

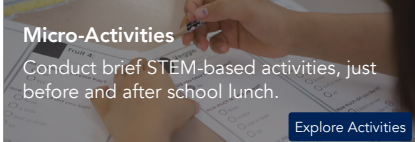

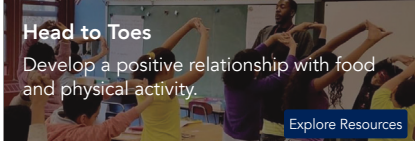
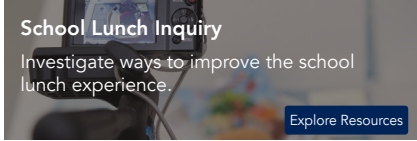
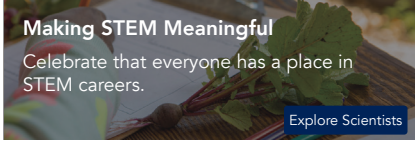



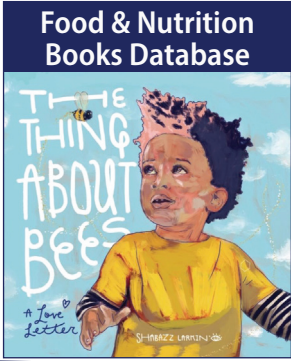
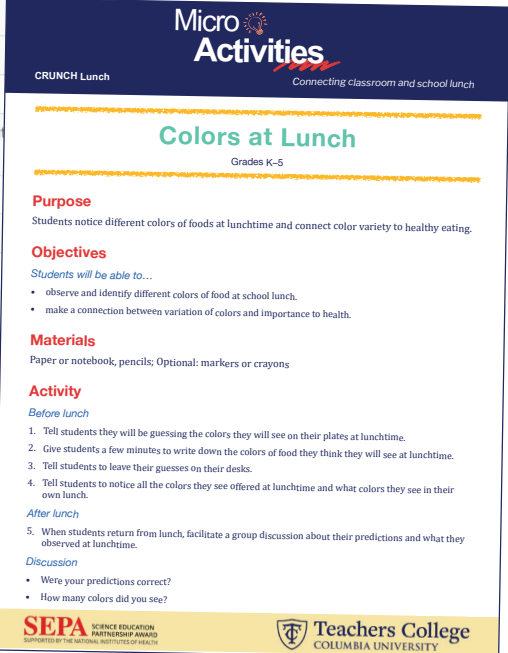
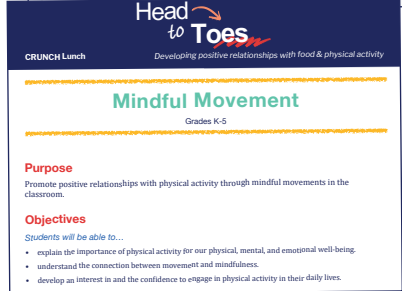


Project Name:	
Authors, Affiliations, and Email Address of Primary Contact: Pamela Koch, Raynika Trent, Felicia Mensah (Pam pak14@tc.columbia.edu and Raynika rt2569@tc.columbia.edu)	Funder: SEPA (September 2023 to July 2028)
Website: tc.edu/crunchlunch/	If SEPA project, URL for project on https://nihsepa.org/nihsepa.org/project/creating-resources-uplifting-nutrition-culture-and-health-at-lunch-crunch-lunch/

Brief Program Description (50 – 60 words)

CRUNCH Lunch, uses robust, engaging, and comprehensive teacher professional development to make the connection between STEM and school lunch happen. The current environment of adopting Universal Free Meals throughout the U.S. offers an unprecedented opportunity to improve attitudes and confidence in STEM and connect education to school lunch for up to 30 million public school children.

