



University of Kentucky  
UKnowledge

---

Dietetics and Human Nutrition Faculty  
Publications

Dietetics and Human Nutrition

---

8-2020

## Policy, Systems, and Environmental Change: A Planning Tool for Community Health Implementation

Lauren E. Kennedy  
*Michigan State University*

Christopher T. Sneed  
*University of Tennessee, Knoxville*

Karen L. Franck  
*University of Tennessee, Knoxville*

Heather Norman  
*University of Kentucky, [heather.norman@uky.edu](mailto:heather.norman@uky.edu)*

Lisa Washburn  
*University of Tennessee, Knoxville*

*See next page for additional authors*

Follow this and additional works at: [https://uknowledge.uky.edu/foodsci\\_facpub](https://uknowledge.uky.edu/foodsci_facpub)

 Part of the [Dietetics and Clinical Nutrition Commons](#)

**Right click to open a feedback form in a new tab to let us know how this document benefits you.**

---

### Repository Citation

Kennedy, Lauren E.; Sneed, Christopher T.; Franck, Karen L.; Norman, Heather; Washburn, Lisa; Jarvandi, Soghra; and Mullins, Janet, "Policy, Systems, and Environmental Change: A Planning Tool for Community Health Implementation" (2020). *Dietetics and Human Nutrition Faculty Publications*. 20.  
[https://uknowledge.uky.edu/foodsci\\_facpub/20](https://uknowledge.uky.edu/foodsci_facpub/20)

This Article is brought to you for free and open access by the Dietetics and Human Nutrition at UKnowledge. It has been accepted for inclusion in Dietetics and Human Nutrition Faculty Publications by an authorized administrator of UKnowledge. For more information, please contact [UKnowledge@lsv.uky.edu](mailto:UKnowledge@lsv.uky.edu).

---

## Authors

Lauren E. Kennedy, Christopher T. Sneed, Karen L. Franck, Heather Norman, Lisa Washburn, Soghra Jarvandi, and Janet Mullins

## Policy, Systems, and Environmental Change: A Planning Tool for Community Health Implementation

### Notes/Citation Information

Published in *Journal of Extension*, v. 58, no. 4, article #v58-4tt1.

© 2020 Extension Journal Inc.

The copyright holder has granted the permission for posting the article here.

The article is also available at <https://joe.org/joe/2020august/tt1.php>.

## **Policy, Systems, and Environmental Change: A Planning Tool for Community Health Implementation**

### **Abstract**

Extension educators across the United States are being asked to expand their direct education efforts to include policy, systems, and environmental (PSE) changes. However, professional development opportunities and tools are needed to familiarize Extension professionals with PSE change approaches, build their capacity to implement PSE change, and make the process relevant to their work. We describe a planning tool developed for a unique multistate PSE change intervention training and designed to facilitate the process of PSE change implementation at the local level. An example of the tool and recommendations for others wishing to use it are included.

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

### **Lauren E. Kennedy**

Assistant Professor  
Tennessee State  
University Extension  
Nashville, Tennessee  
[kenne552@msu.edu](mailto:kenne552@msu.edu)  
[@dr Lauren Kennedy](mailto:dr Lauren Kennedy)

### **Christopher T. Sneed**

Assistant Professor  
The University of  
Tennessee Extension  
Knoxville, Tennessee  
[csneed@utk.edu](mailto:csneed@utk.edu)

### **Karen L. Franck**

Extension Assistant  
Professor  
The University of  
Tennessee  
Knoxville, Tennessee  
[kfranck@utk.edu](mailto:kfranck@utk.edu)

### **Heather Norman**

Assistant Extension  
Professor  
The University of  
Kentucky  
Lexington, Kentucky  
[heather.norman@uky.edu](mailto:heather.norman@uky.edu)

### **Lisa Washburn**

Associate Professor  
The University of  
Tennessee Extension  
Knoxville, Tennessee  
[lwashbu4@utk.edu](mailto:lwashbu4@utk.edu)

### **Soghra Jarvandi**

Assistant Professor  
The University of  
Tennessee Extension  
Knoxville, Tennessee  
[sjarvand@utk.edu](mailto:sjarvand@utk.edu)

