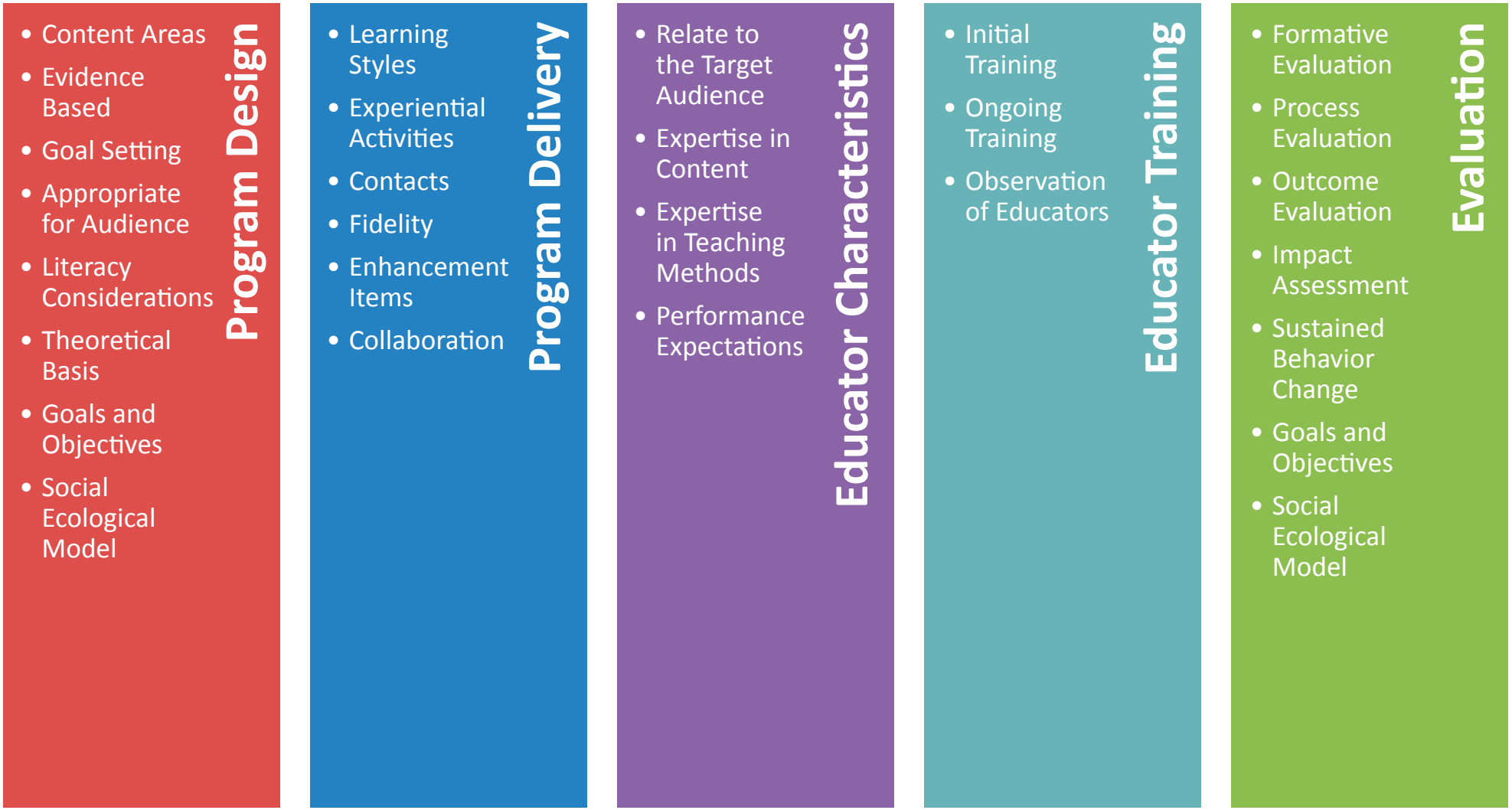

Best Practices in Nutrition Education for Low-Income Audiences

Best Practices in Nutrition Education for Low-Income Audiences

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Supported by the National Institute of Food and Agriculture (NIFA), USDA, through Award 2012-48757-20337
Funded by the Food and Nutrition Service (FNS), USDA, through Interagency Agreement No. 12-IA-22-20-235

Preferred Citation for this Document: Baker, S; Auld, G; MacKinnon, C; Ammerman, A; Hanula, G; Lohse, B; Scott, M; Serrano, E; Tucker, E; and Wardlaw, M. Best Practices in Nutrition Education for Low-Income Audiences (2014).

