

Two States, One Mission: Building Policy, Systems, and Environmental Change Capacity of County Extension Educators

Abstract

Policy, systems, and environmental (PSE) change interventions are a key part of comprehensive nutrition and health education. Although Extension educators find value in PSE approaches and report being involved in PSE work, many still indicate a lack of understanding regarding PSE approaches. We describe a unique multistate training designed to increase Extension educators' understanding, skills, and capacity related to implementing PSE change interventions. Data demonstrating success of the training are presented. Additionally, best practices for others wishing to create similar multistate programs conclude the article.

Keywords: [PSE](#), [multistate training](#), [Supplemental Nutrition Assistance Program Education](#)

Christopher T. Sneed

Assistant Professor
The University of
Tennessee Extension
Knoxville, Tennessee
csneed@utk.edu

Karen L. Franck

Extension Assistant
Professor
The University of
Tennessee
Knoxville, Tennessee
kfranck@utk.edu

Heather Norman

Assistant Extension
Professor
The University of
Kentucky
Lexington, Kentucky
heather.norman@uky.edu

Lisa Washburn

Associate Professor
The University of
Tennessee Extension
Knoxville, Tennessee
lwashbu4@utk.edu

Lauren E. Kennedy

Assistant Professor
Tennessee State
University Extension
Nashville, Tennessee
kenne552@msu.edu
@dr Lauren Kennedy

Soghra Jarvandi

Assistant Professor
The University of
Tennessee Extension
Knoxville, Tennessee
sjarvand@utk.edu

Janet Mullins

Extension Professor
and Interim Chair
The University of
Kentucky
Lexington, Kentucky
janet.mullins@uky.edu

Introduction

The Healthy, Hunger-Free Kids Act (2010) and the endorsement by the Centers for Disease Control and Prevention (CDC) of multilevel approaches to health promotion have prompted an expanded approach to nutrition and health education (Savoie-Roskos, DeWitt, & Coombs, 2018). A key part of this approach includes policy, systems, and environmental (PSE) change interventions (Lyn et al., 2013).

Extension professionals have sought to incorporate PSE approaches within the traditional Extension model, a model that has historically focused on behavior change through direct education. Extension educators are addressing new nutrition and health PSE expectations, particularly through Supplemental Nutrition Assistance Program Education (SNAP-Ed) and other programs funded by federal partners, such as the CDC. Examples of this work include improving street safety for walking and cycling, increasing access to fresh produce through

community gardens, and enhancing spaces for physical activity (Arkansas Healthy LIFE Project Team, 2018; Hicks, 2018; Sweet, 2018). Despite this progress, questions concerning best practices for developing synergy between direct education and PSE strategies and for implementing PSE approaches at the community level still abound (Bergman et al., 2018). Extension educators perceive value in PSE approaches but express lacking understanding of PSE change (Smathers et al., 2019).

Extension educators need training to fully integrate PSE change approaches into Extension programming (Smathers et al., 2019). Training opportunities to enhance Extension professionals' understanding of PSE change interventions are key to enabling Extension professionals to use subject matter expertise to create healthier communities (Smathers & Lobb, 2015).

In this article, we describe a unique multistate training developed by our team from University of Tennessee Extension, Tennessee State University Extension, and University of Kentucky Cooperative Extension to assist Extension educators in understanding, developing, and implementing PSE change interventions. The training we developed and multistate format we used hold potential for replication in other states as others strive to incorporate PSE approaches into Extension programming.

Training Implementation

A 2-day PSE training designed to increase family and consumer sciences (FCS) Extension educators' knowledge, skills, and capacity for implementing PSE change interventions was developed. The training was offered to all FCS Extension educators from our institutions. A unique aspect of the training was the multistate collaboration of specialists and field staff. During the 2-day training, 57 participants received instruction on a variety of PSE intervention topics delivered by members of our multistate team.

Participant objectives were as follows:

- Describe the importance of PSE changes for fostering healthier rural communities.
- Incorporate PSE change interventions into county plans of work.
- Understand how FCS educators used PSE change interventions in the CDC-funded High Obesity Program.
- Identify barriers to and facilitators of PSE change interventions in counties.