Program and Participant Characteristics	Teachers College COLUMBIA UNIVERSITY		Program Activities
Program type (Please check all that apply): <input checked="" type="checkbox"/> Curriculum <input type="checkbox"/> Out-of-school program <input type="checkbox"/> Exhibit <input type="checkbox"/> Interactive multimedia <input checked="" type="checkbox"/> Teacher PD <input type="checkbox"/> Research experiences for students or teachers <input type="checkbox"/> Other (describe):	 <p>CRUNCH Lunch Creating Resources Uplifting Nutrition, Culture and Health at Lunch</p> <p>Welcome to the Resource Hub CRUNCH Lunch provides teachers with ongoing support to connect STEM to School Lunch.</p>		<p>During our first year we created our CRUNCH Lunch Resource Hub website. We also designed our two Teacher Professional Development Workshops:</p>
Setting(s): <input checked="" type="checkbox"/> Formal <input type="checkbox"/> Informal	<div> <div>  <p>Lesson Portal Explore STEM-based lessons connected to school lunch that meet your school's needs. Explore Lessons</p> </div> <div>  <p>Micro-Activities Conduct brief STEM-based activities, just before and after school lunch. Explore Activities</p> </div> </div>		<ul style="list-style-type: none"> Why CRUNCH Lunch: <i>teachers reflect on their own school lunch, learn about the National School Lunch Program and begin to connect the school menu to their curriculum.</i>
Types of participants <input checked="" type="checkbox"/> Students <input checked="" type="checkbox"/> Teachers <input checked="" type="checkbox"/> Scientists <input type="checkbox"/> Families <input type="checkbox"/> Public <input type="checkbox"/> Other (describe):	<div> <div>  <p>Food and Nutrition Books Discover books that connect STEM and food to develop critical reading skills. Explore Books</p> </div> <div>  <p>Head to Toes Develop a positive relationship with food and physical activity. Explore Resources</p> </div> </div>		<ul style="list-style-type: none"> Connecting STEM to School Lunch: <i>teachers build more confidence in their ability to connect STEM to school lunch by reviewing the Resource Hub and making a CRUNCH Lunch lessons and activities plan.</i>
Grade level(s) of participants <input checked="" type="checkbox"/> PreK <input checked="" type="checkbox"/> Elementary (K-5) <input type="checkbox"/> Middle (6-8) <input type="checkbox"/> High (9-12) <input type="checkbox"/> Adult	<div> <div>  <p>School Lunch Inquiry Investigate ways to improve the school lunch experience. Explore Resources</p> </div> <div>  <p>Making STEM Meaningful Celebrate that everyone has a place in STEM careers. Explore Scientists</p> </div> </div>		
Characteristics of the populations you serve relative to DEIA: Working in NYC public schools: 41% Hispanic, 24% Black, and 17% Asian, 14% ELL, 21% have disabilities, 73% economically disadvantaged.	<div>   </div>		

Evaluation	Key Accomplishments and/or Findings																
<p>Constructs measured</p> <p>✓ Content knowledge ___ Skills ___ Nature of science ___ Career awareness ✓ Attitudes (e.g., interest, identity, belonging) ✓ Quality or fidelity of implementation ✓ Other (describe): consumption of school lunch</p> <p>Methods</p> <p>✓ Tests/surveys ✓ Interviews/focus groups ___ Observations ___ Artifacts (e.g., student work) ___ Other (describe):</p> <p>Design characteristics</p> <p>✓ Comparison or control group ✓ Pre/post surveys or assessments ___ Longitudinal tracking of participants ___ Other (describe):</p>	<p>Online resources!</p> <div data-bbox="1066 201 1543 899">  <p>Organization: Ag in the Classroom</p> <p>Title: FOODMASTER Fruit</p> <p>Students identify fruits that grow on a tree, bush, or vine, classify fruits as pome, drupe, berry, melon, or citrus, perform an experiment about the browning of fruit, and dry plums to make prunes.</p> <table border="1"> <tr><td>Grades:</td><td>3-5</td></tr> <tr><td>Duration:</td><td>2.25 hours</td></tr> <tr><td>Subjects:</td><td>English Language Arts, Health & Nutrition, Science</td></tr> <tr><td>Activity Types:</td><td>Cooking, Experiment</td></tr> <tr><td>Language:</td><td>English</td></tr> <tr><td>Location:</td><td>Indoor</td></tr> <tr><td>Season:</td><td>Not Specified</td></tr> <tr><td>Materials:</td><td>Food, Food Prep Supplies</td></tr> </table> </div> <div data-bbox="1654 168 1942 526">  <p>Food & Nutrition Books Database</p> </div> <div data-bbox="1495 526 1999 1175">  </div>	Grades:	3-5	Duration:	2.25 hours	Subjects:	English Language Arts, Health & Nutrition, Science	Activity Types:	Cooking, Experiment	Language:	English	Location:	Indoor	Season:	Not Specified	Materials:	Food, Food Prep Supplies
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Project Lessons Learned																	
<ul style="list-style-type: none"> • New York City Public Schools (NYC PS) are very dedicated to food education, improving school lunch, and to connecting school lunch with STEM. • To promote adoption of CRUNCH Lunch resources, we are going to need to align our teacher professional development workshops and website resources with the NYC PS science curriculum. 	<div data-bbox="1066 899 1465 1188">  </div>																

Questions, Advice Wanted, or Topics of Discussion for the SciEd Community (optional)
<ul style="list-style-type: none"> • What are your experience related to school lunch in schools you work with? • Do you know any food nutrition, food systems, STEM, BIPOC professionals for us to interview for our Making STEM Meaningful resource? • What we are creating now is specific to NYC PS and we will make it more adaptable for dissemination. Any tips on how to go from materials that are specific to the “evaluation population” to become more inclusive for wider dissemination? • What are your creative ideas for recruiting schools?