### **Janet Mullins**

Extension Professor  
and Interim Chair  
The University of  
Kentucky  
Lexington, Kentucky  
[janet.mullins@uky.edu](mailto:janet.mullins@uky.edu)  
[u](#)

Interventions that change the context for individual behavior are more effective than direct education efforts alone (Frieden, 2010). Extension educators across the United States are therefore being asked to expand their direct education efforts to include community engagement around the policy, systems, and environmental (PSE) elements that support health-promoting lifestyle behaviors (Braun et al., 2014; Smathers et al., 2019). However, in a survey of 379 Extension professionals, only about half of the respondents agreed that they would be comfortable developing a PSE action plan if asked to do so by a supervisor (Smathers et al., 2019). To address this gap, professional development opportunities and tools are needed to familiarize Extension professionals with PSE elements, build their capacity to implement PSE change, and make the process relevant to their work (Leeman et al., 2015; Smathers & Lobb, 2015).

In July 2019, Tennessee State University Extension, University of Tennessee Extension, and University of

Kentucky Extension partnered to offer Extension educators from all three institutions a professional development workshop on implementing PSE changes in their communities (Sneed et al., 2020). The 2-day workshop, which we developed, ended with a call to action, during which participants worked individually and with their peers to develop comprehensive action plans to guide their PSE change efforts (Sneed et al., 2020). After the planning activity, participants shared their action plans with the larger group, an activity that provided an opportunity for peer education from the diverse perspectives and experiences of those in the room.

In planning the workshop, we understood that developing an action plan for PSE change can be challenging, especially for educators unfamiliar with PSE change approaches. Therefore, we created the PSE Change Action Planning tool to facilitate the process (available by request from our lead author). It comprises a stepwise process for health educators transitioning from a needs assessment phase to an implementation phase (see the appendix for an example of a completed version of the tool). Tool development was guided by relevant research and technical practice manuals (Golden, McLeroy, Green, Earp, & Lieberman, 2015; Leeman et al., 2012; Moore, Villalobos, Gardner, Staples, & Shafir, 2019).

During the workshop planning activity, participants were provided a hard copy of the Be More Implementation Guide developed by University of Tennessee as part of the Centers for Disease Control and Prevention's 1416 High Obesity Cooperative Agreement. The Be More Implementation Guide contains PSE change strategies and resources for several different contexts, including for promoting physical activity and healthful nutrition in worksites, with faith-based groups, in senior centers, in schools, and in food retail establishments. For the workshop activity, participants were instructed to (a) select PSE change strategies that fit an identified opportunity in their counties, using the Be More Implementation Guide, and (b) work through the PSE Change Action Planning tool, both individually and with their peers, as a capacity-building exercise (Leeman et al., 2015). Participants were provided with the Be More Implementation Guide and other physical resources (books, websites) to assist with the planning activity, although those materials are not required to effectively use the tool. Similar resources are readily available at the national or local levels (e.g., from SNAP-Ed Library). Technical assistance from other Extension professionals, including specialists, was also provided.

The PSE Change Action Planning tool engaged participants through four steps:

1. Participants selected a strategy and were directed to think about the strategy in their community context. They were asked to brainstorm ideas about existing community strengths and opportunities related to the selected strategy as well as champions and community partners they would need to work with to implement it.
2. Participants were instructed to identify barriers and challenges as well as any additional resources (e.g., external funding) they would need to be successful.
3. After an explanation of how to create a SMART (specific, measurable, attainable, relevant, timely) goal (Bovend'Eerd, Botell, & Wade, 2009), participants created several goals for implementing the strategy.
4. Participants identified what success would look like and what measurable outcomes they could report. They were also asked to consider how they could ensure that their project was equitable for everyone in their community.

