help the local economy. <br> SS: All fine. <br> SM2nd: Had a hard time knowing how to answer salad bar questions since salad bar only once per week. "It was a taste test that happened to be a salad bar." Was not sure if to answer "most or all days of the week" or "most or all days that the salad bar is offered." |

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

Grove Park
Elementary

## Moulton

Elementary School

SM: Described the meaning of Question J as, "If the kids are put in a place where they want to [eat fruits and vegetables], are more likely to eat fruits and vegetables."
Going to observe school meals made it easy to find the answers to these questions.
Would be good to have comment box, in case there was something different about the school.
About salad bar, thought it would be good to ask, "do kids often eat the salad bar?" In this school despite the salad bar being set up and appealing the students don't eat it, "just really speaks that they need that information of like how it's cooked, I think. And just like, I think they like cooked vegetables more than raw a lot of the time."
Question M: "if it's a comfortable environment for having lunch."
For the cafeteria: many of the questions such as cleanliness, salad bar level are not items that a FoodCorps service member would have the ability to change. Also, SM wishes, "we could connect more with the school lunch menu with my schools, that's been a hard entry point for us."

Question O: "About tastings and what those look like."
Question P: Determined how much local food was serviced by looking through the district school lunch calendar.
SS: This section takes observation in the lunchroom. There is often a big difference in what they say is going on and what is actually happening. If there was a protocol for collecting this it would be really important that this is done by observation of the FoodCorps service member. Also this section gives really good ideas that could become interventions. Recommendations to make it clearer that they can become action plans.
Also make it clearer (in addition to what is in the back) that this is all based on evidence. Suggestion, "Hey, Smarter Lunchbox or Smarter Lunchroom self-assessment has found that you can really make huge changes in the kid's eating habits with these small changes. So let's look into what you have already and where the easiest leverage point is, for your school." Have a little bit of set-up context at the beginning of each of these sections. This would make it feel more valuable instead of feeling like it was filling in a bunch of bubbles.
ST: Section is clear.
SM2nd: Did a lot more by observation in spring than fall.
About tastings: did them in each "pod" making them "kind of a lesson, but it's still a tasting. And so I guess, in that way, I would reformat the tasting section just so it doesn't have to be in the cafeteria. 'Cause still the entire school got to do the tastings that I did. Unless this is specifically just supposed to be tastings to impact what the cafeteria is serving.
Then asked if specifically about what the cafeteria served.
Said "counted" these tastings since every student got to taste but was not sure if they should count or not.
SM: Question J was described as, "I think the appeal-ability of the food and how attractive it was for kids to eat or how approachable it was for kids to eat."
Found these questions hard to answer, as they seemed very option based. For example, different people may have different opinions on if the fruit is displayed nicely. Questions were good and had enough details, but still hard to choose the answer.
Question L was described as, "How prominent the salad bar was and how important it was in your school and how the kids were able to access it and what they thought of it, kind of thing. How useful it was for them and how approachable also the salad bar was?"
Last question in that sub-section about adults eating school lunch or salad, not sure the percentage of people who did that, seemed to be very low. Also, question 8: adults only at salad bar if students needed help, never to encourage students to take from the salad bar, thought that "manned with an adult" took away the ambiguity but still a bit hard to answer.
Thought it would be good to ask if food was fresh, canned or frozen on the salad bar.
Question M was described as: "How appealing it is to eat lunch at this school and how... What's the mood of the cafeteria? If students feel good about eating lunch there or if it's a negative environment."

The question on cafeteria decoration and noise level are two examples that are at the person completing the Progress Report discretion -- different people may have very different options on what is decorated enough and what level of noise is tolerable etc.

Question O was described as, "How often and, what are the tastings about and how are they run?"
Question P: can be hard to know how much local food is served and takes continually working with food service staff. Gave an example of having local corn one week and then canned corn the next week and so hard to know how much is local.
Suggested adding a question that distinguishes local food that is served as part of a meal and local food that is served as a specific promotion and not part of the menu.
ST: These questions are pretty dry (meaning clear and easy to understand). Could ask about tastings of local foods.
SM2nd: Based it off of observations of when in the cafeteria. As an example, never saw teachers eating lunch in cafeteria with students, but did not survey teachers to know for sure.

## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

| Postville | SM: For this section was able to get the information from one key person, Lori. <br> For the Salad bar, question L, suggestion to add that each food on the salad bar is labeled so students know what they are. <br> Also maybe questions on the quality / variety of the food (e.g., romaine vs. iceberg lettuce). Ask about local foods on salad <br> bar. <br> Since question M was about the cafeteria environment in addition to Lori she spoke to 2 other people who spend time in the <br> cafeteria. <br> Found it hard to know if food service staff, "encourage" them to eat. SM does this but not aware of anyone else specifically <br> encouraging. Felt like it was two separate questions -- what SM does and what others do. Same kind of thing for an adult <br> being at the salad bar, food service staff vs. other adults. [Note: this all goes back to the conversations we have had, is this <br> about assessing what the SM and/or what school staff does or what the students experience is.] <br> For taste tests, again Lori knew, this information was not recorded anywhere. |
| :--- | :--- |
| SS: For local food since it depends on budget may want to know if the school has shrinking or growing enrollment since |  |
| that may determine how much local food they can serve. |  |
| SM2nd: Same as fall, talked to Food Service Director who knew "all the answers right off the bat." |  |

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Focus Area 4, culture - school environment. Questions Q-U

## Comments and Recommendations

- Make it clear that all questions in this section are about the total school and student experience, not only FoodCorps sponsored events or fundraisers, etc.
- Only reported by one service member, but this person felt strongly that this section was irrelevant to their service.
- This was an area that most thought was important but many acknowledged hard to change and not much progress in this area.
- A few people had concerns that these questions seemed to have a judgmental tone to them, which made it hard for school personnel to be honest when answering them.
- More of an introduction that this is a comprehensive section and gives a very full range of ideas and that most schools will not be able to do all of this. Something that makes it feel fine to be honest and to realize that many schools will have many no answers to many questions. This will help it feel "less dismal" to answer "no" over and over again.
- Add a question, do students help to prepare the food served for school meals.
- Some questions, such as R hard to answer since some adults had a positive tone and some negative, making more specific, such as most adults or majority of adults may make it easier to answer.
- Suggestion to add more on etiquette around food and encouragement from adults to try new fruits and vegetables.
- Specifically ask about food at sports events.


## Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | SM: Got that this section was overall about "what the school was doing within foods, with teachers, cafeteria, everybody as <br> a whole." <br> Confused as to if the question about fundraisers being healthy foods was about FoodCorps sponsored fundraisers or all <br> fundraisers [should be all fundraisers] and said that could be made clearer. <br> Question R SM defined as, "involving kids directly in food culture." SM found this hard because the teachers did a lot on <br> their own (she gave example of recycling) without the service member knowing about it. <br> In question T SM was confused why composting part of the question, liked composting being asked about but this question <br> did not seem like the right place for it. <br> SS: "I like how it's tying in not only just community but farms and families and then the school's physical space, I think, is <br> really, really important. So I think it touches on the main areas. And as I'm looking through these we got a lot of things that <br> we can improve on... like that it gives really specific ideas like sending home newsletters with motivational and <br> inspirational messages, so I like that. I like that within this thing it gives... To me it doesn't seem overwhelming. I think to <br> some people it can." <br> As with focus area 3 discussed how it is about choosing a few things to focus on, and what order to accomplish them. <br> ST: Well done. <br> SM2nd: This is tough "because so irrelevant" Met with teacher who only knew about her classroom. She tried to be healthy |
| "but then I see a thousand cupcakes go by me throughout the day." It seems extreme but SM not close enough to situation to |  |
| know. Tracking this, "was so irrelevant to my position." |  |
| Hard to have snacks, celebrations and rewards combined because some healthy and some not. Also hard to know what to do |  |
| about fundraisers. Some for garden healthy but also PTO sells candy bars. Not sure how to answer. Did not know how to |  |
| answer, wanted to put "all the time" but not sure. |  |

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## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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$\left.\begin{array}{|l|l|}\hline & \begin{array}{l}\text { Question T was about an overall sense of exposure to students about "food"" } \\ \text { Question U was about how the school space was setup in terms of fruits and vegetables. } \\ \text { SS: Only said this section was good, and some discussion how composting and food production in this section were good } \\ \text { questions to have. }\end{array} \\ \hline \text { ST: No comments. } \\ \text { SM2nd: Not much changed, answers almost identical as the fall. }\end{array}\right\}$

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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SM discussed that some answers were incorrect and said it might be because the person SM talked to had looser definitions than what was written (e.g., what is a workshop that is focused on eating more fruits and vegetables. Person she was talking to was confident, but SM not confident informant answering, "all the way honestly." Liked that this question gave good ideas about how a school could work with families.

Question T was about, "Connecting with the wider community, which also made us want to do a field trip, which we weren't able to do, which was a bummer."
Great example of a challenge and missed opportunity related to the Fruit and Vegetable Snack Program: "[the] kids go and pick up baskets for each class, three days a week, to have a fresh fruit and vegetable as a snack, and with it comes information about that snack that the teacher's supposed to go over, but I've never seen a teacher do that, I don't think that they do. And a lot of times even the teacher gets busy with their day, and the kids leave without getting their fresh fruit and vegetable snacks, so it's one of those things where, yes the opportunity's there, but it's still not happening, we need a little bit more support, like when I come in and cook with the fresh fruit and vegetables of that day."
Question U was about, "if the decorations encourage eating fresh fruits and vegetables at the school."
SS: Have a little introduction. If people answer "no" to 4 out of 5 in R, it feels "dismal." They may have thought they respect healthy eating but now getting feedback they must not. That is negative emotional feedback. If people could understand this is more of an assessment and action plan tool it might make answering a lot of "no's" less depressing. Maybe have the same actions but change the "respect for healthy eating."

SS: No comments, these are good questions.
SM2nd: Discussed how one thing SM did was create a recipe book that went home with all 5th graders that had healthy recipes, places to buy vegetables, local farms, fit into encouraging family, local farms several places.
Realized that forgot to change a few things and then also that what was done (such as recipe book) may be better described so suggested making the "please share explanations" mandatory.

## Moulton <br> Elementary School

SM: Question Q was about having the school on board to enable students to make healthy choices [somewhat inaudible]. Found these hard to answer because not possible to go into every classroom and ask them what they did.

Question R was about, the intentionality that the school places upon the healthy school food environment and how into it they are, I guess. How much they're putting in to it."
These were also hard to answer because it was hard to choose yes or no as something were done only once but then not again and not sure if that should be yes or no. Those are good main questions, probably more could be added.
Question S was about, "What the parent's family engagement is like and if it's just, do they just care about teaching kids about healthy foods or are we also extending it into the family and afterschool times as well."
These questions seem to give more specifics (e.g., offer 2 parent workshops, actively promote farmers market) making these easier to answer.

Question T was about, "Talking about the integration of learning about local foods and access to foods, kind of like the food cycle process, and how much that's a part of the learning at this school."

These were also worded to make it easy to say yes or no, but did have the same issue of not being able to talk to every teacher so the answered were based on knowing teachers and what they had done the year before.
Question U was about, the ambience, the aesthetics of the school and how engaged... Like when walking through the hallways that you know what the school is about, and that they have an interest in a healthy school environment."
SS: Some discussion that what was checked for this school did not seem to be on the PDF that was sent. Maybe add about some specific programs or support from teachers or administrators.
ST: This was not something we were working on yet. This was a little discouraging, "but it also gives us a place where we can work to."
SM2nd: This part was discouraging. School "isn't quite all-in for this healthy school environment."
"The idea of this piece is so important and it's integral for the success of a Farm to School program, but it's also like when you think of the pillars of FoodCorps and the knowledge engagement and access, those three, first focus areas that we just talked about, those are the things that are most tangible to work on."
Realized maybe too focused on direct service and less on culture. Some schools do really well on a few things in this section. But, hard to focus, remember, or realize this when checking "no" for a lot of the questions.

## Postville

SM: Question Q was described as the school has a coordinated effort to offer healthier snacks and not always offer candy.
Somewhat hard to choose the answers because even though they knew there was a "celebration food policy" they were not sure how often it was followed, that is why chose sometimes. Also since SM new to this school hard to find out what teachers do for birthdays and other celebrations.

Question R described as more about everyday norms. whereas Q is more special occasions.
Question S described as, "did they do outreach about fruits and vegetables to families." Easy to answer these questions.

## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

|  | Question T described as, "how many non-nutrition food education lessons had people had?" Had to ask others what <br> historically happened with fieldtrips etc. However, there could have been more that they were not aware of, so hard to know <br> if everything captured. <br> Question U described as, "What are their reminders about eating fruits and vegetables and staying healthy?" <br> These questions were easy to answer. Suggested adding, if there is a garden asking if it is in a visible or accessible <br> location." <br> SS: No comments. <br> SM2nd: Encouraged that had meeting with administrators to gain their support. |  |
| :--- | :--- | :--- | :--- |
| George |  | SM: Described the meaning of question Q as well as why it was an important question, "My school culture around food <br> which is like one of the most interesting things to me here and my site supervisor is also just like a coming in to <br> understanding of how important that is because it's not very good here so that was important for me to see because it's such <br> a different space and it was good to go over because to get an idea of like the challenges ahead." <br> Service member realized reliance on others for answering and answers chosen may not have been as accurate as it could <br> have been. <br> SM also said that it was easy since this was a brand new school and most items were just not happening yet. <br> Question R described as, "I interpreted this question as their value of students of opinion and their value of students like <br> understanding more or having more exposure to what like a healthy community food system works like." <br> Suggested adding, do students get to cook or prepare food in the cafeteria? <br> Question S described as, "Understand the families like of levels of food literacy." |
| Question T described as, "Having them on the other hand learn about like ecological literacy and understanding food |  |  |

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Staying Power

## Comments and Recommendations

- Service members understood that Staying Power is having structures and supports in place to institutionalize the food-related work In the school.
- Change answer options to reflect what percentage of teachers, parents, etc are supportive as the Staying Power questions were hard to answer if there was a few very engaged teachers but then the rest of the teachers were not engaged at all.
- Overall school team members spoke favorably about this section because they feel this is important for the programming to be able to continue at the school
- Suggested putting together all questions about a group (e.g., teachers, parents) together as it would make it easier to get the questions answered.


## Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | SM: Defined "staying power" as 'All the difference direct elements like the curriculum, the teachers, the administration, the <br> parents, you're just kind of getting a feel for every single element coming together." <br> Question 2 was hard because of some teachers being really supportive and others being not very supportive it was hard to <br> know how to answer. <br> Idea for possible questions that would help to alleviate this struggle: what percentage of the teachers are supportive OR <br> onboard OR go beyond to help with the program. <br> SS: Discussed that for the supportive ones hard to answer, if one teacher does it well but the rest not at all, what to answer? <br> Would like more specifics here, such as 1-2 teachers, some teachers, most/all teachers. (same for parents) This would be <br> more information and make it easier to answer. <br> ST: Well done. <br> SM2nd: This section definitely easier to answer, "but I wish I knew more about the curricula and stuff, and how they're all <br> tied in, in the school administration and stuff. I don't know all the politics to the actual school side." |
| Texas Avenue | SM: Defined Staying Power as "whether or not was being done is actually sustainable." <br> SM would really like to know teachers (on an individual level) how much they supported the school garden. |
| Suggested adding to question 8 about if parents cook at home or cook healthy at home. <br> Suggested adding to question 10 a definition of food service director since that is often a person at the district level and not <br> in the school, this might be confusing for people. |  |
| SS: Hard to determine parent support, need more details on what support means, make it more quantifiable. |  |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | really embraced it more than we expected, so that was really good to see. And a few of the questions at the end, just realizing more what we could focus on like having parent support, healthy meals, and keeping families more involved, and then having champions in the school, those sorts of things." <br> Overall good reminder of what to work on next year. |
| :---: | :---: |
| Cibecue Elementary | SM: Described staying power section as, "Institutionalized policies for this kinda stuff." SM stated that some of the staying power answers were not correct. SM now realized that the program is not institutionalized, if Hopkins (service site) left, "it leaves with it." <br> SS: This is comprehensive. <br> SM2nd: Nothing new to add. |
| Grove Park <br> Elementary | SM: Staying power is about what structures are in place to institutionalize activities in the four focus areas. <br> SM felt this was a good section and the questions were straight forward to answer. <br> SS: More on garden committee work [and acknowledged that connection to curriculum here], "just not where I would have expected it to be." Wellness committee / garden committee biggest factor in staying power. That should be the first few questions about this committee work. <br> Track the name of champions so it can be tracked, "the flow of how those people change over time too." <br> SM2nd: Maybe could be "wellness committee" or "garden committee" as many schools have a garden committee that functions like a wellness committee. <br> These were easier to answer in the spring because knew school culture. <br> Suggested a question on turnover of champions. Might still have same number, but there might have been turnover and if there is turnover that does represent "staying power." |
| Moulton <br> Elementary School | SM: Defined staying power as, "What's happening besides FoodCorps? And what are the ways that this education is integrated into the school culture and environment and how is it gonna last beyond when you're gone?" <br> Questions were pretty specific in terms of what administration, parents etc needed to do to be supportive. SM felt like they did give some support so felt bad to have to click "none of these" but they were not doing any of the items listed. <br> Suggested adding other partner organizations (besides teachers, parents, students). This school has several external organizations that are helpful and will continue beyond FoodCorps. SM believes this is a big part of staying power because these organizations were promoting a healthy school environment before FoodCorps and will continue to do so beyond FoodCorps. <br> SM reported this section felt more like opinions that clear benchmarks of what to answer. <br> Good discussion of the use of staying power section, "I'm not sure of the intention necessarily of this. I think the first couple of sections were applicable to really share and have the teachers and staff and whoever was on that Healthy School Team to really know all of those question and answers, but this staying power one seems to be really... First and foremost, for the FoodCorps member and the site supervisor and the staff to know how things are kind of coming along at that school and if it feels like things are going to continue on beyond FoodCorps work. So it seems like it's okay if it's a little bit subjective because it might not be necessarily need to be shared with the school administration ...[b]ut more for us to understand the know and work on those things with those features and as a part of our goals to continue to create the staying power at that school." <br> Good understanding that this is not scored in the same way and is not as crucial to understand the exact experience of the students. <br> SS: No comments. <br> ST: "I thought this one was really pretty good because it gave us a picture of not only where we are, but look at where we have to grow. And some of this I guess we might not ever get up there. The school administration, if they're not engaged, they're not gonna provide us professional development time to learn about garden-based activities. But if that changes, look where we can go over here. So I thought that was helpful. It might look like we're at the bottom now, but again, giving us a place to work to. And this was, I felt like more achievable maybe than the other ones." <br> SM2nd: Gained support over this year from administration and parents. For teachers 1st and 4th grade teachers are working together and successful, but not the whole school so did not want to say "everyone." Suggested using wording more similar to previous sections that ask what percentage of teachers etc supportive. |
| Postville | SM: Staying power was not confusing but challenging questions for someone who is new to the school to answer. "This one took a little more like of a treasure hunt to get the answers. But I think they're all pretty clear." Had to investigate \#2 and \#5 because although knew school administration supportive of nutrition and lunchroom, less clear on support of garden. <br> Also had to research \#3 and \#7 to find out about connections to the curriculum for nutrition and gardening. It was good to talk to people, but for SM was better when could observe in terms of feeling confident in the answers. <br> SS: Teacher engagement hard to answer. How many teachers need to be engaged and at what level to make it beneficial. |

Key: SM Service Member 1st interview SS Service site Supervisor ST School Team Member SM2nd = service member 2nd interview Orange bullets = specific recommendations for change | Page $26 \mid$

## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

$\left.\begin{array}{|l|l|}\hline & \begin{array}{l}\text { Suggested, "How many teachers as a percentage of your teaching population do you feel are engaged with you at some } \\ \text { level?" } \\ \text { SM2nd: Knew much better what teachers supported nutrition education and who was doing their own lessons. Learn this by } \\ \text { spending time in the school. Also tried to form wellness committee without much success so knew the answers to those } \\ \text { questions. }\end{array} \\ \hline \text { George } \\ \text { Elementary S } & \begin{array}{l}\text { SM: Question \#6 (teachers support school garden) hard to know what support is, gave examples of a teacher bringing } \\ \text { strawberries from the garden and being excited and teacher taking seconds at the salad bar and encouraging students to do } \\ \text { the same. How to capture and describe those moments of teachers being "little cheerleaders." } \\ \text { Also liked the parent section and thought maybe more could be added there, such as is there a school Facebook page (or } \\ \text { other social media) about food/garden etc. Or emailing updates to teachers to help them to see "why what we're doing is } \\ \text { important." Suggested adding more on outreach within the community and how that is happening. Also might ask if } \\ \text { outreach and communication is happening at the district level. }\end{array} \\ \text { Also discussed \#16 -- put down yes had wellness committee because intended to start one but has not as of yet. } \\ \text { Overall summed up staying power as, "To see how the administration is on board and how they're communicating because I } \\ \text { think like they all like the idea in theory and they want to be your cheerleaders." } \\ \text { SS: Have headings that relate the questions to the 4 focus areas. } \\ \text { ST: Very easy to fill out, no suggestions. This helped to think about what needed for sustainability. } \\ \text { SM2nd: Overall felt like there was a shift in culture so more items were checked. However, question about teachers, they } \\ \text { were all supportive allies in a cheerleader type of way, but not active supporters so wrote "none of these" because they are } \\ \text { not really doing any of these tangible markers of success. } \\ \text { Thought that questions about ties to the community could be added, such as local food businesses who donate food to the } \\ \text { garden club. "Maybe how many local businesses or organizations do you feel like you are in partnership?" }\end{array}\right\}$

## Policy

## Comments and Recommendations

- Several suggestions to have questions along with the policy questions that ask about implementation of the policy.


## Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | SM: Found this very challenging and had to sit with site supervisor to answer these questions. This part felt over SM head. <br> Did not even understand what a "wellness plan" or "standards" mean. <br> SS: Suggested more about how much the policies are implemented instead of just what the policies are. That way could <br> track both what the policies are and how well put into practice. <br> ST: Well done. <br> SM2nd: Also easier. Question 13 on geographic preference still hard. Maybe simplify into layman's terms. |
| Texas Avenue | SM: Defined this section as: "The laws and everything throughout the state, throughout the district related to healthy school <br> food as well as gardening practices." |

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|  | SM found answering these questions pretty easy (not clear how information gathered). Suggesting adding more on "standards" (think this means policies) on the school level. <br> SS: Said this section good. <br> ST: No comments. <br> SM2nd: This also stayed just about the same as the fall, although people seemed to gain more awareness or knowledge about it, at least had their horizons broadened from answering the Progress Report in the fall. |
| :---: | :---: |
| Albert S. Hall School | SM: Defined this as what was going on the district level. Felt it was easy to find the answers by talking to the food service district manager and teachers. <br> SS: Looks complete, no suggestions. <br> SM2nd: Stayed the same from the fall. "We are seeing the other schools in our district becoming more interested in the programming we're doing with the garden and cooking and stuff so, hopefully we would see a movement in the next couple of years, in changing policy." |
| Cibecue Elementary | SM: Said of the policy section, "Oh this is like written policy, like educational standards." <br> SM really liked the option of "don't know" because sometimes people just really didn't know. <br> SS: Talked a lot about federal policy but that is different when working with tribes who have their own tribal policies. Maybe add something about tribal food policies or food codes. <br> SM2nd: Same as filling out the first time. |
| Grove Park <br> Elementary | SM: Described this section as "just policy" and then added "all of the different levels involved, what's already in place." <br> This section was challenging because the SM heard conflicting things from different people (e.g., there is a district wellness plan, no there is not a district wellness plan). SM felt this showed the challenges at talking across different levels such as the school and the district. <br> Comment on question 14: The produce is allowed to be used in school meals nation-wide but many people do not know that. <br> SS: Needed more of a primer that this was coming. Working in 4 different school districts and needed to get contacts in each district. Service site supervisors needs to be more away of the importance of this section and help with it more. <br> SM2nd: Since nothing changed in spring, easy to fill out. SM said that assumed that since did not hear anything that nothing must have changed. <br> Suggested putting by "was school produce allowed to be used in school meals" could add "was it used" [and how often] |
| Moulton <br> Elementary School | SM: Policy section means, "Kind of like the overarching things that are happening in the school district and kind of what guidelines and things at school's having to work under and with. What sort of restrictions and restraints and allowances do they have." <br> Site supervisor helped complete this section. <br> ST: This was "cut and dry" Also out of school control (e.g., "our district provides the nutrition education standards, our district provides the wellness plan.") <br> SM2nd: Easy since did not change much. |
| Postville | SM: Hard to find this, but "was good to kind of dig a little deeper about how teachers implemented, or what nutrition stuff they were implementing in their classrooms." When so new at a school, hard to figure out the policy stuff. Educational policies and standards all so new. Also, the contacts she had used for all the other questions did not know about these policy questions. Looked up educational standards online. <br> This is a good section to find a specific person who knew about policy stuff and not have to talk to the entire group about. SS: No comments. <br> SM2nd: Found out throughout the year that there was not a preferred garden curriculum, confirmed that there was not something SM did not know about at the beginning of the year. |
| George Elementary S | SM: [there was some confusion over the discussion of the policy section, in the end SM just said that this was easy because everything was no] <br> SS: this section fine too. "We found the whole document thorough, but easy to use." <br> ST: No comments. <br> SM2nd: Liked these questions and policies had not really changed. |
| Ronan | SM: Described policy section as, "I think it was helping you understand where your school was at in the larger political framework. So, from like school policies but all the way up to your state policies and such." |

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## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

|  | Some debate over the definition of set curriculum (e.g., some people think of FoodCorps as a curriculum instead of as a <br> service member). <br> SS: Don't know much about this area. |
| :--- | :--- |
|  | ST: All pretty easy to answer and like that can click multiple options as appropriate. <br> SM2nd: SM knew more this time from a year of working on the school. In the fall had to rely on others. |

## Combine Focus Area 1 and 2?

## Comments and Recommendations

- Most people interviewed liked having Focus Areas 1 and 2 separated.

Site specific information:

| Site | Salley Springs <br> SM: No do not combine, these were done by different people. <br> SS: At first thought, why are they asking the same thing again. Then thought, "they're good to be separate because I think <br> they're two different things, you know what I mean? I think that the actual nutrition education and then the garden <br> education. So I think it's good that they're separate. I think, like I said, initially when we were first doing it 'cause it was our <br> first time going through it, it felt like we were answering the same questions again, but then when we really thought about <br> it. No, one is... Garden education is this, and then the nutrition is.. We do the nutrition education in the garden or <br> sometimes in the classroom, depending. So I think it's good to have them separate 'cause I see them as two very, very <br> interlocked but definitely separate things." <br> ST: Good to have separated. <br> SM2nd: "I love that it was separated because I feel like they're very separate entities. I didn't feel like it was overlapping at <br> all. I actually enjoyed that part of it." |
| :--- | :--- |
| Texas Avenue | SM: Get how they are interconnected, but liked having them separate because in a school the garden and classroom are <br> often thought of separately. <br> SS: "I think it would be good to keep it as it is, to tease out the garden pieces versus the school nutrition, 'cause it could be <br> one without the other." <br> ST: "Broken down like this, yes. I think they're definitely two separate things." <br> SM2nd: "I think it was good to have them separated, especially for myself when I first came in in September. A lot of my <br> gardens were destroyed because of superstorm Sandy. So originally, we didn't really do a lot with gardens. So it was nice to <br> have that nutrition education separate from the school gardens, since I think a lot of schools either don't have a garden <br> where they can do garden education, and they can still work on nutrition education. So I think it was good to separate <br> them." |
| Cibecue | SM: "Helpful to have them separated" Some education specifically in the garden and easier to think of it that way. |
| Elementary |  |
| "For my service it would make sense to have them combined just because the curriculum was so, the classroom and garden |  |

