

Ready-to-Adopt-and-Implement Curriculum to Enhance Supplemental Nutrition Assistance Program Education (SNAP-Ed) Reach in Pennsylvania Middle Schools

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Background

In Pennsylvania, SNAP-Ed is delivered by PENNSYLVANIA NUTRITION EDUCATION TRACKS (TRACKS). A 2009 needs assessment indicated low milk intake among youth in TRACKS-participating schools; 70.2% of 8th graders (n=785) reported drinking ≤ 1 glass of milk/day in the past week. TRACKS educators addressed this need with an intervention in a ready-to-use format known as TRAILS (TRACKS Ready to Adopt & Implement Learning Structures). TRAILS are designed to minimize the administrative burden for SNAP-Ed educators and to enlist interest of potential new partners.

Program Description

TRAILS For Bones (TFB) includes all necessary items for implementation – teacher guide, student materials, shelf-stable foods for tastings, and paper products (Table 1).



- The 4 TRAILS For Bones lessons:
- target 11-14 year old students;
 - focus on Ca²⁺ (calcium) and its relationship to health;
 - are intended for delivery by school teachers;
 - align with Pennsylvania Department of Education Academic Standards;
 - are approximately 45-minute classroom sessions;
 - are compiled from existing nutrition education materials.

Table 1. TRAILS For Bones Overview

1	2	3	4
Overall Aim of Lesson			
Introduces Ca ²⁺ in foods	Addresses Ca ²⁺ intake recommendations	Identifies Ca ²⁺ in convenience store snacks/beverages	Investigates good and excellent sources of Ca ²⁺ in fast foods
Lesson Specific Weight-Bearing Physical Activity			
Lift school book up and down above head twenty times	Walk around the classroom 5 times	Run in place or do favorite dance move for 30 seconds, rest for 5 seconds (Repeat several times)	March in place twenty times (Repeat 2 times)
Food Tasted in Each Lesson			
Refried beans and corn chips	Vanilla soy milk	Sunflower kernels and cranapple juice	Whole wheat crackers and cheese bites