Others interested in using the PSE Change Action Planning tool may benefit from the following recommendations:

- *Emphasize equity.* The intended goal of any health-related PSE change is to create a culture of health by mitigating preventable factors related to poor health outcomes. Historically, most policies, systems, and environments have purposely disenfranchised entire communities of people on the basis of their race, ethnicity, or other demographic or cultural characteristics (Alexander, 2020; Bailey et al., 2017; Quijada & Murakami-Ramalho, 2009; Ross & Leigh, 2000; Simovska, Kane, Elia, & Tokunaga, 2015; Wallace, Crear-Perry, Richardson, Tarver, & Theall, 2017). Moreover, communities where health inequities are most persistent are often not the beneficiaries of equitable PSE changes (Kumanyika, 2018). For PSE changes to have the intended impact, there must be intentional engagement of all stakeholders in the process, not only those who are traditionally engaged (Liburd, Giles, & Jack, 2013).
- *Allow for peer education.* Participants in our workshop reported in the workshop evaluation that having time to discuss and troubleshoot their action plans with their peers and more experienced colleagues was very helpful. Educators should reach out to other Extension professionals, partners, or coalitions for assistance with action plan development (Haller, Gallagher, Weldon, & Felder, 2000).
- *Encourage reflection.* It is important to reflect on the completed action plan with other stakeholders. Critical reflection stimulates creativity and provides a framework for authentic implementation of PSE changes. Consistent reflection during implementation improves buy-in from the community and acceptability of the changes being implemented (Hills & Mullett, 2000; Raelin, 2001).

Through the use of the tool presented here, Extension educators will be able to develop an action plan for PSE interventions tailored to the needs of the communities they serve. Using the tool not only benefits Extension educators in mapping their PSE engagements but also can help Extension educators communicate their PSE change plans to community partners, including the steps necessary for achieving those plans. Given the continued conversations nationally regarding PSE interventions, this PSE change tool holds potential for scaling use by Extension educators to the national level.

### 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

- Alexander, M. (2020). *The new Jim Crow: Mass incarceration in the age of colorblindness*. New York, NY: The New Press.
- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet*, *389*(10077), 1453–1463.
- Bovend'Eerd, T. J. H., Botell, R. E., & Wade, D. T. (2009). Writing SMART rehabilitation goals and achieving goal attainment scaling: A practical guide. *Clinical Rehabilitation*, *23*(4), 352–361.

- Braun, B., Bruns, K., Cronk, L., Fox, L. K., Koukel, S., Le Menestrel, S., . . . Warren, T. (2014). *Cooperative Extension's national framework for health and wellness*. Retrieved from [http://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR\\_Library/national-framework-for-health-and-wellness/file](http://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR_Library/national-framework-for-health-and-wellness/file)
- Frieden, T. R. (2010). A framework for public health action: The health impact pyramid. *American Journal of Public Health, 100*(4), 590–595.
- Golden, S. D., McLeroy, K. R., Green, L. W., Earp, J. A. L., & Lieberman, L. D. (2015). *Upending the social ecological model to guide health promotion efforts toward policy and environmental change*. Los Angeles, CA: Sage Publications Sage CA.
- Haller, C. R., Gallagher, V. J., Weldon, T. L., & Felder, R. M. (2000). Dynamics of peer education in cooperative learning workgroups. *Journal of Engineering Education, 89*(3), 285–293.
- Hills, M., & Mullett, J. (2000). *Community-based research: Creating evidence-based practice for health and social change*. Paper presented at the Qualitative Evidence-Based Practice Conference, Coventry, England.
- Kumanyika, S. K. (2018). Supplement overview: What the Healthy Communities Study is telling us about childhood obesity prevention in US communities. *Pediatric Obesity, 13*, 3–6.
- Leeman, J., Calancie, L., Hartman, M. A., Escoffery, C. T., Herrmann, A. K., Tague, L. E., . . . Samuel-Hodge, C. (2015). What strategies are used to build practitioners' capacity to implement community-based interventions and are they effective? A systematic review. *Implementation Science, 10*(1), 80.
- Leeman, J., Sommers, J., Vu, M., Jernigan, J., Payne, G., Thompson, D., . . . Ammerman, A. (2012). Peer reviewed: An evaluation framework for obesity prevention policy interventions. *Preventing Chronic Disease, 9*, E120.
- Liburd, L. C., Giles, W., & Jack, L., Jr. (2013). Health equity: The cornerstone of a healthy community. *National Civic Review, 102*(4), 52–54.
- Moore, A., Villalobos, A., Gardner, A. L., Staples, C., & Shafir, S. (2019). Leveraging the strength of comprehensive cancer control coalitions to support policy, systems, and environmental change. *Cancer Causes & Control, 30*(10), 1033–1044.
- Quijada, P. D., & Murakami-Ramalho, E. (2009). Who says I don't want to come to school? School policies disenfranchise American Indian youth's educational vision. *WINHEC: International Journal of Indigenous Education Scholarship, 1*, 39–49.
- Raelin, J. A. (2001). Public reflection as the basis of learning. *Management Learning, 32*(1), 11–30.
- Ross, C. L., & Leigh, N. G. (2000). Planning, urban revitalization, and the inner city: An exploration of structural racism. *Journal of Planning Literature, 14*(3), 367–380.
- Simovska, V., Kane, R., Elia, J. P., & Tokunaga, J. (2015). Sexuality education: Implications for health, equity, and social justice in the United States. *Health Education, 115*(1), 105–120.
- 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://www.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>

