

Technical Report for Improvements to the WSDA Farm-to-School Survey

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I. Findings from the current survey

Survey response trends were examined for whole-survey individual completion rates as well as “per question” answer rates in order to identify any fall-off trends in response rates and overall willingness for survey participation. Other aspects of the survey were then examined to identify areas of potential improvement and basis for suggestions.

1. Individual completion rate of survey

Average individual survey completion rates were fairly high at 74%, which seems to indicate that most respondents were compliable and willing to answer the questions to best of their knowledge.

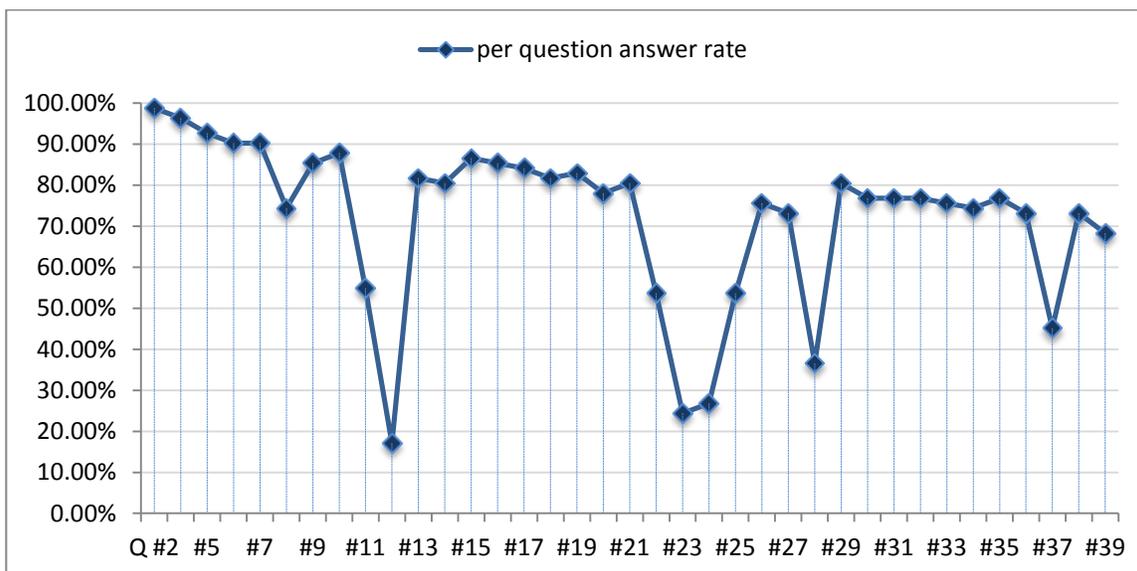
- Individual survey completion rate range: 10% - 98%
- Average completion rate at 74%
- Only 18 people below completion rate of 60%

2. Response rates per question

Per-question answer rate trends were investigated to see if length of survey might have impacted completion rates of the survey. Although there was a slight fall-off trend towards the end of the survey it was not significant. However, there were several questions with very low response rates indicated by the steep dips in the graph below (Figure 1). Some of the no-responses seemed to be due to the fact that the questions might not have been applicable to the respondents, therefore not due to the survey design.

- Per-question response rate range: 17% - 99%
- Completion rate trends only fell slightly towards the end of survey
- Questions with very low response rates seemed to be due to confusion or because question was not applicable

Figure 1: Response rate per question



3. Other findings

Upon close examination of the overall survey design and individual survey questions, we identified several areas that may be able improve the quality and value of the survey.

1) Issues in overall survey

- Questions tend to jump around
 - Different types of questions regarding purchase patterns and purchase items were dispersed throughout different categories of the survey (i.e. “Whole items most purchased”, “Processed items most purchased”, “Items willing to purchase from local” etc.)
- Inconsistencies in answers resulting from confusion regarding follow-up questions
 - Q13 asked if individual school kitchen sites currently process fresh fruits and vegetables and Q14 asked if the individual school kitchen sites have the capacity to process fresh fruits and vegetables. Therefore, if a kitchen currently does process fruits and vegetables that should indicate they have the capacity. However, five respondents answered yes to Q13 yet no to Q14.
 - Q10 asked if the school district operates a central kitchen and Q11 asked if the central kitchen currently process fresh fruits and vegetables. Therefore only those who answered yes to having a central kitchen should answer Q11. However, there was one respondent who answered no to Q10 but yes to Q11.

2) Issues in individual questions

- Lengthy questions with unclear wording seem to result in high non-response rate and confusion
- Appropriate answer choice seemed to be not available in certain questions: either was not included in the selection choices or question design seemed inadequate

II. Suggestions for improvement in survey design

1. Overall suggestions

Re-sectioning of categories and re-arrangement of questions could improve overall “flow” of the survey by addressing the issue of questions tending to jump around.