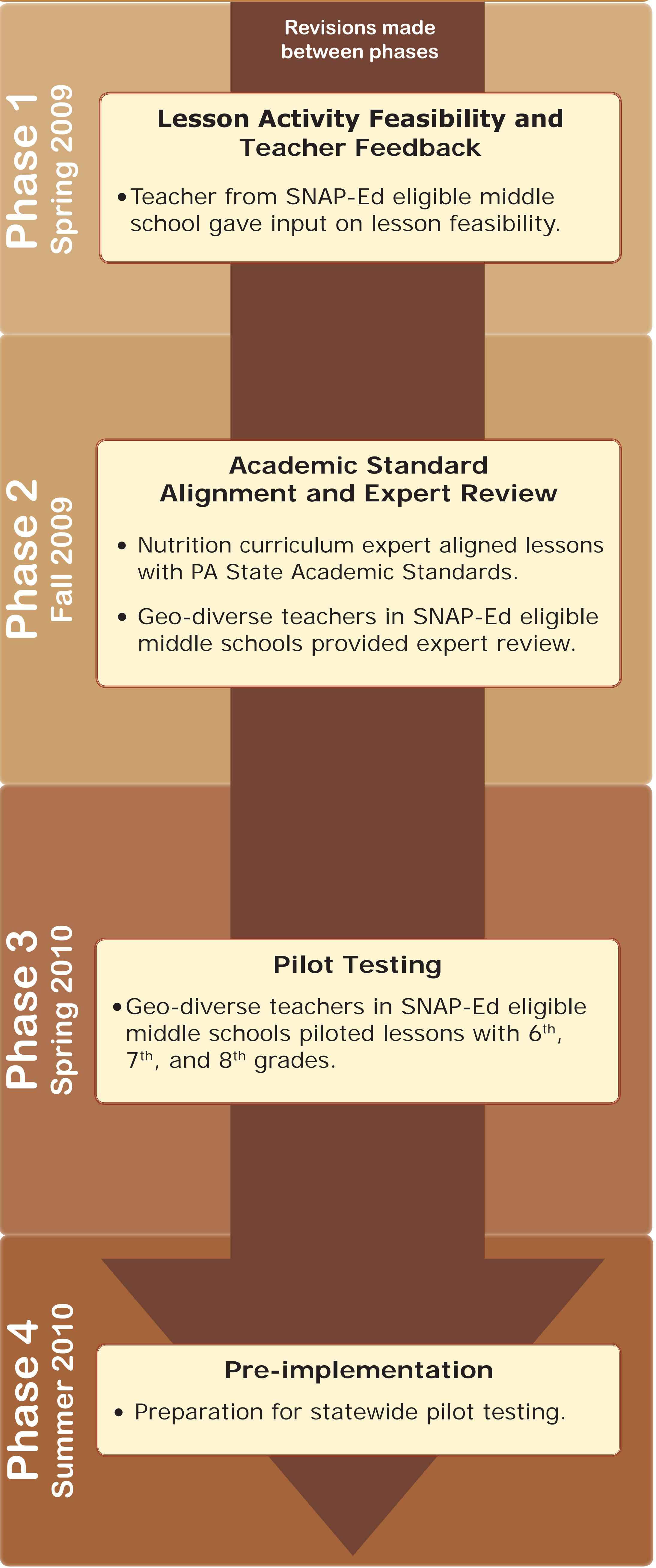
Acknowledgements/Funding

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Overview of TRAILS for Bones Development



Program Testing

Expert Input

- Eleven middle school teachers (6th-8th grade) examined materials for face and content validity and provided input via web-based survey. Teachers taught a variety of subjects (5-Health/PE, 3-Science and Math, 2-Family and Consumer Science, 1-History/Current Events) and represented both rural and urban school districts. Input informed curriculum revision (Table 3).
- Five lesson activities were assessed; 36 of 52 responses (69.2%) indicated difficulty level was age-congruent.
- Weight bearing activities were denoted appropriate in 32 of 42 (76.2%) responses.
- Taste test appeal for all 4 foods was high for 29 of 44 responses (65.9%).

Pilot Testing – Teacher Feedback

- Eight middle school teachers (Table 2) implemented TRAILS For Bones.
- Teachers responded to web-based feedback surveys.
- Feedback informed curriculum revision (Table 3).

Table 2. Pilot Testing – Teacher Characteristics

Subject Category	Grade	Lesson Feedback	School District Population Density*
Civics	8	Lessons 1, 2, 4	Urban
Family & Consumer Science	7	Lessons 1, 3, 4	Urban
Health	8	All Four Lessons	Rural
Multiple Subjects	6	All Four Lessons	Urban
	6	Lessons 1, 2, 4	Urban
Science (and Math)	6	All Four Lessons	Urban
	7	All Four Lessons	Urban
	8	All Four Lessons	Urban

* Center for Rural Pennsylvania website: http://www.ruralpa2.org/rural_muni_sd.cfm

Table 3. What Did We Learn from Expert Input and Teacher Feedback?

Survey Question	Teacher Responses	Revisions
What is your opinion about the Wrap-up Discussion Question?	• “Wrap up questions were not specific enough.”	The question “What surprised you about what we learned today?” was replaced with “Were you surprised by the calcium content of the foods in the calcium graphic activity? Which foods surprised you? Why?”
What is your opinion about the weight-bearing physical activity – lifting books?	• “My class doesn’t require students to carry textbooks. What about the students who don’t have any books?”	Instructions revised to direct students without books to imagine they are holding a 10 pound weight and push upward as if they were lifting the weight.
What are your thoughts about the Optional Take Home Writing Assignment?	• “With my students, if I give them a take home writing assignment that is optional, very few do it.” • “This would be something I would maybe use as an in class assignment or refrain from maybe using the word optional if it was going to be a take home activity.”	Assignment intended for optional use by teachers, not optional for students to complete when teachers assign. Name of section clarified to “Extend-the-Lesson: Take Home Writing Assignment”
My students would NOT participate in the weight-bearing physical activity (jumping jacks). Rated on a 5-point scale: Strongly agree to Strongly disagree; included comment box	• “There are a lot of middle school girls that will not do jumping jacks.” • “We could not do jumping jacks because we have a classroom below us and the noise is too much.”	Marching in place replaced the jumping jacks activity.
During the school year, when would you be most likely to teach TRAILS For Bones?	• “At the end of the school year, when I am looking for unique and engaging lessons.” • “The 4th marking period.”	Time for implementation and State Standardized Testing are barriers for many school teachers. Suggested implementation end of the school year after standardized testing is over.



“I was amazed at student interest in the lesson... They really GOT the key points and many said they would select foods higher in calcium.”
- Middle School teacher



“I thought it was very user friendly. [I’m] very impressed with all the supplies that were provided. You thought of everything!”
- Middle School teacher



Implications for Practice

- Repurposing materials for SNAP-Ed is an iterative process requiring expert input and testing with the target audience.
- Teacher review is an essential component of readying SNAP-Ed materials for use.
- TRAILS concept (ready-to-adopt-and-implement) was well received by busy middle school teachers.
- Teachers were interested in teaching about calcium intake.
- To obtain ordering information contact Barbara Lohse at lohseb@psu.edu.