Sneed, C. T., Franck, K. L., Norman, H., Washburn, L., Kennedy, L., Jarvandi, S., & Mullins, J. (2020). Two states, one mission: Building policy, systems, and environmental change capacity of county Extension educators. *Journal of Extension*, 58(4), Article v58-4iw1. Available at: <https://joe.org/joe/2020august/iw1.php>

Wallace, M., Crear-Perry, J., Richardson, L., Tarver, M., & Theall, K. (2017). Separate and unequal: Structural racism and infant mortality in the US. *Health & Place*, 45, 140–144.

## Appendix

### Sample Policy, Systems, and Environmental (PSE) Change Action Plan

Health Issue: Example: Healthful Food Access

Step 1: Use the Be More Implementation Guide, other available resources, and your community partners to select PSE change strategies that address your identified opportunity. Use the table below to brainstorm how you will implement your chosen strategy(ies).

<b>Strategy</b>	<b>What community champions, strengths, or opportunities exist?</b>	<b>How can you engage with these opportunities?</b>	<b>What partners do you need?</b>
<i>Example: Offering and promoting whole fruit options in attractive baskets near the door and register in corner stores</i>	<i>Healthy Kids Coalition; School Wellness Committee; PTA; county funding for healthy kids programs/policies; strong community ties to store managers</i>	<i>Reach out to other groups and coalitions; meet to discuss partnerships for improving corner store healthful food access</i>	<i>Corner store owners/managers; health-related stakeholders; county officials; parents; youth; SNAP-Ed educators</i>

Step 2: Identify barriers and challenges and any additional resources you will need to be successful.

<b>What barriers or challenges will you experience? How will you overcome these?</b>	<b>Do you need additional resources? If so, where will they come from?</b>
<i>Example: Some corner store consumers may have preferences for fruits that are unavailable. To remove this barrier, we can complete a brief poll with corner store consumers to ask what fruits they would be interested in purchasing and provide a report to corner store owners/managers.</i>	<i>Yes—funding from county government to purchase signs, to subsidize the cost of purchasing fresh fruit, and other costs. Most of the project can occur without funding and some owners/managers may be open to purchasing fresh fruit without subsidizing.</i>



Step 3: Identify several SMART goals for implementing your strategy.

<b>Goal</b>	<b>Specific</b>	<b>Measurable</b>	<b>Attainable</b>	<b>Relevant</b>	<b>Timely</b>
<i>What is it that you want to achieve?</i>	<i>Who? Why? What? Where? When?</i>	<i>How much? How often? How many?</i>	<i>Achievable? Feasible?</i>	<i>Is it important to what you ultimately want to achieve?</i>	<i>Have you allotted enough time to achieve the goal?</i>
<i>Example: Recruit and engage store owner/manager</i>	<i>Corner stores where youth and parents shop before and after school  Engaged store owners/managers</i>	<i>4 corner stores: each store within 0.5 miles of a KC Public School  At least two fruits available for purchase at any given time</i>	<i>Yes Yes</i>	<i>Yes</i>	<i>Month 1: meet with all store owners/managers to discuss their interest in adopting this strategy</i>

Step 4: How will you know that you have been successful with your PSE change? What are some of the measurable outcomes you can report? How will you ensure that what you are doing is equitable?

*Example: Each of the four targeted stores participates in the program, store owners report increased POS purchase of fruit, etc.*

[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](#)