# Appendix I-Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | were so integrated together." |
| :---: | :---: |
| Grove Park Elementary | SM: "I think it definitely... They should be separate. It's true that there's some overlap as far as what they both encourage 'cause they both encourage similar things, so I don't know if it could be combined for part of it and separate for the other questions." <br> SS: "I do think that a lot of the lessons that we do overlaps nutrition education and activities in the garden, and I do think that there is... I think you could combine them, if you just pulled out a couple of questions about specific tastings, where it's just a tasting activity and not really a garden lesson or activity at all. But for the most part, if it's not just a single tasting activity, there's gonna be a part that's both included in each lesson. So yeah, I like the idea of combining them." <br> If combined just might have to have a way to account for tastings that were not part of lessons. <br> SM2nd: I think it is useful to have them separated because most of my nutrition lessons were kind of a part of the tastings and those were done inside the school and separate from the garden. And then I also had a few more nutrition-related lessons, but yeah, I think there are schools where I kind of integrate both into every lesson and then, Grove Park, I think I kept them more separate, just because of age groups I think. Not wanting to give too much information so that it's overwhelming. So yeah, I think it works to keep them separate 'cause each school is different. |
| Moulton <br> Elementary School | SM [this was in the focus area 2 section, but is good information to think about in relation to combining]. "The nutrition education is much more rigid, like regimented. It's like, 'I know exact...' I teach the same amount of lessons per month in every classroom. And so, the garden I was kind of like guessing based on what I remember from doing last year. Garden education more about guessing and estimating that an exact count. <br> This SM dug into how it is similar and what is different and gives a good case for why to think about education more holistically in terms of the student experience. "I think it's helpful to have them separated because, like at my particular service site, the nutrition education is pretty strictly just nutrition education. But in those times that it's overlapping, similar to our R\&R logs then I teach something in the classroom and I might tell you about the nutritional benefits of spinach, and how you can cook with it. But I also might tell you how you can grow it and we might even plant it together. And so, those cross-over lines of when we're doing both of those types of lessons. I think in that instance it would be helpful to have them more joint, but I think it is helpful to know are kids always inside learning about eating healthy or are they outside experiencing it with their hands, growing food? So, I think there's definitely a difference." <br> SS: "Right now the way that our lessons are structured having them separate makes sense, but I do see an effort in the members in other schools integrate their garden and nutrition lessons more. So I can see where that may be hard to define which piece it might fit in." Separate funding that supports nutrition and gardening is good to have separate. <br> ST: "I think it was really good that they were separated. Because, yes we do have a garden, and we've been building momentum with it, especially our food co-worker has been amazing in helping with that. But we also have a district provided health curriculum and we talk about nutrition in that, in all grade levels. Whereas the, 'pick a better snack' program that she teaches is not with all grade levels. So being able to separate that out. And also with what she comes in and does, and what teachers are doing based on district provided curriculum, so I really appreciated that that was separated out." <br> SM2nd: [said this part during section on contrasting completing progress report in the spring with the fall] Did have difficulty determining if it was "nutrition-focused" or "garden-focused. There is overlap, e.g, food club talks about nutrition and gardening. <br> "All of my classes that are specifically nutrition education through a class that I do call "Pick A Better Snack", those are all... The Department of Public Health has those designed to be specifically nutrition-focused, but when I do a lesson, I, every single time, talk about gardening, or bring a plant in to show them what it looks like, tell them how it grows and things... Some of those things are hard for me to decipher, like should I include that in the gardening section too? And then so the garden one, what if I talk about the nutrition behind the plants that we're growing? Is that also a nutrition lesson? So I didn't really do that. I was like, was it more gardening than nutrition-focused specifically? I didn't double count them, but that was a little bit challenging. But as far as repetitive, definitely the questions are repetitive from section to section, but I understand why you would want to have all of that information for each, and it's not that hard to just write yes or no." <br> [said this later in interview when asked again] "I think it's good to have it separated, but I can see how people would start double-counting things and that might throw off results a little bit." |
| Postville | SM: Good to have them separated. However, the school this SM served at last year they were more integrated so it would have been harder to have them separated. Current school nutrition and garden pretty separated. <br> SS: Pretty clear which were garden or nutrition lessons at their sites. <br> SM2nd: Depends on how a site is set up. This service member was at a different site last year and created own curriculum so integrated garden and nutrition. Would have been hard to have them separated. But, this year have a specific nutrition curriculum, Pick a Better Snack. It was easier to have them separated. <br> If at a school where nutrition and garden integrated answers may get repeated. |
| George | SM: "I think it's good that they're separate I do." |

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## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

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| Elementary S | SS: Like them separated. "There's a lot...under nutrition education... food system sustainability, social justice, food issues, <br> analyzing food issues. That's not necessarily engagement in the garden, so to me it's very helpful to keep it separated, to <br> make sure we're getting all these areas." <br> ST: Separated. <br> SM2nd: Liked them separated. |
| :--- | :--- |
| Ronan | SM: [not discussed in interview] <br> SS: Like them separated. |
|  | ST: Could see how some thing may get counted twice. After some trying to think it through, realized how it was explained <br> better to separate, but I think could be convinced if explained as all education then could go together. <br> SM2nd: Even though had trouble figuring out where to put items (e.g., in same lesson planted microgreens, cook and <br> "doing nutrition" still thought it would be easier to have them separated. "I just think it works nicely for my head because I <br> have something that sort of defines the different areas." |

## Gather information for each grade level?

## Comments and Recommendations

- Those interviewed felt it was a strength to have the information separated by grade level.

Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | $\begin{array}{l}\text { SM: Thought it was important for FoodCorps to know exactly what grades and what classes involved (previously this SM } \\ \text { had talked a lot about having some highly engaged teachers and some not so engaged teachers.) } \\ \text { SS: "Think by looking at it by grade level is really important." It can help to design the program. Do not think it is too hard } \\ \text { to complete. } \\ \text { ST: Good to collect for each grade level, help to set curriculum. Maybe also could do a survey monkey or google survey } \\ \text { with the information from the Progress Report for each teacher. } \\ \text { SM2nd: "I think you should definitely go class by class...I think it's pretty valuable." }\end{array}$ |
| Texas Avenue | $\begin{array}{l}\text { SM: Yes, "definitely find it useful to go by grade and that actually helped me to determine what grade I did want to kind of } \\ \text { target with my service. So, I thought it must be very helpful." } \\ \text { SS: From a program development end, this is very useful, really need to pinpoint what each grade is getting. } \\ \text { ST: No, I think it's better this way actually, so you can actually focus on maybe where you think you might need a little bit } \\ \text { more...more focus in the younger grades so that when they get to be sixth, seventh and eighth graders they already know } \\ \text { about it... I'd rather do it this way and know that like last year we focused mainly on first, second and third... if you just } \\ \text { quote... Percentage ... 'What percentages of what?" ... I prefer it this way actually." } \\ \text { SM2nd: "I think having it separated by grade level was really nice. Especially for me, because I know in the past they only } \\ \text { did a certain education with certain grade levels. So for me personally it was nice to kind of lay out which grades have had } \\ \text { it, which grade haven't, so then I can adjust who and what I want to teach." }\end{array}$ |
| Albert S. Hall | $\begin{array}{l}\text { SM: Since there is variation on the education in different grade levels gathering this was helpful. "I feel like it was probably } \\ \text { more accurate the way we did it, going class by class. General, I feel like I would probably have a slightly more inflated } \\ \text { number" [if it was more general and asked about percentage of students] }\end{array}$ |
| School |  |
| SS: "I thought that was pretty important to do." The best way to get this accurate (SS said as she is reviewing now she saw |  |
| errors) is to have more eyes on it. Perhaps review with wellness committee before submitting. |  |
| SM2nd: Thought more useful to have separate. This school only 4th and 5th grader so simpler, but "fourth grade teachers at |  |
| our school, universally embraced the garden this year and the fifth grade teachers were much more reserved, so I think it is |  |
| important to see the differences in those numbers. And it allows us to see where we need to focus more and also see where |  |
| our allies are. So, I think it was good to have them separated that way." |  |$\}$

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | of schools, or a lot of FoodCorps members only work with certain grade levels. So, I think it's good to make that <br> differentiation, especially when you're working between elementary school, middle school and high school." <br> SM2nd: Grade by grade appropriate since only 3rd to 5th receive the curriculum. |
| :--- | :--- |
| Grove Park | SM: "For me it was helpful. I could see how at other schools the percentage might be more useful, but for me I tried to <br> spread myself amongst all the grades." <br> SS: "I actually like pulling it out per grade level. I think it does give you a good trend of who's doing what. 'Cause some <br> schools are really focused on specific grade level bands, and they might have all... Everybody in 5th grade does a garden <br> project, but nobody else does gardening. And I think if you end up averaging that out across the school, you lose some <br> important information. <br> ST: "I think the grade level specific is useful... I don't think it would be as useful for our members specifically in how <br> they're working with the school, knowing that 20\% of the students are getting it. We can increase that but knowing that first <br> grade is getting this and not fifth grade it helps them to kind of form plans with the school on how to spend their time if <br> that's the goal would increase the number of grades for classes. I think that's useful." <br> SM2nd: Like doing it by classes. |
| Ronan |  |
| Elementary School |  | | SM: Service site has a nutrition program for K to 3rd, but not 4th and 5th. Helpful to do individual grades also that can help |
| :--- |
| the school to see which grades are not getting it so they can work on it. |
| ST: Having to do each grade, "was really useful when we were talking about it." Grouping grades is one option (e.g., K-3, |
| 4-5) |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

kindergarten because SNAP educator works with 1st and 3rd grade. "Tapers off after that."

## How Progress Report helped with Action Plan

## Comments and Recommendations

- Spring: SM really got that even if a goal was "completed" that almost always meant it was really ongoing -- still took a lot of work to keep it going and without support would not happen anymore.

Site specific information:

| Site | Sum mary |
| :--- | :--- |
| Valley Springs | SM: Process for action plans was with service site supervisor and past FoodCorps SM. The 3 sat down in a meeting with the <br> service site supervisor taking the lead. <br> Hard to determine the timeline since everything was new did not know how long it would take to accomplish different <br> steps, Wanted to do everything right away. Also found it hard because SM had ideas and people would just say it would not <br> work, without discussing details about what steps had been tried before. <br> SM also felt some confusion over whether the action plan should be to continue and build on what previous SM had started <br> or to be able to begin with her own ideas. This was frustrating to not know what to do. <br> When SM did set goals she wanted to them to be both ambitious and realistic. SM felt goals were accomplished because of <br> being BOTH realistic and ambitious. <br> SS: Identified their weaknesses from the Progress Report and, "So we literally cut and pasted right out of the questions. I <br> don't know if they're questions or would you call them the statements that we're answering where we were in each of those <br> areas...We literally used line by line going through that trying to find our weaknesses and then setting our five goals both <br> for the school sites. And then when we set our service member plan then feeding off of that going back in. So I actually <br> found it to be an incredibly useful tool for setting goals." <br> ST: Helpful but ST not that involved in setting the goals. <br> SM2nd: "I thought it was really fun because I felt like I had made a lot of progress." A lot accomplished shortly after <br> setting goals and then other ones ongoing. We have, "an adult to man the salad bar on a regular basis in upper grade <br> students, we're doing that, that's in line. I have completed that in my mind 'cause it's being handled, but it's an ongoing <br> thing." However, SM realized has to keep paying attention to assure it continues. <br> Also does bi-weekly tastings. Has been doing that a long time. Would like to check that off but really ongoing. |
| Good to keep Progress Report and action plan "in front of you." |  |

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## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | awareness." <br> SM2nd: Knew what focus areas, "wanted to tackle." A lot had to do with the garden. Went from 5 to 11 raised beds. That <br> was from the Progress Report, from the Progress Report, "figure[ed] out what we wanted to do and what we needed to do." <br> Also the goals of having more classes work in the garden came from the Progress Report and realizing only one grade <br> working in the garden. "Now there is a Garden Club, so hopefully it will remain active for years to come." |
| :--- | :--- |
| Albert S. Hall | SM: Used progress report as baseline for what wanted to improve in the school. <br> Gchool |
| Goal 1 came from realizing that they were serving local food, but not promoting them and felt as though it was important to <br> food service staff has limited time (constrained due to being busy preparing meals) it has been challenging to find a <br> sustainable way of knowing what local foods are coming in and figured out how to then identify and promote them. <br> Goal 2, "came out of a project from before where the students had calculated their food waste over the course of two weeks. <br> And it was in collaboration with the Robotics Club at the school who's doing a project on styrofoam in schools." This made <br> the goal to get compostable or reusable trays, "and then promote recycling and composting at the same time, to introduce a <br> holistic system instead of just going after one piece of it." Also felt this was related to the Progress Report question on <br> composting as well as connecting to 4th grade science unit on soil and decomposers. Therefore thought a composting <br> program in the cafeteria would connect to environmental sustainability. However, after doing all the planning, the district <br> stopped the composting pilot for fear of all schools wanting to do composting and then having to pay custodians more -- it <br> came down to a budget decision. <br> Goal 3: permanent water source for garden. Connected to having more garden education and experiences. That was easy to <br> accomplish, principal paid someone to do it. |  |
| Goal 4: related to progress report as they wanted to be able to more systematically make sure all classrooms were getting |  |
| both garden experiences and nutrition education in the classroom. |  |

Goal 5: grow taste test program that have local farmers come visit during the taste testing. This has been easy to accomplish and they have done 3 taste tests so far.
Used Action Plan to complete service member plan more than Progress Report.
Service member plan was a combination of SM desire to connect gardening, local farmers and nutrition education with the school's desire to do the same.
SS: Goals a mixture of Progress Report and service site organization mission. From the Progress Report and collecting information on grade level, "it became clear to us that fourth grade had more engagement than fifth grade."

Goals number 4 (access in each classroom) and 5 (taste-testing) were specifically from the Progress Report.
SM2nd: Valuable to look back over goals at end of school year, "we realized in some areas we had done really well and got $100 \%$ of the goals accomplished and then some other areas, especially related to community involvement and getting parents involved in the gardening and programs and families involved, we really didn't have a whole lot going this year. So that was a good way to recognize, 'Oh, we left this big section off our radar 'cause we were so focused on these other things.' Yeah, that seemed like the most helpful."
"There was a number of times throughout the year that we pulled up the action plan to see how we were doing on things, see if we needed to adjust any of our goals so it's definitely a good resource to have and to bring up multiple times...The first goal, 'Serving local food on Wednesdays and highlighting where the food came from.' In the fall we were definitely very focused on this and I got a monthly printout of foods that the cafeteria would be serving and any time there was a fruit or a vegetable. And we'd look into who we were buying it from, what local farm it was coming from, and then we'd make it a poster and display it on the day that that food was gonna be served to highlight that."

Decided that for next year want to try to streamline process of having food service label local foods. Service member will focus on taste tests.
Second goal of composting "long, exhausting battle" discussed with many people. But, ended up as policy battle. City did not want a pilot program for school to compost because did not feel ready for all schools in the city to complete. "That's disappointing, but it's potentially something in the future if there's more community buy-in that we could get going. We had three different clubs of the kids in the school that were all promoting it and did a little presentation to our school board and talked to the local paper about it and stuff. So they all thought they were gonna change the world and then it didn't quite work out, so it was hard for them."

Third goal, got a permanent water source for the garden. "We have a sign-up list going around right now for students and their families to take care of the garden and water it throughout the summer."

Fourth goal, to get every classroom going to garden happened in January, then rest of year was getting connected to the curriculum. Next year to work toward teachers, "instigate on their own" and service member is providing resources.
Fifth goals successful in having 4 local farmers come in for taste testing. "We'd like to get more of them, and have an ongoing rotation of farmers and seasonal crops coming in for monthly taste tests."

