How can you recognize success?

Individual responses to food system policy aimed at children

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Farm to school programming

• Grassroots approach to creating system-wide change
• “Enriches the connection communities have with local, healthy food and food producers” (National Farm to School Network)
• “Enrich children’s bodies and minds while supporting local economies” (USDA)
• “Cultivate healthy farm and food connections in classrooms, cafeterias and communities” (Food Connects Vermont)

• Areas of impact
  • Nutrition
  • Public health
  • Market opportunity
  • Community development
  • Education
  • Environment

• Levels of impact and units of analysis
  • Individual
  • School
  • Community
  • Policy
But aren’t all farm to school programs pretty much the same?
The CDC uses SEM to depict the interrelatedness and systems nature of public health factors and behavior change.

Prevention strategies should include a continuum of activities that address multiple levels of the model.

Bronfenbrenner, 1979; Stokols, 1996
Individual behavior change

Farm to School and School Garden Constructs
• Food System Learning
• Fruit/Vegetable Neophobia or Preferences
• Fruit/Vegetable Self-efficacy
• Fruit/Vegetable Social Norms

Key Constructs
• Behavioral capability
• Positive reinforcement
• Emotional coping
• Locus of control
• Self-efficacy
• Expectations

Social Cognitive Theory as Framework

Reciprocal Determinism

Bandura, 1998, 2004
## Individual Behavior

### Survey of 3rd-5th graders at 12 Vermont schools with farm to school programming, 2009

<table>
<thead>
<tr>
<th>Vaccines received by age group</th>
<th>Scores for Social Cognitive Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Report eating plenty of fruits and veggies</td>
<td>57%</td>
</tr>
<tr>
<td>Report not eating enough fruits and veggies</td>
<td>43%</td>
</tr>
</tbody>
</table>

### Survey of 3rd-5th graders at 12 schools, nationwide, with a school garden curriculum, 2012

<table>
<thead>
<tr>
<th>Preferences</th>
<th>Self-efficacy</th>
<th>Food System Learning</th>
<th>Social Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknowledgeable without intent</td>
<td>29.9</td>
<td>25.3</td>
<td>20.6</td>
</tr>
<tr>
<td>Knowledgeable without Intent</td>
<td>33.1</td>
<td>27.3</td>
<td>21.9</td>
</tr>
<tr>
<td>Unknowledgeable with Intent</td>
<td>35.4</td>
<td>30.3</td>
<td>22.4</td>
</tr>
<tr>
<td>Knowledgeable with Intent</td>
<td>35.3</td>
<td>30.8</td>
<td>22.5</td>
</tr>
</tbody>
</table>
School and community

Percent of Vermont public schools by the number of farm to school elements reported, 2012-2013
School and community change

58% increase in local food spending by participating schools, September/October, 2012 vs. 2013
National policy level change

• USDA creates Farm to School program
  • $5 million annually in grants
    • 139 grants given in first 2 years of program
  • Biannual Farm to School Census
    • 44% of school districts nationwide report farm to school programming
    • 56% of school districts plan to increase local purchasing
• Local preference option for school food purchasing
  • Fresh Fruit Vegetable Program
  • National School Lunch Program
• National Farm to School Network creates evaluation framework
Next steps to recognize success

1. Grassroots approach must be preserved, but intuitive measures are no longer enough
   1. Consistent measures must be established
   2. Units of analysis consistent with SEM levels of impact

2. Longitudinal research is required
   1. Baseline
   2. Comparison group
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