Training sessions are outlined in Table 1.

Table 1.
Policy, Systems, and Environmental (PSE) Change Intervention Training Sessions

Session	Description
Day 1	
Training purpose and overview	The session began with an overview of the training including the purpose of the training and desired learning objectives.
PSE intervention examples from the field	Six Extension educators shared their experiences implementing PSE interventions in their communities.
Lessons learned in PSE intervention implementation	Successes and challenges of implementing PSE approaches through the CDC-funded High Obesity Program were presented.
Barriers to and facilitators of PSE intervention work	Challenges and pathways to incorporating PSE approaches in the Extension delivery model were presented.
Getting started with PSE intervention work	Ideas for initiating PSE approaches in rural communities were shared.
Day 2	
PSE interventions and SNAP-Ed	Example PSE intervention strategies for use in SNAP-Ed were shared.
Evaluating PSE intervention work	Participants received instruction in best practices for evaluating PSE interventions.
Developing PSE intervention plans	Participants were given time to begin developing PSE intervention plans and projects for their communities. Technical assistance was provided by facilitators during this work time.
PSE intervention plan sharing	Extension educators shared their PSE intervention plans with the larger group to gain feedback and suggestions.
Wrap-up and next steps	The training concluded with a recap of the content covered and strategies for continuing PSE project work moving forward.
<p><i>Note.</i> CDC = Centers for Disease Control and Prevention; SNAP-ED = Supplemental Nutrition Assistance Program Education.</p>	

Program Evaluation

Forty participants completed surveys. The survey included three types of questions to evaluate effectiveness of the training: (a) postprogram-only questions measuring perceived changes in knowledge and skills, (b) "retrospective pre/post" questions measuring changes in confidence levels for implementing PSE interventions, and (c) open-ended questions for capturing additional feedback.

For the postprogram-only and retrospective questions, participants answered using a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Participants reported that the training was beneficial in increasing knowledge related to PSE approaches (100%) and relevant to the needs of their counties (83%). Most (93%) reported that they planned to use what they learned in their counties' programming. Participants also reported increased confidence in implementing PSE interventions, using PSE intervention strategies for future projects, overcoming barriers to PSE intervention implementation, and reporting impact. Table 2 shows results regarding participants' changes in knowledge and confidence.

Table 2.
Participants' Self-Rated Changes in Knowledge and Confidence Related to Policy, Systems, and Environmental (PSE) Change Interventions

Variable	Pretraining M (SD)	Posttraining M (SD)	Mean difference (Pretraining– Posttraining)	df	t value	p
Confidence to implement PSE strategies	2.90 (1.03)	4.20 (.69)	1.30	39	–9.64	.001
Understanding of how to use PSE strategies for future projects	2.93 (1.12)	4.15 (.92)	1.23	39	–8.69	.001
Confidence to overcome barriers to PSE change	2.65 (1.06)	3.84 (.90)	1.19	36	–7.97	.001
Confidence in sharing and reporting impact of PSE change	2.84 (1.19)	4.08 (.86)	1.24	36	–8.76	.001

Note. Scale: 1 = *strongly disagree* to 5 = *strongly agree*.

Participants indicated that learning from other educators, including those from another state, was the most helpful training element. Particularly noted were activities highlighting participants' successes and challenges with PSE change implementation in their own communities and group activities allowing collaborative exploration of potential PSE projects. Comments included the following examples:

- "It was great to hear advice from my colleagues."
- "Agent presentations and success stories are valuable and inspirational and helped define what a PSE [change intervention] is."
- "Agents sharing their experiences both good and bad was the most helpful."

Implications

The multistate training described herein serves as a model for how this form of training can be an effective method for expanding and building PSE intervention capacity. The joint training allowed participants from

multiple states to share resources, review program delivery methods, and highlight educator successes for replication.