Cibecue
SM: The school wellness committee chose the goals. They were not really involved in answering the Progress Report

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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Elementary $\quad$| questions. SM used the Progress Report to come up with ideas and "voice them to the committee." An example was doing |
| :--- |
| taste tests that the SM brought up because of the Progress Report. |
| SM referenced the action plan a lot during the beginning of service, but the goals have changed greatly or become obsolete. |
| At first service member did not understand that she was coming in as part of Johns Hopkins team. "Especially coming off as |
| the orientation where FoodCorps teaches us all of these, different things that FoodCorps members can lead. I remember |
| feeling a sense of independence that actually never really materialized. I thought as a FoodCorps member I was kind of in a |
| different role than my co-workers at Johns Hopkins but that's not really true." |
| So at first SM focused on own plan, but now is focusing more on the school plan. As an example, at first SM thought role |
| was, "transferring the ownership of the school garden from Johns Hopkins to the school community" but the school was |
| already doing that by taking on the FoodCorps service member next year. |
| SM summarized by saying, "my FoodCorps service seems more geared towards being a Johns Hopkins employee and |
| following their goals rather than necessarily FoodCorps' goals. So, I think sometimes the FoodCorps goals kind of fell to the |
| wayside while the Johns Hopkins goals took precedent." |
| The Progress Report and creating action plans was good for the SM to, "expand my mindset around school wellness but |
| then was a little hindering in that it was a very optimistic view of what was gonna happen." |
| For the service member plan the Progress Report was really good to give ideas. |
| SS: The questions on the Progress Report were in line with the goals that they already planned to work on, so fit together |
| well. |
| Progress Report helped to inform the goals process and gave, "a better framework for a plan that the school can |
| implement." Even if many of the goals are long-term and will take several years to complete. |

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | Discussed the importance of the goal process: "we did not get to host a parent-student cooking session, but we did get the <br> recipe book out there. And we did get the atrium's garden to look nice through a group that came out. So, and then definitely <br> it's really helpful to have the plans for next year and long-term goals. Cause it brings out some creativity from... Ms. Jenkins <br> had the idea to do Thanksgiving baskets with food grown at the school, possibly for next year. Not for all the students, but <br> for students in high-need. And to just stay consistent with having our actions be a good model for healthy eating for the <br> students, and using gardening in her leadership after school group." <br> Discussed what would do differently to make goals more successful next year: "I think something I would do differently if I <br> had this again next year is just to really, really stress at the beginning, in the fall, to really stress that we're doing smart <br> goals, that we're gonna really make sure they're reasonable, and in the Action Steps, set up more of a specific timeline than <br> what I did. So that's important for me to remember, because I worked with a lot of dreamers this year, and so they had lots <br> of lofty goals, which was awesome and exciting but then hard to follow up with when they have so much else going on <br> throughout the year. So yeah, that's something to remember for next year." |
| :--- | :--- |
| Moulton | SM: Went through Progress Report answers and thought about what was the "low hanging fruit" and then invited a team <br> Elementary School <br> (about 8 people at that point -- since then team has increased to 15) and passed out copies with the possible items to work <br> on highlighted and also asked the team, "to see other things that stuck out to them as well." Some items from the Progress <br> Report were featured directly on the action plan, but also the progress report, "spurred the conversation into the direction <br> that it went but it didn't necessarily come from the progress report." For example, "one of the things that our school <br> community decided was really important was that we were gonna focus on recycling and cleaning up the neighborhood in <br> the school area. And that came about because of a conversation from the progress report, but it wasn't specifically on there." <br> The progress report helped with Goal 5 directly. Also the Progress Report helped them to realize how better communication <br> between and across the district and the school could help them achieve more goals. <br> This is what led to the decision to make a website to update about the garden since it is hard to get in touch with parents. |
| Sm believes all goals, "kind of relate in some way to the Progress Report." |  |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

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hands on deck, we could do that more frequently and at more events. So, that kind of ties in to the get wellness community stronger goal, which I think we did make progress on it; just talking with teachers individually throughout the year with the goal of getting them to commit to the wellness committee was slow and gradual, but I think it's good that we set that out as a goal at the beginning of the year, because I think moving into next year, we have six or seven people who have committed to quarterly wellness team meetings and they know that they're gonna be part of the wellness committee next year."
"I think setting that goal at the beginning of the year was good. Because now, almost a year later, we're starting to make progress on it... [The] extra recess goal was ... shot down right away, but I think that conversation planted a seed, because next year a lot of the grades are getting an extra recess. So, even though we didn't reach that specific goal, ... I like to think that me approaching the administrators with that request influenced their decision to add an extra recess, but who knows."
Referred to the action plan throughout the year. But not the Progress Report, only "reflected on memories" of the Progress Report, which SM saw as different than the action plan.
Said that action plan is similar to the Northeast Iowa Food and Fitness Memorandum of Agreement that they do with their schools. What the SM likes about making action plans is that for each action plan there is a lead person and a list of who else will be involved. This makes it specific for what people in the school will do and they make a commitment to it. "It's like a partnership rather than me providing service to them."

## George

Elementary

SM: "The progress report is good because it tells you where you want to be and that helps us kind of see what we weren't doing and where we wanted to be doing so like maybe picking one thing that we could easily complete by the year or you know a goal for the future. So that's how the toolkit the progress report helps us with the action plan."

Saw action plans as the "extra" stuff to do and that conducting lessons was main thing that was ongoing. So felt not really need to look at action plan.
Looking at goals, realized now that they were important at the time but, "we've taken a different path to get where we want to be but it's also good to read these to remember like do I still want to do that I don't think so I haven't done the cooking classes. I haven't done the garden club. I have not done the school market we're going to have one enabled like that's one thing. Now I think we do consistently is harvest of the month and the family literacy workshop that was my number five like has not gone the way that I intended. So it could feel like too defeating to read it and be like oh that didn't really work out but I feel like I've had a lot of success when I think about my service. So I don't I'm looking forward to redoing this and making it just like to reflect on what worked well and what if any of these do I still want to try and do for next year."
Action plan may have created "unnecessary pressure" because now that priorities have shifted what is in the action plan is not the best use of SM time.
Service member plan came from school action plan.
SM spending much of service teaching (20 lessons a week) but struggling with this since getting teaching was an important personal goal for the service member, but in thinking about staying power may not be the best for the school since then the teaching is depending on having a FoodCorps service member.
Also SM said it would be useful to get to go to classes to improve teaching skills.
SS: Did not have 4 focus areas "firmly in my head" when did action plan. Would now review to make sure balanced in the four focus areas. But feeling fine about it since this is a first year school. The Progress Report really drove the action plan and the service member plan.
ST: Looked at where marked "no" or "never," or "seldom." Also looked at what they wanted to keep doing well.
SM2nd: Two goals completed. For those goals they were successful because, "we had an idea, we did it and we will continue to do it."
For the three goals still in process they were more big ideas, what they thought of as "the basics that a FoodCorps service site should have, like a garden club, a cooking club, and a after-school farmer's market. Those three things are still important to us but we really haven't made too much progress other than community partnerships and understanding the lay of the land a bit more. So, it's still worth trying next year but it might fall to the wayside again if something bigger comes up."
Biggest change during the year was shifting from a goal of having a school garden that produces a lot of food (and that is what is most important how much food is produced) to having a garden that is a "learning lab" and what is most important is "getting the kids outside and teaching them lessons that are relevant to the garden rather than growing as much as we can so that they can take it home or we can use it in the cafeteria. Even though that's still important, it's not our main focus anymore."
The Progress Report helped the school to understand what FoodCorps is all about. Even thought it was "overwhelming" to check "no" on a lot of questions. SM glad to have learned what other people are doing and what is possible. Also really liked that then there was the goals and an acknowledgement to only focus on five things. Helped to prioritize what is most important and relevant for the school to do out of all the options. Also liked that the goals were "flexible and lenient and things can go in a different direction, you can come back to that to see if your goals have changed or if they're still the same."

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## Appendix I-Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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#### Abstract

school. When setting goals was discussed, team gave SM a lot of say in what she was passionate about, but not everything was accepted. It was a give and take, "getting some green lights and some red lights, as far as things that I was interested in."

With setting goals, different people had more weight on certain goals. Also, since this was a continuing FoodCorps school many of the goals were continuing on previous work. Overall different people (teacher for curriculum, service site supervisor for garden) took the lead on different goals. SM felt action plan helpful to think about what work to do, but again felt like it would have just happened since they were a continuing FoodCorps school. However, other items such as planning a fieldtrip only happened because it was a goal. Service member plan was related to the school action plan. Professional development goals were more specific to the service member (gain experience in a low income native community) but also tied together with the school and service member action plan.

SS: Wanted to have a garden so that ended up being a key part of the action plan. That was so do not have all zeros in that area. Was a combination of what service member wanted and desire to have teacher involvement. Also tried to have the action plan touch on all the focus areas. Also took into consideration that this is a high poverty school ( $100 \%$ free/reduced price lunch). As an example, when they started Harvest of the Month very hard to get students to try foods but by May, "number of kids that tried it was phenomenal." (spoke a lot about high quality of FoodCorps service members -- some good quotes on that at minute 39)

ST: Goals mostly by what people wanted done -- school garden. Don't know exactly how Progress Report used, but seemed like school desires, wellness policy, and Progress Report, "just worked together this year." SM2nd: Tried to have a meeting partway through the year to review, but when no one showed up SM reviewed goals with supervisor. At that meeting updated action plan and tracked progress. SM found this very useful. SM really liked the framework of having the goals and being able to check in on what was done, what was working, what was not working and why.

Goals were met, basically, timeline for implementing the garden goal changed some as the school year went along, and education did not always get done as planned because of other priorities, and fieldtrips happened except one place wanted to visit did not offer trips for children.


## Suggestions for changes

## Comments and Recommendations

- Overall long, need more guidance on how to complete the Progress Report. Also, wording can be alienating to people who do not have a background in doing food-related programming in schools.
- Even though they thought it was long, thought all information was good and important to collect.
- The questions seemed to be phrased to make them feel like a test and so people found it hard to have to answer "no" repeatedly.
- Thought was that it was hard for a school that was just getting started, but good for a school who has been doing programming as it allowed them to report everything they were doing in a detailed way.
- Suggested thinking about it more as a conversation and learning process instead of a test.

Site specific information:

| Site | Summary |
| :---: | :--- |
| Valley Springs | [Important note: service member shared that she missed service member orientation in Oregon in August, 2015 and <br> realizes that a lot of information was provided there that she did not have] <br> SM: Suggested that maybe the process of creating action plans could be more structured (e.g., in focus area 1 choose 1 <br> question the school had room for improvement on and make an action plan that would work for the school and improve the <br> school's score on that question). <br> SS: Nobody really went through on how to fill these out with us in terms of we just...[Service members got] some training <br> probably at their national orientation. But even then I don't think they did a lot because this was so new. I'm assuming that |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | with service members next year they'll spend more time on this at the national orientation, because it is kind of a big thing coming in and there it was such a new thing last year that they were kind of still figuring out too I think. But no, I think that they're pretty straightforward." <br> Maybe an optional webinar would be helpful for people to be walked through the process. <br> SS would like to have the opportunity to work with other service site supervisors, creating more opportunities for dialogue. Felt as though as a service site supervisor very involved. <br> Overall found it valuable once determined that it could be used as a goal setting tool (at first felt overwhelming and thought of as just evaluation that seems worthless). <br> Also, maybe making it clearer that the larger point is to build community so supportive tools about how the Progress Report can be used for community organizing would be helpful. |
| :---: | :---: |
| Texas Avenue | SM: "I would say is I feel like it is rather lengthy and although I love that because it actually is really detailed. I'd like it becomes a bit of a task for especially busy teachers in beginning of school to fill it out, so maybe if it was a little bit smaller, if there was a way to combine certain questions; I don't have exact questions to combine, but I think just intimidating at first." <br> SS: Really stress to school that representatives from the school are needed to complete the Progress Report accurately. <br> "I think that just the size of it is intimidating to the school wellness or team, or to the school to have to complete, especially because they're just meeting this person for the first time. The service member's like, 'Hey, I'm new to you and let's sit down and work on a 15 page document together.' So, having the ability to break it up or at least knowing where to stop to break it up, maybe a little bit more instruction on that would be helpful or like I was saying about, is it on a format that could be sent and returned to the service member would be helpful." <br> Service members could use more guidance on how to set realistic goals and what steps could help achieve them. <br> ST: No suggestions for changes. <br> SM2nd: One PDF, service member discussed having to submit multiple times, but then said fine [this was unclear.] <br> SM suggested having the Food laws for each state. This would help with the policy section. Having a "link to the specific laws in the state would be helpful." <br> Link to the Edible Schoolyard website would help to see "what other schools have been doing in different lessons...a great resource, and it's free...good one when it come to developing the action plan." |
| Albert S. Hall School | SM: Suggest that for each section have a list of the types of people who may be useful for getting information for that section. Something like a basic checklist of needs: someone from cafeteria, someone who knows about policy, principal for some more general questions. Felt that many SM got overwhelmed with building the biggest and best team and this caused more frustration and discouragement instead of starting the year in a positive way. A streamlined way of gathering information would be more positive for everyone. <br> Suggested more questions on community resources outside the school that could help promote nutrition or gardening. <br> SS: "it's really long and I'm not saying cut things out, but it's really long. And we get a lot of paperworks and emails from FoodCorps, it's overwhelming. So, I'm wondering, one, I didn't quite understand what this was for when I did it, and that may have been my fault for really not reading through it. But I'm wondering if it could be broken apart where one month you get one part to fill out, another month you get another part to fill out. It was overwhelming. It's all important stuff and good stuff but teachers are... We're really busy." <br> Maybe get it right at the beginning of the school year and get a bulleted list of what data will be needed. If there was a one page list of what would be needed it might have helped. <br> On page 1 (list of programs) think about also asking about the quality of the programs instead of just a check-off. Discussed their breakfast in the classroom program, "the breakfast we get is horrible. It's pre-packet, processed, sugary carbs. So, I don't know how that can be teased out as far as, 'Do your kids get oatmeal and fruit or hard-boiled eggs and toast, or do your kids get little baggies of garbage?'" <br> Also suggested a question on the snacks in afterschool programs, chocolate milk, access to water. <br> SM2nd: More clarity on where to find answers for the policy section. |
| Cibecue Elementary | SM: "The filling it out was easy, and I think the structure and how it was separated was easy to understand. I think it depends how FoodCorps views this document, like how they want it to be used and by whom. But it is very long and I think the wording can sometimes be a bit alienating to people who don't have experience with this or background experience with a lot of this [these] ideas and goals." <br> "Just the way that the questions are phrased and presented, it's like a test in which you know the right answer. And so the... It's a very... The questions have this bias to them that doesn't allow it to be a neutral... But I guess it's called a progress report, so that was just inherent in it. It was just hard for it not to be like a neutral document, and when speaking to a school that was so far behind." <br> SS: Felt Progress Report was very time consuming and some areas did not apply to the school. "If it was a new school that |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | was barely starting this process, it might be a little intimidating for them." <br> More technical assistance, an overview of it for the schools. <br> Suggested a glossary of terms used in the Progress Report. More explanation of the different areas. <br> Working with tribal communities is different than other schools. Provide more specifics for tribal schools. Maybe ask what type of school it is. Whether the school is a public, charter or other type of school influence a lot. This would be good to know [we get this from common core data]. <br> SM2nd: Length is overwhelming for SM to do in the fall, but not sure how to make shorter and still "be as comprehensive as you want it to be...I think that it's just by nature a laborious process to go through when you're like a new person into the community." <br> Thinks reading the beginning part that gives an overview of each focus area is really important and realizes now that did not read that before completing in the fall. |
| :---: | :---: |
| Grove Park Elementary | SM: Thought whole form very long. "I think that was a concern from the beginning for most service members, that it's just really hard in a lot of the schools that we're working with for them to actually go through everything, and maybe people get lazier when we do surveys and they're long. So, I don't know if it would make sense to cut some of those down and just use the essentials." <br> Have it be a working format that can be gone back to. Also make it smaller, even though all the questions are valuable things. SM summed it up by saying, "it really doesn't take that long, but it's overwhelming for the school workers that we're working with, they just don't have the time to go through it all." <br> SM said that having the Progress Report information will be really helpful to the next SM. <br> SM mentioned that many schools complete the Alliance for a Healthier Generation forms. SM could be better prepped for how they could get this information from the school (especially since new SM are so unfamiliar with the school culture). Gym teachers mostly do the Alliance for a Healthier Generation form, so they may be a good resource for the Progress Report. <br> Suggested a day-long workshop for SM on how to conduct evaluation. SM gave the example of completing a Cooking Matters survey. They say, "oh, I am sorry that you have to fill this out" but that framing does not make them want to do it, positive framing for the Progress Report could be, "This is gonna be really helpful in evaluating what the school already has in place so that we can know what our place is and what our role is." <br> SM also thinks that being able to share the completed form with everyone at the school would also help to provide a positive framing. Discussed improving the Fruit and Vegetable Snack program as part of Progress Report and SM thinks this helped to add a positive frame to it. <br> SS: Accessibility. Very hard to work on collaboratively online. Service members had to take screenshots or send PDFs. If it was a collaborative online tool then the committee would feel more actively involved. Having only one person able to do it online sets up a "gatekeeper situation." <br> Long discussion about Alliance for a Healthier Generation, "I talked a lot with your local Alliance for a Healthier Generation folks here, and went through this with them. And they identified some things that were really similar, but a lot of things that were also completely separate than what they're doing in their toolkit. And they were really interested in the potential of this to help the schools that they already work with through Alliance for a Healthier Generation measure more of the garden-based nutrition education. 'Cause they have a few questions related to that, but this really would expand that for them. Every single school that we work with here has worked with Alliance for a Healthier Generation at some point. So, I think to understand how this fits in with that kind of thing that can get them that national recognition for their school will give schools more of an internal motivation to work on this kind of stuff. 'Cause right now, the point is for them to use this to measure what's going on, assess what's going on, and set goals, and then measure progress towards those goals internally. But Alliance and some of those other tool kits linked to a recognition or award, and schools get really motivated by that. So, I don't know if there might be a way to link up with that, or Healthy Green Schools, or whatever. There's a ton of them that are... Not a ton, but there's a small handful, like six or seven other national wellness or green schools awards that this could feed into, but maybe there's a way to also make a recognition program, so that this becomes more of a... And that's what Georgia Organics did to get all the information from the school district here with the Golden Radish Program, and they're getting fantastic info back from them and making huge... They're making huge changes because they did this award. I think you should attach recognition to it, if you wanna get schools more... Feel more that they can... And working on it. And also help them understand where they are compared to their cohort of other few core schools, what does excellence look like? Within their school, they can say that, but they can also see what that looks like in other schools." <br> Also suggested an online tool for Service Members to be able to track progress on action plans as the year goes along. |
| Moulton Elementary School | SM summary of how to present Progress Report, "I think it just like, has to take a lot of initiative from the FoodCorps member to be able to present it in such a way that it's not burdensome, but it's also like a really useful tool. It's funny 'cause I was able to do that in one school, this one. And then at another school, I was not able to do that and that tool has not been very successful there, and I don't know that it's really useful at all at that school because there's not really like... If it's just |

# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | me looking at the tool and using it to develop my own action plans, it feels very irrelevant. I feel like it was a waste of my <br> time to do it at that school. But at this school, it proved to develop this whole team of people that is meeting and hopefully <br> will meet even if I'm not there next year." <br> SM recommends that the way to be successful with the Progress Report is to really dig into it themselves before going to <br> the school. If the service member knows it really well. That way instead of feeling like a judgment tool it could lead to more <br> conversations. National orientation could be a time to guide service members about how to use this as a conversation starter <br> and as a way for the school to see how they could grow instead of feeling judged. <br> Was hard to make the action plan specific enough at the beginning of the year when everything was new. Hard to figure out <br> exactly what needs to be done (what to spend time doing). <br> Might be a good idea to have checkpoints throughout the year to make it seem more relevant to look at the action plan <br> during the year. Would be good to be asked to check in on things during the year. Maybe also asked to report on what <br> percentage of time spending on different goals during the year. <br> SS: Would be nice to connect Progress Report to other information they have to report, such as action plans for wellness <br> policy. <br> Site supervisor's role could be more involved, there could be more resources and discussions with FoodCorps national on <br> how to do this. <br> ST: Share the action plan widely with all people who could be involved. Also have a school administrator as part of the <br> process. <br> SM2nd: Overall a good tool, but kind of repetitive for schools who have to do other assessments. "I can't think of off the top <br> of my head. I think it is a good tool, and for the most part, pretty self-explanatory as to what you're doing. I think it explains |
| :--- | :--- |
| everything pretty well, and I didn't really have hard of a time filling it out. So, yeah. I guess just the thing that we talked |  |
| most about in my service site was just not being insensitive when filling it out of people's time, and also other surveys that |  |
| they fill out too in terms of your healthy school environment because there's a lot of them. So, like my particular school |  |
| have to do a similar type of healthy school assessments, and so just recognizing that those things feel a little bit repetitive |  |
| and using the burden of the school to have to do that and having it." |  |$\quad$| Slementary S |
| :--- |

## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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|  | to link curriculum to the garden and mission and vision. "Being able to have those resources to connect to of how to connect science and how to connect nutrition education to the classroom. Those resources were very beneficial, and our teachers grabbed on to those. Like this summer, we have a science teacher on special assignment. It's from the district level, and that person is meeting with the FoodCorps employees. And they're connecting the FoodCorps curriculum and our district's science curriculum, and they're lining up each unit for... Like when each grade level teaches each unit, and they're lining up that, "Well okay, when you teach unit two in second grade, this matches FoodCorps' goals. And so these here are the materials from FoodCorps that match unit two." And so, they're actually creating a FoodCorps link into our district curriculum guide, so that when the teachers pull up their district curriculum guide for their unit, for the six or eight weeks that they're doing it, they can scroll down and they have an automatic link to FoodCorps and all the resources that are there. I'm not sure that everybody has that or has it lined up that way, but that was very valuable that we were able to access those resources." <br> SM2nd: Keep the categories of nutrition education, garden, staying power etc. But then provide service members with a regrouping of the questions based on whom to ask the questions to: administrators, teachers, food service, etc. This would allow service members to have a more "direct approach" in getting to know staff. <br> Even if the principal and other administrators are too busy to help with filling out the Progress Report it is really important for them to be at least "somewhat involved" in setting the goals and creating the action plans. Really important to have the goals and action plans be something the principal supports. |
| :---: | :---: |
| Ronan | SM: Even though this service member only had to do the Progress Report once heard from several service members who had 3 schools that it was really hard to do the Progress Report 3 times. <br> Also suggested more guidance on who might be able to answer different questions. This would have to just be guidance because all schools are a bit different, but a list of who might be able to answer the different questions. <br> Feels all pieces are valuable and not wanting to take any out. <br> SS: Beginning of the year survey should be "short and sweet" maybe 10 questions on if students choosing fruits and vegetables. Talked a lot about surveys for students (27:30) <br> ST: "I feel like it looked very well completed, very well set up. The questions were very easy to answer. I believe it was really quite well done. There may be some slight changes but I feel like the way it is set up right now, it's very good. And it's not too horribly long, but yet it does cover a lot of information." <br> Might be good to connect with other schools that are also completing the Progress Report, to know how they are approaching training, etc. <br> SM2nd: Would like the Progress Report to be smaller, "but that's hard because I like the content that is in it. SM ended up divided document into who to talk to. Having it broken down that way might be easier. The hardest part in the fall was trying to figure out whom to talk to and not ask people inappropriate questions for them "because they are all really busy people." Would like more guidance on who could answer the questions. <br> Suggested a glossary of terms or examples for terms and items that might be confusing, "for people who aren't embedded in this kind of work." |

## Summary or Snapshot of Score

## Comments and Recommendations

- The idea of having a visual summary of how is a school is doing would be exciting to schools and would help schools with their action plans and to visually see changes over time.
- Cautions to not present low scores in a way that would make a school feel defeated.

Site specific information:

| Site | Summary |
| :---: | :--- |
| Valley Springs | SM felt strongly that having a summary of the results of the Progress Report would help with creating appropriate action <br> plans. <br> SS: I think some kind of chart to identify weaknesses, emphasized something clear and visual. This could be very helpful <br> for goal setting, better than scrolling through whole Progress Report. Then over time it could be used to show places, "you <br> saw you're weak in to then build on." |
| ST: Could be presented to School Site Council. This could help allocate funding to these issues. "An overall summary, and <br> then maybe some statistics, whether that's through a bar graph, or some kind of visual that shows the impact." |  |

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# Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued) 

## Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year

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|  | SM2nd: Recommend that a visual highlight strengths and, "areas of improvement," this could make it seem positive, people <br> don't like to feel negative. Also make a clearer list of suggestions for what to work on, "like areas to grow, and that would <br> pop up for them to build on the Healthy School Action Plan." |
| :--- | :--- |
| Texas Avenue | SM: Would like to have some way to see the overall score and for a school to be able to track change over time. <br> SS: "We love infographics so anything that would show just in one image, even if it's a red, yellow, green like you're hot, <br> you're cold, you're doing okay in this area, just to show them on a meter where you're at in comparison to other schools or <br> what ideal situations would be with." <br> Also these images could be looked at over a few years to see where a school has been, "you were in the red and now in the <br> yellow area." This would be helpful for school administrators and teachers who, "have so much on their plate." Thinks that <br> this could be motivational, as people would get excited about it going up (made reference to a thermostat used for a <br> fundraiser). <br> ST: Maybe give each question a 1-5 score and let people know how they are doing. For example, the more that is checked <br> for question D the higher the score for that question. Then school could see what they don't score anything yet on (this <br> school does not have a salad bar yet). <br> SM2nd: Thinks it would be very helpful, but no suggestions. |
| Elemeng |  |

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## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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|  | plans. <br> ST: Would be interesting to have data to see how many were checked in the different sections. Might be useful to be <br> compared to others and broken down by focus area. Give percentage of, "on-track," behaviors. Getting just a, "random <br> number," would not be useful. Maybe color-coded ranges (green, yellow, red). |
| :--- | :--- |
| SM2nd: Suggested being able to generate some statements on reach of the program such as what percentage of students <br> visited garden or how many hours of lessons taught. "I still agree with highlighting some success from the past year that it <br> might be nice to be like, "This many students participated in nutrition education," or I guess if we had collected percentages <br> of students like, "This percentage of students received one hour of garden education, this percentage of students received <br> two hours of nutrition education throughout the year," that kind of thing, to be able to look at it in that way, but I guess we <br> didn't collect any information on hours, just like how many lessons. But something like that might be nice to look at and to <br> share a little snapshot with the school, and also other schools too that are thinking about doing FoodCorps, or thinking about <br> requesting a service member at their site." <br> Also could be used to share stories about what is going on in school already to get grants. Also could track certifications <br> that schools are getting, "being able to use that progress report in that way could be really helpful, and make it less of a <br> drudgery to fill out." |  |
| Postville | SM: Thought the idea of having a score, both total and for each section, was "awesome" and thought using gardening terms <br> -- for a school doing well, "fully blossomed vegetable," and for a school just staring out in an area, "sprout." <br> SS: Compare a school year-to-year and see how they are growing. Getting a score would be helpful. |
| Schools could rate themselves in each focus area. Could show which focus area strong in. Maybe get a bar graph with a bar |  |
| for each area. |  |
| SM2nd: Thinks it would be helpful and fun and, "schools would latch onto [the summary score] and identify a little more |  |
| than they do with this document." |  |

## How much longer have a service member? <br> (asked to service site supervisors only) <br> Comments and Recommendations

- No clear recommendations, but something important to talk about. Also felt it varied by school.


## Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | SS: Current school 2 more years and thinks 5 years is the time for a FoodCorps service member to be able to establish skills <br> in the school and for the school to take the responsibility of funding the position because they will value the position |
| Texas Avenue | SS: This was the 1st year for a service member at this school and would like to have a person for at least 2 more years. |

## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

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|  | "This year was a lot of just groundwork and really nothing was worked on around the sustainability of the efforts that were <br> made. So, the service member was doing a lot of the education herself. The garden was tripled in size... The basis for <br> continued use of that garden isn't really established yet by the end of the school year. We're not real confident on the <br> leadership of that garden outside of our touch. So, we definitely see the value of at least another year of somebody making <br> that connection and making sure we can step away from the school after awhile, but we're not ready yet. |
| :--- | :--- |
| Albert S. Hall <br> School | SS: "I was told that we can have a service member for 5 years. I was told we've got 4 more years, and I do know Sam is <br> coming back at least next year." |
| Cibecue <br> Elementary | SS: Change this year, the school is taking over managing the service member instead of the outside organization. "I don't <br> know how much longer they want a service member. I know that there's a lot of momentum at the school, and a lot of things <br> that can continue to be worked on. I'm thinking, I don't know, 2 to 3 more years, maybe." |
| Grove Park <br> Elementary | SS: Going back and forth with schools on how long to have a service member, which is a, "delicate decision making <br> process." |
| Moulton <br> Elementary School | SS: "We have been having a lot of discussions about that. We have some schools who've had a member for a number of <br> years, 4 or 5 years. And, I think that's where we struggle the most is what it looks like to have a school ready to not have a <br> member. I think that's a challenge, because the schools who have one really like the time commitment and the things that <br> they can give to the school. And it's been really challenging to the step back. Not with this school, we've had a conversation <br> with another school about that and they were... That made them very nervous. [chuckle] They said that they would still feel <br> like they really benefit from having a member help with gardening and nutrition and school wellness activity. So that's our <br> biggest challenge is how to do that." |
| Postville | SS: Wanted to have a service member talk about sustainability and what that looks like. Thinks Progress Report could help <br> to do that. |
| George <br> Elementary S | [not discussed, due to logistics of this interview] |
| Ronan | [not discussed, due to logistics of this interview] |

## Could Progress Report help determine when schools ready to graduate from FoodCorps? (asked to service site supervisors only)

## Comments and Recommendations

- Overall felt there was potential for the Progress Report to be used as a tool for when a school is ready to graduate.
- Some thought there could be specific markers school have to meet, such as how actively involved FoodCorps service member is in doing programming, that could be used to determine when a school is ready to graduate.

Site specific information:

| Site | Summary |
| :--- | :--- |
| Valley Springs | SS: Yes, absolutely, it could help the school set goals of where they wan to be. Also stated having a timeline of what to <br> accomplish over a few years can help too. |
| Texas Avenue | SS: Progress Report useful and also, "the confidence of the school to take it on their own." [this is what we want staying <br> power to be]. <br> Want to be able to set good groundwork so do not need longstanding relationship and then to be able to support them going <br> forward. |
| Albert S. Hall <br> School | SS: "For us, when we'll know that we don't have to have FoodCorps anymore is when the gardening and nutrition are part <br> of our curriculum. So, each teacher has to teach lessons around these goals and ideas. Until that happens, it won't be <br> sustainable." |
| Cibecue <br> Elementary | [not discussed, due to logistics of this interview] |

## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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| Grove Park <br> Elementary | [not discussed, due to logistics of this interview] |
| :--- | :--- |
| Moulton <br> Elementary School | SS: Maybe some markers ... How much the FoodCorps member is still actively involved in supporting this progress or how <br> much this school has taken on itself. Some way to think about if a school can support these kinds of activities or these <br> specific things, then it might be time to move to another school. I'm not sure exactly what those would be though. Certainly <br> the engagement piece in that would seem that some of those questions help, but they're still relying heavily on the time <br> component of FoodCorps." |
| Postville | [not discussed, due to logistics of this interview] |
| George <br> Elementary S | [not discussed, due to logistics of this interview] |
| Ronan |  |

## Surprised at anything learned from Progress Report? <br> (asked to service site supervisors and some school team members) <br> Comments and Recommendations

- Some felt it gave a framework for what would be done, other felt it showed how much work needs to be done.