- Minimize numbers of questions by grouping follow-up questions
- Minimize confusion by grouping similar questions into same sections and eliminating redundant questions
- Increase value of survey by adding new questions on policy and other best practices
- Clarify wording of individual questions
 - Include clear and concise definitions of certain words (i.e. “central kitchen”, “minimally processed”, “buyer co-op”)
 - Modify answer choices for feasibility and clarity
 - Incorporate common written-responses from previous survey findings into answer choices
 - Design of answering methods for certain questions can be modified for clarity and better data collection

2. Suggestions for re-sectioning survey

1) Method

- Went through individual questions to identify purpose of each question and grouped items of similar theme
- Rearranged order of questions within sections for best logical flow
- Incorporated findings from the 'policy' and 'other states' teams to add into appropriate sections

2) New format sections

A. Contact and Demographics

- Combine Q1 & 4

B. Current Purchasing

- Assessment of current purchasing items: Q6, 7, 18, 32, 33
- Regarding local foods purchasing: Q21
 - if "yes" then proceed to Q22, 23, 24, 34, 37
 - if "no" then proceed to Q22
- Regarding vendors: Q19, 20, 25, 26, 27, 28

C. Facilities

- Central kitchen: Q10, if "yes" follow up to Q11, 12
- Additional facilities question: 12, 13, 14, 17

D. Identifying Needs

- Q9, 15, 16

E. Barriers and Feasibility

- Q31, 35, 36

F. Participation in Programs

- Q5, 8, 39

G. Interest in Future Events

- Q29, 30, 2, 3, 38

3. Addressing individual questions

Questions 6 and 7 can be drop down lists including the most commonly listed items, now that the commonly purchased fruits and vegetables (whole and minimally processed) have been listed. This list can be made exhaustive by including an "other" option, which will display a previously hidden textbox for specification if chosen. If the intention is to gather ranked purchasing information, this should be included in the instructions, with a statement on which number corresponds to the item most frequently purchased (Figure 2).

Figure 2: Proposed redesign of Questions 6-7

Please rank the 5-10 WHOLE fruits or vegetables (i.e. potatoes, strawberries, apples, broccoli) most frequently purchased for school meals in 2009-2010 school year (1 is most frequently purchased).

1

2

3

4

- blueberries
- broccoli
- cabbage (whole)
- carrots
- cauliflower
- celery
- cucumber
- grapes

For Questions 10-14, which are about the kitchen availability and capacity, the term “central kitchen” needs to be defined. The format can be changed so Questions 11-12 (questions about the central kitchen’s capacity and current use) are follow-up questions to a “Yes” response to Question 10 (presence of a central kitchen), but not shown to those replying “No.”

Questions 13-14, regarding the individual kitchens, had the options of “Yes” or “No” in response to capacity and current use of the kitchen to process fresh fruits and vegetables. These were given as exhaustive and mutually exclusive options. The survey was given to district foodservice directors, with the purpose of them answering on behalf of the district. However, districts may have several schools, and each school’s kitchen capacity and current use may vary across districts. This could create confusion about which answer to choose and may weaken the meaning of the responses. To improve this question, the response choices can be edited to include a “Some schools” option (Figure 3).

Figure 3: Proposed redesign of Questions 13-14

In your opinion, do the individual school site kitchens have the capacity to process fresh fruits and vegetables (as defined previously)?

- Yes, all of them
- Yes, some of them
- No, none of them

Question 18 asked about purchasing from USDA Foods and buyer cooperatives. There was some confusion regarding the meaning of the term “buyer cooperative,” as evidenced by write-in answers “FSA” and “SYSCO.” To improve the quality of information from this question, define the term “buyer cooperative” and provide, in a drop-down menu which appears if buyer cooperative is selected, the names of common cooperatives that serve the area, including the “other” option which will display a previously hidden textbox for specification if selected (Figure 4).

In addition, the question said, “If you purchase any of these items through a buyer's cooperative, please specify the items and the associated cooperatives.” Some respondents wrote the

names of their cooperatives, or food distributors, if they misunderstood the question, but very few wrote food items. Those who did wrote the product categories listed in the question, rather than providing specific items within those categories. For example, if they indicated that they purchase minimally processed fruits and vegetables from a cooperative, they may list the cooperative and then list “minimally processed fruits and vegetables,” rather than “frozen corn.” If this data is still of interest, this request should be reworded; if it is no longer necessary, it should be removed from the question.

Figure 4: Proposed redesign of Question 18

Please indicate if you purchase any of the following products through USDA Food Distribution Program (state commodity program) or a buyer cooperative.