Those interested in pursuing joint training strategies for PSE interventions may benefit from our lessons learned:

- *Focus on real-world examples.* Feedback from educators who participated in the training emphasized the importance of actual examples that identify barriers, challenges, and successes.
- *Share the stage.* To truly capitalize on the experiences and knowledge available in each state, it is important that no one state or institution dominates the training agenda. Allowing ample time for sharing across state lines adds to the richness of the training.
- *Include peer instruction and group work.* Participants made the most favorable comments about presentations by their peers. They appreciated learning from their colleagues, especially those in a neighboring state. Participants also found valuable the time they spent together in small groups brainstorming PSE strategies.
- *Start the planning process early.* Pulling together a training across multiple states can be challenging, so it is important to start planning well in advance. For this training, it was helpful that team members from one state coordinated all training logistics.
- *Use technology.* Restrictions on group meetings and increased attention on social distancing do not mean that learning has to stop. Instead, a combination of distance learning platforms, such as webinars, online learning management systems, videos, and voice-over slide show presentations, can be used to convey subject matter.

Author Note

Lauren Kennedy was employed as a health specialist with Tennessee State University Extension during the development of this article but began working as a community behavioral health specialist with Michigan State University Extension during the review process.

References

- Arkansas Healthy LIFE Project Team. (2018). *National Center for Chronic Disease Prevention and Health Promotion success story: Arkansas town makes strides to create safer streets for walking and cycling.* Retrieved from Centers for Disease Control and Prevention Division of Nutrition, Physical Activity and Obesity website: <https://nccd.cdc.gov/nccdsuccessstories/showdoc.aspx?s=15008&dt=0>
- Bergman, J. J., Linnell, J. D., Scherr, R. E., Ginsburg, D. C., Brian, K. M., Carter, R., . . . Soule, K. (2018). Feasibility of implementing a school nutrition intervention that addresses policies, systems, and environment. *Journal of Extension*, 56(1), Article v56-1a6. Available at: <https://joe.org/joe/2018february/a6.php>
- Healthy, Hunger-Free Kids Act of 2010, 42 USC §1751.
- Hicks, K. (2018). *National Center for Chronic Disease Prevention and Health Promotion success story:*

Community garden helps low income North Carolinians eat their veggies. Retrieved from Centers for Disease Control and Prevention Division of Nutrition, Physical Activity and Obesity website:

<https://nccd.cdc.gov/nccdsuccessstories/showdoc.aspx?s=15341&dt=0>

Lyn, R., Aytur, S., Davis, T. A., Eyler, A. A., Evenson, K. R., Chiqui, J. F., . . . Brownson, R. C. (2013). Policy, systems, and environmental approaches for obesity prevention: A framework to inform local and state action. *Journal of Public Health Management and Practice*, 19(3 Suppl 1), S23.

Savoie-Roskos, M. R., DeWitt, K., & Coombs, C. (2018). Changes in nutrition education: A policy, systems, and environmental approach. *Journal of Nutrition Education and Behavior*, 50(5), 431.

Smathers, C. A., & Lobb, J. M. (2015). Extension professionals and community coalitions: Professional development opportunities related to leadership and policy, system, and environment change. *Journal of Extension*, 53(6), Article v53-6a1. Available at: <https://joe.org/joe/2015december/a1.php>

Smathers, C., Toomey, M., Washburn, L., Johnston, K., Iaccopucci, A. M., Johannes, E., & Ravola, M. (2019). Positive youth development for health: Extension's readiness for multilevel public health approaches. *Journal of Extension*, 57(1), Article v57-1a1. Available at: <https://www.joe.org/joe/2019february/a1.php>

Sweet, C. (2018). *National Center for Chronic Disease Prevention and Health Promotion success story: Rural Tennessee churches and coalitions help congregants make healthy choices.* Retrieved from Centers for Disease Control and Prevention Division of Nutrition, Physical Activity and Obesity website:

<https://nccd.cdc.gov/nccdsuccessstories/showdoc.aspx?s=15089&dt=0>

Copyright © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the *Journal Editorial Office*, joe-ed@joe.org.

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)