Site specific information:

| Site | Summary |
| :---: | :---: |
| Valley Springs | SS: Yes, that there are many simple things to fix (e.g., adult by the salad bar), "surprise was just some of the simple things that we could do and even in the context of all this big picture stuff." Transforming the school environment sounds huge but when can see the simple things it helps to plan the steps and not overlook the small stuff that can make a difference. <br> From other schools learned that with the 3rd year of FoodCorps seems to be when real progress coming. <br> ST: "I was surprised by... I didn't realize just how impactful the toolkit and the work of the FoodCorps member had been. And when you saw the final results, it showed that it really did have a very large impact on a lot of children." |
| Texas Avenue | SS: No, "we had a very desperate view of what was available to the school and what was going on already. So, that was a good reason why we picked that school. So, I don't think when we looked it through. Looked at the report, in the end it was like, 'Oh, yeah. I guess that's about right', what we thought." <br> ST: No surprises. |
| Albert S. Hall School | SS: Seeing on paper all the work that still needs to be done. Lack of administrative support, "jumped out at me as well." Also realized struggling with cafeteria support and, "their lack of nutrition education and their lack of knowing how to cook real food is a constant struggle and a real challenge. The lack of a good kitchen, and I don't know what you do about that. So, sitting down and talking about all this stuff just made it kind of more obvious." |
| Cibecue Elementary | [not discussed] |
| Grove Park Elementary | SS: Increased awareness that every school disjointed. Very few schools have a functioning wellness team that can come together and confidently answer these questions, and very few of the school contacts actually even knew where to get a lot of the information, particularly whenever it came to the nutrition department information. But it just served to highlight the disjointed nature of school programing." <br> Also surprised that for this school, even though the principal was the champion there was a low level of involvement from teachers. Would have thought that, "because the principal was the champion that everybody would be onboard, and we're kind of surprised to find out that wasn't the case. I'd say that's one of the main differences." |
| Moulton Elementary School | SS: Thought the Progress Report was an accurate reflection of the school. <br> ST: No surprises, it was fun to look at. |
| Postville | SS: Surprised in a good way. Saw what they were doing and got concrete ideas for what they could do. |

[^31]
## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

George
Elementary S

## Ronan


#### Abstract

[SS: not discussed] ST: "Not really, [chuckle] because my instructional facilitator and Mariah are really good at communicating with me about what's working, what's not. I meet with my instructional facilitator at least twice a week on multiple things. And so really, I wasn't surprised by the results in the progress report, because she'd been telling me all along what was going well and what we needed to think about for next year." [SS: not discussed] ST: Provided more back up than, "I thought it would. There was several of the teachers that were very glad to see this, like a school garden go out there and probably be accomplished and the people that are willing to help with it. Some of the teachers sometimes aren't that involved but some of them were very involved, which was nice. I'm trying to think what questions and stuff that were involved there that I was kinda surprised on. Oh man, I thought that there should be more nutrition taught at the school, which I was surprised there wasn't more taught over there, but they're striving to do more now. I think those are the two that I mainly was surprised to hear.


## Using the Toolshed or resources from service site to help complete action plans (asked to service members, 2nd interview only)

Comments and Recommendations

- Some used the Toolshed, others did not, but almost everyone thought it could be really helpful.

Site specific information:

| Site | Summary |
| :---: | :---: |
| Valley Springs | SM2nd: SM also feels like did not, "I did not utilize that online at all as much as I'd like to. The only time that I had time to really fit and venture off was when we had the Martin Luther King Service Day that I sat down and they had lots of good resources. But I felt like it did not help me, it did not connect in line to the Toolshed at all." <br> SM felt main resource to use had to be from the school, here is the explanation, "I feel like my supervisors are, they're in a whole world of their own 'cause I worked through so many entities. I worked for the UC, I worked for FoodCorps, so I have all these different things. So I felt like they were a separate entity than representing FoodCorps. So they gave me more resources beyond FoodCorps but I think it was just as challenging for them to use FoodCorps resources. I wish I could've used the toolkit more because between trying to align, like you said, the curriculum with the idea of the information in the toolkit and all these different entities, to try to align them was very challenging. So I felt like my first resource needed to be the school, their curriculum and that's that. So, I didn't use the toolkit as much as I would've liked...I wish we had more curriculum that was offered through FoodCorps that was more standard-based, like school standard-based. Like I said, there could be that but I just don't really know what FoodCorps is gonna put on the table for teaching classes that are really aligned with the school's curriculum." <br> Might be good to have the toolshed be able to highlight what the school is, "very heavy into" (e.g., this school into garden and local procurement) [maybe through a search function] <br> SM suggested there is more of a clear understanding of how the toolshed can be used to help accomplish action plan, did not understand this at first and once did it seemed easier. |
| Texas Avenue | SM2nd: Yes and no. I am the 1st service member, and this the 1st year to service site. So for me, it was just everything was new. But yeah, based off of what we felt that they needed was kind of how I based my lessons, and how I based it, what I wanted to look at on the Toolshed." <br> Service site also provided resource, "they normally do School of Nutrition Education, so there was tons of different board games that she had and things like that, that I found to be very useful, and I use them in classes." |
| Albert S. Hall School | SM2nd: Never used toolshed. |
| Cibecue Elementary | SM2nd: Toolshed, "kind of hard to use. So I mostly skipped the Toolshed and went right to Google whenever I needed anything. Yeah. I think it provided ideas for the type of curriculum or the type of projects that do exist in other schools and could exist in lessened format on the Toolshed. And probably indirectly, those ideas made me think of certain things to search for on the Toolshed." <br> "My service site supervisor often emailed me or shared with me different resources whether that was classroom management or particularly, serving in native communities. Yeah, she provided me with different resources, and then the |

[^32]
## Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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|  | number one resource is local knowledge." Supervisor was a local Apache woman. |
| :--- | :--- |
| Grove Park <br> Elementary | SM2nd: Thinks the Toolshed has so much more potential. SM planning to upload more this summer, "everyone has so <br> much great knowledge to share but don't always take the time to share it. And so, maybe if that [upload your resources that <br> helped you to reach your goal] was included there then at the end of the year it would give people ideas of things that they <br> could share in the Toolshed." |
| Moulton <br> Elementary School | SM 2nd: Did not use Toolshed. |
| Postville | SM2nd: Loved using the Toolshed but did not use it specifically to meet any of the goals. |
| George <br> Elementary S | SM2nd: Did not use the Toolshed much, but did use many resources from LifeLab. |
| Ronan | SM2nd: Did not use it directly, but remembered questions on the Progress Report (e.g., salad bar question) and then would <br> look up in Toolshed what others were doing related to salad bar. Did not feel like it was direct, but Progress Report spurred <br> ideas for what to look at. "The progress report shaped the way I thought and then, therefore, it shaped the way that I looked <br> for information throughout my term." |

## Useful for next service member next school year? <br> (asked only to service members in 2nd interview)

## Comments and Recommendations

- Overall service members felt that the Progress Report would be very helpful to the next service member. They often thought of the new service member as they completed the Progress Report.
- Thought who had a completed Landscape Assessment Tool from PY15 found that very usedful.
- Most service members thought that the new service member could continue to work on the goals from the previous year. A few thought it was important for the new service member to get to plan the goals for their year of service.

Site specific information:

| Site | Sum mary |
| :--- | :--- |
| Valley Springs | SM2nd: Suggest that they start with a blank goal sheet to be able to formulate their own goals and not have to follow the <br> goals of the previous SM, since a fresh perspective is good. |
| Texas Avenue | SM2nd: "I think it's gonna be really helpful to pass it over to the next service member, and see what I've done...Because <br> when I walked in, I knew nothing. And it was really hard for me to figure out what that school has been doing, especially <br> not being from the area. So I feel like it's gonna be really helpful to give a packet to the next member, and be like, 'Well, <br> here you go. Here's what we did. Run with it."" |
| Albert S. Hall <br> School | SM2nd: "I definitely feel like it's a good starting point and again, if you got feedback from the cumulative year progress that <br> you had and maybe highlighting what you did well in and what was lacking and then resources for the areas that were <br> falling behind, how to improve them in the following year." |
| Cibecue <br> Elementary | SM2nd: "I think I viewed filling this out as more of a service to next year's FoodCorps service member who's taking over <br> my position at the school and, so it's a helpful overview that I think she'll have, and that I'll be able to use to walk her <br> through where the school is at when we make that transition. I'm staying in the community so I'm gonna be helping her <br> establish herself there, and I think this will be a tool that I will use. So I think that's what I was thinking about most of those <br> filling it out. But it wasn't.. Yeah, and so it was helpful for me in that way." <br> Feels as those what would make it most useful is for the new service member to be able to sit down with the old service <br> member for an in-person explanation. Without this it would be confusing. "At the beginning of next school year, another |
| service member will be and I feel lucky to be able to walk her through it in person, but if that's not available to other service |  |
| members, I think it would be helpful to, maybe, have a comments section. If this is getting passed on from one service |  |
| member to the next, maybe they could informally write down explanations about each section, and what the school's doing, |  |
| and what the next service member could do to create dialogue between the differing service members and make more of a |  |

[^33]Appendix I - Report on Results from Cognitive and Process Evaluation of the Healthy school Progress Report PY2016 Version (continued)

Healthy School Progress Report Cognitive Testing and Process Evaluation 2015-16 School Year
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|  | continuity between... I mean, it's a confusing document when you first see it and now that I know it, I feel confident with it, and I would want to help the next service member feel confident with it, too. So I don't know if there's a way to facilitate that with other service members who aren't able to speak in person about it." <br> Also thought that what would be written in the comment section for each focus area would be very different if it is being written for FoodCorps to use as an evaluation tool, or being written to pass onto the next service member. |
| :---: | :---: |
| Grove Park <br> Elementary | SM2nd: Said it would be so useful. Iphone connection got very bad at this point and Danielle asked her to send her answer, ask Danielle if she has it] |
| Moulton Elementary School | SM2nd: Now that it is not a new tool will be easier for everyone. "I think it was just challenging because it was the first time we were using the tool. And by challenging, it wasn't even that challenging, but it just took longer because you're getting used to a new tool. And I know that will be true for a new service member coming in to use the same tool at Moulton next year when I'm not gonna be here. But I think since I've already gone through the tool, my site is familiar with the tool, and we have everything pre-populated with all of the answers, I think it will be much easier to understand and complete. And also, my service site knows a lot about it too, so my supervisor can be helpful in filling it out too 'cause she's been through it with us. So I feel like the next service member potentially might be a little bit confused just figuring out what this tool even means, but it might feel a little bit more like how I feel now filling out the spring one, because a little bit of the legwork has already been done." <br> From SM experience Landscape Assessment Tool was used to help guide new service members at schools that had previous service members, to know where the school was at, the school's interests and priorities, easy winds, and what work had been done over the past year. <br> "I can just speak to how, what I did with the former tool which is the landscape assessment. It was nice for me to look through that before filling out the next one, because I knew what that service member thought and then the little notes they left and the further explanations, those were really helpful to me in just getting a larger picture of what was going on at that school. Also, what was low-hanging fruit to kind of jump into and things at this school was really focused on in terms of the action plan and that sort of thing. I think it would be helpful to know like, 'Oh, they spent the whole past year working on these particular goals. Great, how can we get back into that?' Rather than coming in and like, "Okay, well, I saw a school over there with chickens, do we want chickens here?" 'Well, no, we didn't put chickens on our action plan, and we haven't even talked about chickens before at our school.' So, having a bit of direction upon entering a site, I think would be helpful. |
| Postville | SM2nd: Generally discussed throughout that goals and ideas from this year will be used next school year. |
| George <br> Elementary S | SM2nd: Service member coming back next year. If SM was not coming back would have spent a lot more time on Progress Report if someone else had to read it and use it the next school year. |
| Ronan | SM2nd: Next service member could look it over and, "understand where things were at at the end of the year last year and seems like they could maybe use it to have a meeting with the healthy school team or whoever and really look through it to come up with goals for the year and longer-term goals." |

> Great general FoodCorps quote!
> George Elementary Principal: "I absolutely love FoodCorps, and the change I'm already seeing it ... summer in the garden, and they harvested vegetables from our garden, and they made a veggie pizza and also fruit pizza and they actually... We have apple trees out front we planted a few years ago and we actually have apples on them, and so the kids put pineapples and apples, and things like that on the pizza. So, I just see quite a few... I just see a different engagement, and I'm really appreciative of the FoodCorps for one, allowing us to have the grant so that we can do these kinds of things."

> FoodCorps $=$ heathy schatlit toote

## for school teams

## The Healthy School Progress Report is part of the Toolkit (cover above).

Presented below is the PY2017 Progress Report, pages 19-40 of the Toolkit.

## PROGRESS REPORT

| Instructions | After you have your healthy school team in place, use this Progress Report to look at <br> everything that is happening across the school food environment and decide what is <br> the most important to accomplish this year. Additional copies can be downloaded on <br> the FoodCorps Toolshed. You may complete the tool together with your team and/or by <br> interviewing team and school community members individually. |
| :--- | :--- |
| For New Schools $\quad$ Step 1 (fall)Fill out the Progress Report based on what happened during the <br> past school year. Then, use it to set your Action Plan (see pp. 41-44). |  |
| Step 2 (spring) Update the Progress Report and Action Plan based on what |  |
| happened during the current school year. |  |

## 19 • PROGRESS REPORT



## FoodCorps Progress Report

## SCHOOL INFORMATION

| 1) School name | 2) School city | 3) School state |
| :---: | :---: | :---: |
| 4) Service member name | 5) Service site name |  |
| 6) \# years service site with FoodCorps (including current year) | 7) \# of years school with FoodCorps (including current year) |  |
| 8) \# students enrolled in the school | 9) Do students have recess before lunch? $\bigcirc$ All grades | e grades Onogrades |

10) Does your school participate in any of the following programs? (check all that apply)

| $\square$ Alliance for a Healthier Generation Healthy Schools Program | $\square$ HealthierUS Schools Challenge: Smarter Lunchrooms |
| :--- | :--- |
| $\square$ Cooking Matters | $\square$ Team Nutrition |
| $\square$ Coordinated School Health | $\square$ USDA Farm to School Grant Program |
| $\square$ Fresh Fruit \& Vegetable Program (FFVP) |  |

11) Please list and briefly describe other food, nutrition, gardening, and wellness programs in the school besides FoodCorps in the past year.

$21 \cdot$ PROGRESS REPORT

FoodCorps Progress Report

## In the following pages, you will reflect on what has happened in the school to date. Answer for the past school year.

|  | Pre-K | K | 1st | 2nd | 3 rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | *After <br> school |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13) How many classrooms are in each grade? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14) Of those classrooms (Question 13), how many of them received food- and garden-based lessons focused on fruits and vegetables over the past school year? <br> Lessons are defined as those at least 20 minutes in length. "Focused" means at least part of the lesson. "Garden-based" means any activities related to growing food. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15) Of those classrooms that received lessons (Question 14), how many lessons did each class get (on average) over the past school year? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* After-school programs are configured differently in each school. Do the best you can of filling in the total number of different after-school "groups" that meet, which may be by grade, clubs, topic area classes, etc.