	USDA Food Distribution Program	Buyer Cooperative Program	
Whole fresh fruits and vegetables	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Minimally processed fresh fruits (sliced, diced, chopped, cleaned, etc)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Washington State Purchasing Cooperative
Minimally processed fresh fruits (sliced, diced, chopped, cleaned, etc)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<div style="border: 1px solid black; padding: 2px;"> Other (please define) Enter co-op name Child Nutrition Purchasing Co-op (CNPC) King County Director's Association (KCDA) Washington State Purchasing Cooperative Other (please define) </div>
Bread	<input type="checkbox"/>	<input type="checkbox"/>	

Question 23 asked respondents to “Please indicate approximately how much money was spent in the 2009-2010 school year on those products.” The surrounding questions are asking about Washington grown products, but each question includes that phrase, or something similar, as they should. The phrase “on those products” needs to be changed to “Washington grown products” for clarity. In addition, the format of the response is probably best as a list of categories, with each being a range of dollar amounts. This could be written as “\$0 to \$x”, “\$x+1 to \$y”, and “\$y+1 or more”, or as in Question 25, “Up to \$x”, “Up to \$y”, “Over \$y” (when x and y are dollar amounts). Width of ranges will need to be determined based on estimated range of responses and level of detail desired. Since this question should only be shown to respondents who answered “Yes” to Question 21 (“Does your district purchase WA foods directly from farms?”), a category similar to the first in Question 25 (“Product liability insurance is not required”) is not necessary.

Question 26 requested information regarding food safety requirements and questions asked of potential vendors. The purpose of this question should be reassessed. If the purpose was to determine the requirements and questions used to assess vendors, it may be useful to provide a drop-down menu with common or ideal responses. If the purpose was to determine the state of knowledge regarding

requirements and questions used to assess vendors, the question could be left as is. The current responses included “HACCP” (mentioned 18 times), USDA-related answers (such as “USDA Meats”), and various licenses, certifications, and quality measures.

Question 27, about the minimum purchasing threshold and the competitive bid process, was identified by Farm to School contacts as being misleading. The proposed change is based on the question as it is currently written, and may not apply when the item is updated, although it may be representative of other survey questions. As written, Question 27 actually contained three questions, but was framed as one with a free-response box for additional information (requested by the other two questions). Respondents who entered text into the box did not answer both questions. If both questions are important, they should be separated as follow-up questions that appear if the “Yes” option is selected (Figure 5).

Figure 5: Proposed redesign of Question 27 (or similar)

Does your school district have a minimum dollar amount purchasing threshold for a formal bid process that is different from the State (\$75,000) and Federal (\$100,000)

Yes

No

What is the minimum amount requiring a competitive bid process?

\$

How many vendors must you contact?

For additional information about wording and formatting of questionnaire items, see pages 201-207 in *Research Methods in Anthropology: Qualitative and Quantitative Approaches, 5th edition* by H. Russell Bernard.

4. Additional survey questions

Upon examining other similar surveys from other States practices regarding Farm-to-School programs, the following are the list of potential questions that might be added to future surveys in order to enhance survey value.

1) Procurement:

- Is WA grown produce competitively priced?
- Is your district willing to pay more for WA grown produce?

2) Foodservice:

- Specific equipment needs

3) Farm-to-School Opinions and Experience:

- What would motivate you to increase the use of local foods in your district?

- What are your plans for Farm to School in the future?
 - Increase efforts, keep the same, decrease, no plans, would like to start for the first time
 - How would you describe the feedback you have received about your Farm to School activities from:
 - a. School food service staff
 - b. Students
 - c. Parents
 - d. Teachers/administrators
 - e. Community
 - f. Farmers/producers
- Categorize choices: “Very Positive,” “Positive,” “Neutral,” “Negative,” and “Very Negative” (Figure 6)

Figure 6: Proposed design for additional survey question

How would you describe the feedback you have received about your Farm to School activities from the following groups?

	Very Positive	Positive	Neutral	Negative	Very Negative
School food service staff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers/ Administrators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmers/ Producers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Implementation of proposed formatting

The ability to show certain questions to respondents depending on their answers is called logic or skip logic (because respondents answering certain ways do not need to answer certain questions and the survey tool will then skip over them). Logic can be applied to specific questions and to entire pages, depending on how the survey tool is set up.

Displaying hidden textboxes only when the “other” option is selected can be allowed using JavaScript codes. A web programmer can provide additional insight and direction on this matter.

While the plans and offers may change and this list is not all-inclusive, as of this writing, the following online survey tools may be useful:

- SurveyMonkey (question and page logic available in the Select plan and above)
- SurveyGizmo (question and page logic available in the Basic plan and above, custom scripting available in the Pro plan and above)
- Polldaddy (question logic available)
- QuestionPro (question and page logic available in Professional plan and above)
- LimeSurvey (skip logic available; open source software that is downloaded, installed, and hosted on the survey creator's web server)