If the school has split classes or rotating classes, note here how you counted them for Question 13:

## FoodCorps Progress Report

## AREA ONE: HANDS-ON LEARNING

In the classroom, in the garden, before, during, and after school, students grow, cook, and taste new foods, which builds their skills and changes food preferences.
Below, you'll see a list of best practices and activities that are shown to encourage and support students making healthy food choices. Please read each statement and indicate whether, and/or to what extent, your school or school community did that practice over the past school year.

A Ongoing Cooking, Tasting \& Garden-Based Lessons

1) This school dedicates a space to
food-related activities such as cookin
food-related activities such as cookin
gardening, and nutrition education.

ODevoted indoor space $O_{\text {Devoted outdoor space or garden }}$ Onone right now

For all classes that got lessons in the past school year, did the lessons include this practice?
2) Lessons and activities use best practices in food- and garden-based education.
a. Include opportunities to eat fruits and vegetables through tasting or cooking (e.g. chopping, mixing, adding ingredients).
b. Have students work in the garden, doing things like planting, weeding, watering, and nurturing plant growth.
c. Harvest what is growing in the garden.
d. Create positive social norms through activities that make fruits and vegetables "cool" and allow students to share their favorites.

$23 \cdot$ PROGRESS REPORT

FoodCorps Progress Report
e. Focus on the health benefits of fruits and vegetables (e.g., some help the brain to think better; red ones are good for your heart).
f. Focus on fruits and vegetables that include opportunities to decrease fears of trying new food, such as stories about how kids "tried it and liked it!" or smelling herbs before tasting . Use MyPlate as a visual to encourage students to make half of their plate fruits and vegetables at every meal. If making meals with students, follow MyPlate proportions.
h. Focus specifically on eating more fruits and vegetables at school lunch, such as where to find fruits and vegetables or how to build a colorful salad at the salad bar.
i. Compare the nutritional value of healthful and less healthful snacks (e.g., showing the added fat and sugar in snack foods, or how healthful snacks have more nutrients). j. Focus on setting goals for increasing eating fruits and vegetables
k. Focus on monitoring progress toward the goals of eating more fruits and vegetables. I. Share recipes that students can take home and prepare with their families.

For all classes that got lessons in the past year, did the lessons include this practice? (continued) (check the box if yes)


## FoodCorps Progress Report

m. Include activities that incorporate appreciation for how certain cultures traditionally cook fruits and vegetables.
n. Create appreciation for plants, including life cycles and what plants need to grow.
o. Focus on how our "farm to plate" food system works and how eating more locally produced, less processed and less packaged food is good for the natural environment. p. Focus on how some neighborhoods do not have equal access to healthy food and how there are programs and resources to help achieve equity.

For all classes that got lessons in the past school year, did the lessons include this practice? (continued) (check the box if yes)
q. Introduce the process of composting and/ or provide experiences composting in the garden.


B Field Trips \& Farmer \& Chef Visits

Did this happen in the past year? (check the box if yes)

1) Invite local heroes to dine with students in the cafeteria (e.g., farmers, chefs, politicians, sports heroes, media personalities).
2) Arrange classroom visits with farmers, chefs, and others who work in food.
3) Take field trips to farms, community gardens, farmers markets, composting facilities, or other food-centered businesses.

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FoodCorps Progress Report

C School Garden Development and Maintenance
Have a garden care plan, including during the summertime.
2) Host regular volunteer work days in the garden.
3) Run a garden composting program (e.g., compst school meal waste, families bring scraps from home to school garden compost, compost garden weeds and leftovers).

Please share important notes or explanations about these Hands-On Learning practices:

## FoodCorps Progress Report

## AREA TWO: HEALTHY SCHOOL MEALS

The cafeteria experience steers students toward the healthiest options and gets them excited to try new healthy foods.
Below, you'll see a list of best practices and activities that are shown to encourage and support students making healthy food choices. Please read each statement and indicate whether, and/or to what extent, your school or school community did that practice over the past school year.

Salad Bar \& Lunch Line Design
Did this happen in the past year?

1) Make sure the cafeteria is clean and at a reasonable noise level (e.g., no regular fighting, yelling, or whistle blowing).
$\bigcirc_{\text {Never }} \bigcirc_{\text {seldom }} \bigcirc_{\text {often }} \bigcirc_{\text {most or all days }}$ 2) Make lunch a respected part of the school day by having behavioral expectations consistent with the rest of the school and have teachers and administrators present during lunch.
$O_{\text {never }} \mathrm{O}_{\text {seldom }}$ Ootren $\mathrm{O}_{\text {mostorall days }}$
2) Decorate the meal line and cafeteria to make it inviting (e.g., signs on the salad bar or meal line, student artwork, colorful posters, colorful paint on the walls).
$\mathrm{O}_{\text {yes }} \mathrm{O}_{\text {no }}$
$\mathrm{O}_{\text {yes }} \mathrm{O}_{\text {no }}$
Did this happen in the past year?
$O_{\text {Never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {mostorall days }}$
$O_{\text {Never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {mostorall days }}$
$O_{\text {never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {otren }} \mathrm{O}_{\text {mostorall days }}$
$O_{\text {Nevere }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {mostorall days }}$
$O_{\text {Never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {most oral days }}$
$27 \cdot$ PROGRESS REPORT

## FoodCorps Progress Report

5) The school offers a salad bar at lunch. $\quad$ Ono salad bar $\bigcirc_{1-2 \text { days/week }} \bigcirc_{3-4 \text { days/week }} \bigcirc_{\text {Every day }}$

If so, on days there are a salad bar, the school can
a. Have the salad bar as part of the lunch line so that students do not miss it.
b. Make sure the salad bar is the right height for students to easily put down their tray while taking salad.
c. Fill the salad bar with at least three different fresh fruits and vegetables.
d. Refill the salad bar as needed and keep it tidy and appealing
e. Make sure that salad bar spoons and tongs are the right size and type for the students using them.

## Did this happen in the past year?

$O_{\text {nevere }} O_{\text {seldom }} O_{\text {often }} O_{\text {mostorall days }}$
$O_{\text {Never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {mostorall days }}$
Onever $\mathrm{O}_{\text {seldom }}$ Ooften $\mathrm{O}_{\text {mostoral days }}$
$O_{\text {nevere }} O_{\text {seldom }} O_{\text {often }} O_{\text {mostorall days }}$
$O_{\text {never }} \mathrm{O}_{\text {seldom }} \mathrm{O}_{\text {often }} \mathrm{O}_{\text {mostorall days }}$

## E Taste Tests

1) The school has tastings of the fruits and vegetables that are offered during school meals.
f so, the school can:
a. Set up the taste test in in high traffic areas.
b. Have students taste or prepare foods that will be offered in school meals.
c. Hold taste tests with families during events and before or after school.

If so, the school can:
d. Have principals, teachers, staff, and students serve the foods.
e. Share voting results widely, on posters, bulletin boards, the school website, newsletters and email.
$\mathrm{O}_{\text {yes }} \mathrm{On}_{\text {no }}$

Did this happen in the past year?
$O_{\text {never }} O_{1-5 \text { times }} O_{6-9 \text { times }} O_{10+\text { times }}$
$O_{\text {never }} O_{1-5 \text { times }} O_{6-9 \text { times }} O_{10+\text { times }}$
$O_{\text {never }} O_{1-5 \text { times }} \mathrm{O}_{6-9 \text { times }} O_{10+\text { times }}$

Did this happen in the past year? (continued)
Onever $\bigcirc_{1-5 \text { times }} \bigcirc_{6-9 \text { times }} \bigcirc_{10+\text { times }}$ Onever $\bigcirc_{1-5 \text { times }} \bigcirc_{6-9 \text { times }} \bigcirc_{10+\text { times }}$

## FoodCorps Progress Report

F Cafeteria Role Modeling

1) Older students act as role models or mentor younger students to eat fruits and vegetables.
2) Adults stand by the salad bar to encourage and help students take salad.
3) Adults model salad bar eating behavior and bring items on a plate around for students to try. 4) School staff and food service workers encourage students to eat fruits and vegetables.

Did this happen in the past year?


G Local Sourcing \& Recipe Development

1) Aim for more local food being served in school lunch.
"Local food" (in general) does not have a set definition. Some base it on the number of miles, others on state boundaries, etc. Use whatever your school or district defines as "local food." Please add a comment in the notes section on the next page explaining how your school defines local foods and what local foods were mo commonly served.

How often did this happen in the past year? (please do not include milk in these counts)
Ono local food was served.
Local food was served $1-2$ times during the year (e.g., as part of a harvest celebration).
Local food was served 3-9 times during the year (e.g., once a week through the harvest season or every day during a week-long harvest celebration).
Ocal food was served about 10-20 times during the school year (e.g., once or twice a month throughout the school year, or many harvest celebrations).
Local food was served about 21-39 times during the school year (e.g., several times a month or once a week or more during a long harvest season).
OLocal food was served at least 40 times during the school year (e.g. at least once a week).
2) Add new recipes or items on the full menu that feature local ingredients, school garden produce, and/or student-tested dishes.
$O_{\text {Never }} O_{1 \text { time }} O_{2 \text { times }} O_{3 \text { times }} O_{4 \text { or more times }}$
$29 \cdot$ PROGRESS REPORT

## FoodCorps Progress Report

H) Breakfast Promotion

If so, did the school have any of these programs in the past year? (check all that apply)

| $\square_{\text {Breakfast in the classroom }}$ | $\square_{\text {school breakfast promotion efforts }}$ |
| :--- | :--- |
| $\square$ Grab-and-go breakfast | $\square$ Universal breakfast |

$\square$ Other (please describe): $\qquad$

Please share important notes or explanations about these Healthy School Meals practices:

## FoodCorps Progress Report

## AREA THREE: SCHOOLWIDE CULTURE OF HEALTH

As a whole, the school community and environment-from hallways to classrooms to cafeteria to grounds-celebrates healthy food.
Below, you'll see a list of best practices and activities that are shown to encourage and support students making healthy food choices. Please read each statement and indicate whether, and/or to what extent, your school or school community did that practice over the past school year.

## (1) Celebrations, Events, Rewards \& Snacks

| 1) Healthy food is the main choice for classroom snacks and meals. | Onever | Osometimes | OAll or most of the time | OThe school doesn't have these |
| :---: | :---: | :---: | :---: | :---: |
| 2) Healthy food is the main choice for schoolwide event snacks and meals. | Onever | Osometimes | All or most of the time | OThe school doesn't have these |
| 3) Celebrations and rewards incorporate healthy foods and/or non-food items, such as extra recess or game time. | Onever | Osometimes | All or most of the time | OThe school doesn't have these |
| 4) Vending machines have healthy options as the main choice or are not available. | Onever | Osometimes | All or most of the time | OThe school doesn't have these |

J Schoolwide Marketing

Did this happen in the past year? (check the box if yes)

1) Announcements by and for students share meal options in exciting/fun ways to promote a respect for healthy eating and knowledge of seasonality or where they come from (e.g., school gardens, a specific farm nearby).
2) Students work with food service staff to give school meal items creative and descriptive names.
3) The school hallways, cafeteria, and display cases feature food- and garden-related work by students and/or promote wellness and healthy eating.

Did this happen in the past year?

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## K Fundraisers

## Did this happen in the past year?

1) Fundraisers have healthy foods and/or non-food items as the main choice (including healthier options promoted at bake sales).

Onever $\bigcirc_{\text {sometimes }} \bigcirc_{\text {All or most of the time }} \bigcirc_{\text {the school doesn't have these }}$

L Family \& Staff Engagement

Did this happen in the past year? (check the box if yes)

1) Parent or family workshops cover growing, cooking, and serving fruits and vegetables at home and accessing healthy foods in the community (e.g., cooking, gardening, eating on a budget, healthy eating, sharing food from families' cultural backgrounds).
2) The school has a dedicated space with resources about food access, cooking, and gardening for the school community and families.
3) Family newsletters and emails feature tips on growing, shopping for, cooking, and serving fruits and vegetables at home and how to access healthy foods in the community.
4) Families have the opportunity to volunteer in the cafeteria, garden, and with food- and garden-based lessons and events. 5) Staff have the opportunity to learn about growing, cooking, or preparing food (e.g., staff cooking workshops with a guest chef, staff-only garden work day, regular taste tests at staff meetings).
(check the box if yes)
$\square$

Please share important notes or explanations about these Schoolwide Culture of Health practices:

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## STAYING POWER

People across the school community help create a positive food environment for students.

## School administration can

Did this happen in the past year? (check the box if yes)

1. Provide professional development time for teachers to learn about leading food- and garden-based activities. $\square$
2. Provide support to teachers (e.g., additional pay, class release time, time and support to write grants) for food-and garden-based lesson development and/or school garden maintenance.
3. Participate in food- and garden-based activities (e.g., visiting classrooms or the garden during lessons).
4. Support the food service director in making changes to school lunch (e.g., procuring local food, tweaking line design to nudge students to healthier options).
5. Provide ample staff in the lunchroom for managing students so they focus on eating lunch.
6. Act as a role model in the cafeteria (e.g., encouraging students to eat healthy, eating with students).
7. Provide resources to teachers and parents about which foods are acceptable for serving in the class and at school events, and which are not.
8. Enforce serving only healthy foods in the classroom and at school events.
9. Restrict or limit fundraisers from selling unhealthy food (e.g., candy bars).
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## The food service director/manager can:

Did this happen in the past year?
(check the box if yes)

1. Dedicate time and effort to procuring food from local sources.
2. Prepare recipes from scratch for school meal offerings.
3. Avoid use of prepared, processed food items.
4. Support a salad bar with a wide variety of items.
5. Support using food grown in the school garden for school meals.
6. Make changes that will nudge students toward healthy options (e.g., changing line arrangement and placement, decorations, creative names for fruit and vegetable dishes).
7. Encourage all food service staff to get students excited about eating healthy school meals (e.g., use the creative names of fruit and vegetable dishes, remind students which foods are local or from the garden, encourage students to try new foods).

## Teachers can:

1. Use "prep periods" to plan for teaching food- and garden-based lessons.
2. Make classroom time to teach food- and garden-based lessons.
3. Share successes, challenges, and strategies with other teachers around conducting food-and garden-based activities (e.g. at grade-level meetings).
4. Maintain the garden and/or take part in the school garden committee or club.
5. Remind students what is being served for lunch and encourage them to eat fruits and vegetables.
6. Ask students about what they tried at or thought of lunch when they return to the classroom.
7. Volunteer to help during school meals.

How many teachers participated in this practice in the past year?
Onone $\bigcirc_{\text {afew }} \bigcirc_{\text {many }} \bigcirc_{\text {most or all }}$ Onone $\bigcirc_{\text {a few }} \bigcirc_{\text {many }} \bigcirc_{\text {most or all }}$
$O_{\text {none }} O_{\text {afew }} O_{\text {many }} O_{\text {most orall }}$
$O_{\text {none }} O_{\text {afew }} O_{\text {many }} O_{\text {most orall }}$
$O_{\text {none }} \mathrm{O}_{\text {Afew }} \mathrm{O}_{\text {many }} \mathrm{O}_{\text {mostorall }}$
$O_{\text {none }} O_{\text {afew }} O_{\text {many }} O_{\text {mostorall }}$
$O_{\text {none }} O_{\text {afew }} O_{\text {many }} O_{\text {most orall }}$

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## Parents can:

1. Raise funds to support food- and garden-based education and the school garden
2. Encourage administration and teachers to make time for food- and garden-based education.
3. Assist during food- and garden-based activities (during the school day).
4. Encourage administration and teachers to institutionalize the school garden and its use.
5. Maintain the garden program (e.g., work in the garden, participate in garden committee/club, help when classes are in the garden).
6. Work with food service staff on how to create healthy meals (e.g., sit on a nutrition committee, review menus).
7. Volunteer to help during school meals.

How many parents participated in this
practice in the past year?
Onone $\bigcirc_{\text {a few }} \bigcirc_{\text {many }} \bigcirc_{\text {most or all }}$
$O_{\text {none }} O_{\text {afew }} O_{\text {many }} O_{\text {mostorall }}$
$O_{\text {none }} \mathrm{O}_{\text {afew }} \mathrm{O}_{\text {many }} \mathrm{Omostrorall}^{\text {O }}$
$O_{\text {none }} O_{\text {afew }} O_{\text {many }} O_{\text {mostorall }}$
$O_{\text {none }} \mathrm{O}_{\text {afew }} \mathrm{O}_{\text {many }} \mathrm{O}_{\text {mostorall }}$
$O_{\text {none }} \mathrm{O}_{\text {afew }} \mathrm{O}_{\text {many }} \mathrm{O}_{\text {mostorall }}$
$O_{\text {none }} \mathrm{O}_{\text {afew }} \mathrm{O}_{\text {many }} \mathrm{O}_{\text {mostorall }}$

## Champions and teams

How many champions did the school have in the past year? (not counting the FoodCorps member)

1. The school has healthy food, nutrition, and gardening "champions" (e.g., a person who promotes healthy food issues and gets others excited to support improvements/changes; it could be teachers, staff, parent, etc.).

O1champion $\bigcirc_{2 \text { champions }} \bigcirc_{3+\text { champions }}$
2. School staff members-not including teachers, administrators, and food service staff-support a healthy school food environment and/or the school's gardening program (e.g., school nurse, office staff, security guards, custodians).

No, school staff have not shown support in the past year
Yes, school staff have shown support, but were not actively involved in the past year
Yes, school staff have shown support and were actively involved in the past year.

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3. The school has a group devoted to wellness or healthy food topics, like a wellness committee, farm to school team, school garden group, or other healthy school team.
4. Wellness committees or other teams have a variety of active members.

## Making curriculum connections

1. Teachers work deliberately to connect nutrition, food-, and/or garden-based learning to the curriculum

Ono known group lasty yea
Yes, but met irregularly and/or distributes health-related resources (no planning or implementing activities).
Yes, met regularly to plan and implement healthy food-related activities for the school.

## Who were the participants in the past year?

(check all that apply)

| $\square$ Administrators | $\square$ students |
| :--- | :--- |
| $\square_{\text {Community partners }}$ | $\square$ Teachers |
| $\square_{\text {Food service staff }}$ | $\square$ other school staff |
| $\square$ Parents |  |

## what ways did this happen in the past year?

(choose one)
No nutrition, food-, and/or garden-based education.
Nutrition, food-, and/or garden-based education not connected to curriculum.
Actively working to connect nutrition, food-, and/or garden-based education to the curriculum (but not connected now).
Nutrition, food-, and/or garden-based education connected to curriculum (but not specifically designed to meet standards.
Nutrition, food-, and/or garden-based education connected to curriculum and specifically designed to meet standards in one core subject (e.g.. National Common Core Standards [English and Math], Next Generation Science Standards, state-level standards, or local "scope and sequence").
Nutrition, food-, and/or garden-based education connected to curriculum and specifically designed to meet standards in $2+$ core subjects (same examples above).

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## POLICY

Many policies at the state, district, and school levels influence students' experiences of food in school, and it is important to understand this context. Please note that FoodCorps service members are limited in their ability to engage in policy-related activities.

## Standards and preferred curriculum

| 1. The state and/or district has nutrition education standards. (check all that apply) | The state had nutrition education standards. <br> the district had nutrition education standards. <br> No known nutrition education standards. |
| :--- | :--- |
| Yes, standards and school district had staff to offer guidance <br> and monitor compliance. |  |
| Yes, standards and school had a teacher or other staff to <br> offer guidance and monitor compliance. |  |
| Yes, standards but no support offered. |  |
| Not applicable, no known nutrition education standards. |  |

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5. The school uses the district's preferred nutrition curriculum. (choose 1 answer)
6. The district has a preferred garden education curriculum. (choose 1 answer)
7. The school uses the district's preferred garden education curriculum. (choose 1 answer)

All grades use preferred curriculum and fully implement it. All grades use preferred curriculum but not all fully implemented.
Some grades use preferred curriculum (fully or partially). One grade uses preferred curriculum (fully or partially).
Preferred curriculum not used.
Unknown how much preferred curriculum used.
Ono known preferred curriculum.
Yes, curriculum: $\qquad$
Ono known preferred curriculum.
All grades use preferred curriculum and fully implement it.
All grades use preferred curriculum but not all fully implemented.
some grades use preferred curriculum (fully or partially). One grade uses preferred curriculum (fully or partially). Preferred curriculum not used.
Unknown how much preferred curriculum used. No known preferred curriculum.

## District wellness plan or policy

1. The district has a wellness plan or policy.
2. The district wellness plan or policy follows a template (e.g., National Alliance for Nutrition and Activity).

Oyes Ono known plan or policy
Yes, template followed exactly
Template used: $\qquad$
Yes, template mo
Template used:
Template used:
No known template used
No known plan or policy

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District wellness plan or policy (continued)

|  | Which content was included? <br> (check all that apply) |
| :---: | :---: |
| 3. The district wellness plan or policy covers a wide variety of topics related to the school food environment. | Healthy eating and nutrition School gardens Food policies (e.g., for celebrations, rewards, bake sales, fundraisers) Promoting local foods Unknown what content was in the policy or plan Not applicable, no known policy or plan |
| 4. The district wellness plan or policy is communicated to the full school community. | Who was it communicated to in the past year? <br> (check all that apply) School administrators Teachers School staff Food service workers Parents Students Don't know or not communicated to anyone Not applicable, no known policy or plan |

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Local food procurement \begin{tabular}{l}
Yes for state. Please share what you know: <br>

| 1. The state and/or school district has a policy about geographic preference for local food procurement. |
| :--- |
| (check all that apply) |
| Note: A geographic preference provides a competitive advantage to local, minimally processed foods. | <br>


| Yos for district. Please share what you know: |
| :--- | <br>


| Products from local growers or distributors were regularly |
| :--- |
| requested or sought out in bids or orders. |
| Products from local growers or distributors were sometimes |
| requested or sought out in bids or orders. | <br>

2. The state and products may be supplied but were not specified in bids <br>
or orders.
\end{tabular}

## Fruits and Vegetables at School Lunch

Think about all the fruits and vegetables you had at school lunch today. For each question, choose only one answer.

Let's try an example...


## Fruit 1: Apple

Did you have it on your tray?


No


Yes

## Fruit 2: Banana

Did you have it on your tray?


## Veggie 1: Broccoli

Did you have it on your tray?
$\bigcirc_{\text {No }}$
$\bigcirc_{\text {Yes }}$

## Salad bar

Did you have anything from the salad bar on your tray?
$\bigcirc_{\text {No }}$
$\bigcirc_{\text {Yes }}$


## Fruits and Vegetables at School Lunch

## Wristband Number



Did you have it on your tray?
Ono
$\bigcirc_{\text {Yes }}$

How much of it did you eat?None

O
A little

O
Half or mostAll

How much did you like it?I didn't eat any
I didn't like it $\bigodot$
$\bigcirc_{\text {It was okay }} \because$
O
I liked it


Would you eat it next time at school lunch?


No
O
Maybe
O
Yes

## Fruit 2:

Did you have it on your tray?
Ono
$\bigcirc_{\text {Yes }}$

How much of it did you eat?
none
0
A little
O
Half or mostAll

How much did you like it?
I didn't eat any
I didn't like it $\overparen{O}$
$\bigcirc_{\text {It was okay }} \because$
0
I liked it


Would you eat it next time at school lunch?
0
No
O
Maybe
O
Yes

## Fruit 3:

Did you have it on your tray?
No
$\bigcirc_{\text {Yes }}$

How much of it did you eat?


None
O
A little
O
Half or most
O
All

How much did you like it?
I didn't eat any
I didn't like it $\overparen{O}$
$\bigcirc$ It was okay $\because$
$\bigcirc_{\text {I liked it }}$


Would you eat it next time at school lunch?

Ono
O
Maybe
O
Yes

## Fruit 4:

Did you have it on your tray?No
$\bigcirc_{\text {Yes }}$

How much of it did you eat?NoneA little

O
Half or mostAll

How much did you like it?I didn't eat any
I didn't like it $\because$
$\bigcirc$ It was okay $\because$
$\bigcirc_{\text {I liked it }}$

Would you eat it next time at school lunch?

O
No
O
Maybe
O
Yes

## Veggie 1:

Did you have it on your tray?
Ono
$\bigcirc_{\text {Yes }}$

How much of it did you eat?


None
O
A little
O
Half or most
O
All

How much did you like it?I didn't eat any
$\bigcirc$ I didn't like it $\wp$
$\bigcirc$ It was okay $\because$
$\bigcirc$ I liked it

Would you eat it next time at school lunch?


No
O
Maybe
O
Yes


Did you have it on your tray?
○
$\bigcirc_{\text {Yes }}$

How much of it did you eat?NoneA littleHalf or most
O
All

How much did you like it?
I didn't eat any
$\bigcirc_{\text {I didn't like it }} \bigodot$
$\bigcirc_{\text {It was okay }} \because$I liked it (-)

Would you eat it next time at school lunch?
$\bigcirc_{\text {No }}$
O
Maybe
O
Yes

## Veggie 3:

Did you have it on your tray?
○
$\bigcirc_{\text {Yes }}$

How much of it did you eat?
noneA little
$\square$
Half or mostAll

How much did you like it?
I didn't eat any
0
I didn't like it $\because$
$\bigcirc$ It was okay $\because$
$\bigcirc_{\text {I liked it }}$


Would you eat it next time at school lunch?

○
O
Maybe
$\bigcirc_{\text {Yes }}$

## Veggie 4:

Did you have it on your tray?
$\bigcirc$
No
O
Yes

How much of it did you eat?NoneA littleHalf or mostAll

How much did you like it?I didn't eat anyI didn't like it $\square$
It was okay
$\because$
$\bigcirc_{\text {I liked it }}$


Would you eat it next time at school lunch?
0
No
Maybe
O
Yes

## Salad bar

Did you have any foods from the salad bar on your tray? Do not count salad dressing.

○ No
$\bigcirc$
Yes

How much of the salad did you eat?
O
None
$\bigcirc$
A little
0
Half or most
$\bigcirc$
All
How much did you like the salad?
O
I didn't eat any

0
I didn't like it
It was okay
$\because$I liked it -

Would you eat the salad next time at school lunch?

Ono
O
Maybe
O
Yes


## Fruits and veggies from home

Did you bring any fruit from home? Do not count juice or fruit snacks such as fruit roll-ups or gummy fruit.

○ No


Yes

How much of the fruit from home did you eat?
$\bigcirc_{\text {None }}$
A little
Half or most
$\bigcirc_{\text {All }}$

Did you bring any vegetables from home?
$\bigcirc_{\text {No }}$
$\bigcirc_{\text {Yes }}$

How much of the vegetables from home did you eat?

O
None
o
A little
0
Half or most
$\bigcirc_{\text {All }}$



[^0]:    *Counts are a sum and $\%$ are a mean

[^1]:    * One serving of fruits and vegetables is as defined by the National School Lunch Program: 0.5 cup of fruit or 0.5 cup of vegetables. The serving for salad bar is relative to the amount self-served by each student.
    **Counts are a sum and $\%$ are a mean

[^2]:    Hierarchical linear regression models: Progress Report scores as school-level fixed effects, and consumption data as student-level dependent variables
    a: response options for "How much of it did you eat?" = None; a little; half or most; all
    sr: data were square-root transformed
    OR: odds ratio
    CI : confidence interval
    ${ }^{*} \mathrm{p}<.05$; ${ }^{* *} \mathrm{p}<.01$; Italic means approaching to significance at .05

[^3]:    *Several of the indicators and answer options in Domain 3: Access and a few of the cafeteria-related questions in Domain 4 Culture are adapted from the Smarter Lunchroom Self Assessment (2014), developed by Food \& Brand Lab, The Cornell Center for Behavioral Economics, Child Nutrition Program

[^4]:    ${ }^{a}$ Lessons for nutrition education should be planned activities, probably in a classroom during the school day, that were at least 20 minutes long.
    b "Focused" means part or all of the lesson had activities related to F\&Vs (does not need to be entire lesson).
    c ~ = approximately.

[^5]:    d "On average": if there is wide variability in the number of lessons across grades or groups try to estimate the average number received. On the comment page for Domain 1: Knowledge please describe the number of lessons different grades received.

[^6]:    h "Lesson" here is GBAs that are at least 20 minutes long, could be during the school day, at recess or before/after school.
    i "On average": if there is wide variability in the number of lessons across grades or groups, try to estimate the average number received. On the comment page for Domain 2: Engagement please describe the number of lessons different grades received.

[^7]:    ${ }^{j}$ "Curriculum" is units or lessons teachers use for core subjects such as reading, writing, math, science, social studies, health, and/or art, etc.

[^8]:    ' "Local food" (in general) does not have an established definition, some base it on number of miles, others on within a state etc. For this question use whatever your school defines as "local food." Please add a comment on how your school defines local food and what local foods were primarily served.

[^9]:    m "Less healthy foods = processed packaged foods (e.g., chips, baked goods, candy) and sugar-sweetened beverages (e.g., juice drinks, soda, sweetened iced tea)

[^10]:    ${ }^{n}$ "Champion" is a person who worked a lot on promoting and making more healthy food available (e.g., developed a school garden, active member school wellness committee) and also worked to get others enthusiastic about working on healthy food issues.

    - "Parents supported" can be hard to judge as a few parents may put in a lot of time. Try to think about if the overall tone parents had was positive when deciding if this was true for your school.

[^11]:    ${ }^{q}$ As an example, California has Nutrition Education Standards that can be found at: http://www.cde.ca.gov/ls/nu/he/documents/nergch1.pdf

[^12]:    ${ }^{r}$ A geographic preference provides a competitive advantage to local, minimally processed foods.

[^13]:    Key: SM Service Member 1st interview SS Service site Supervisor ST School Team Member SM2nd = service member 2nd interview Orange bullets = specific recommendations for change | Page 8 |

[^14]:    Key: SM Service Member 1st interview SS Service site Supervisor ST School Team Member SM2nd = service member 2nd interview Orange bullets = specific recommendations for change | Page 11 |

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