http://snap.nal.usda.gov/snap/CSUBestPractices.pdf

Introduction

The Food and Nutrition Service (FNS), an agency within the U.S. Department of Agriculture, identified a need for a comprehensive set of best practices in nutrition education for low-income audiences for the Supplemental Nutrition Assistance Program educational projects, including SNAP-Ed. Best practices are elements and/or strategies, supported by evidence, that have been shown to be effective in achieving programmatic outcomes. A comprehensive list of best practices would promote consistency and efficacy in program planning, implementation, and evaluation. In addition, the use of best practices increases confidence that education efforts will result in positive nutrition and health-related behavior changes. FNS provided funds for this project to the National Institute of Food and Agriculture (NIFA), who then awarded the task to researchers at Colorado State University (CSU).

CSU researchers were charged with identifying best practices, and then involved an expert panel. Seven panel members were chosen based on their experience with nutrition education of low-income populations as program leaders, program implementers, and researchers at universities and public health organizations. Experience with program evaluation, both youth and adult audiences and content expertise in nutrition, physical activity, food resource management, food safety, and educational methodologies was considered. Using a representative expert panel served to validate the best practices for face and content validity. Best practices were also substantiated from a review of the research literature.

Twenty-eight best practices within five domains were identified, recognizing that nutrition education is most effective when delivered through multiple levels of the Social-Ecological Model. These best practices are appropriate for both direct and indirect delivery of nutrition education to both adult and youth audiences. The expert panel also identified potential data sources to be used by nutrition educators to determine if and to what extent their programs are including best practices. In the following pages, these data sources, or indicators, are listed below each best practice described within the colored bars. These indicators are examples and are not intended to be comprehensive.

Links to resources are also included for additional information and self-study. In addition to resources, case studies of selected low-income nutrition education programs are included as real-world examples of planning, implementing, and evaluating specific best practices.

This resource can be used as a self-assessment tool to identify both program strengths and areas for improvement to better align programs with best practices. Additionally, this resource may serve as a guide for future educator training topics, or as a tool for strategic and long-term program planning. As more programs successfully implement and use these best practices, fidelity and efficacy of nutrition education improves. Best practices are not limited for use by program leaders, but may also be used by managers and outside evaluators at local, state, and national levels, state SNAP agencies, FNS at a regional and national level, and other low-income nutrition education programs.

Recommendations for Practitioners

To increase the use of best practices in SNAP-Ed programming, it is recommended that program leaders:

1. Use best practices to self-assess program strengths and limitations;
2. Include behavior change theory and research-based content in program design;
3. Deliver evidence-based curricula, messages, and materials appropriate for the specific target audience;
4. Ensure fidelity in program delivery, educator training, data collection, and evaluation; and
5. Link evaluation to program design, program delivery, educator training, and appropriate levels of the Social-Ecological Model.

Use best practices to self-assess program strengths and limitations

Program leaders might use best practices to self-assess program strengths and identify areas for improvement. It is unlikely that any program exhibits all best practices; however, making program improvements based on each of the best practices could lead to especially strong programs. For example, a program may include strong elements of program design but could enhance programming by developing and delivering a consistent training protocol for nutrition educators.

Indicators provided with the best practices, while not comprehensive, can serve as a guide for program leaders to determine if and how well the best practice is being utilized. For example, an expert review may substantiate the correct use of behavior change theory within a curriculum. In addition to indicators, case studies from current SNAP-Ed programs and resources might help guide program leaders on ways to implement specific best practices.

Include behavior change theory and research based content in program design

Behavior change theory should drive the delivery of nutrition education. Theory can help program planners, such as SNAP-Ed implementers, to define both a target audience and methods for producing behavior change in the audience and set appropriate goals and outcomes. Some theories are more appropriate with respect to specific learning objectives and/or target audiences.

The design of a nutrition education program should be based on accurate, reliable, and current research. A review of the curriculum in a peer-reviewed journal, list of references used in the development of a curriculum, or an expert review of the program or curriculum can help ensure that it is research-based. Using the most current Dietary Guidelines for Americans is an example of using evidence-based content. While many published curricula include a theoretical basis and deliver research-based content, it is more appropriate for programs to use a single curriculum in its entirety rather than piece together multiple resources.

Deliver evidence-based curricula, messages, and materials appropriate for the specific target audience

Curricula, messages, and materials should be developed and delivered specific to the target audience, including consideration of participants' ages and cultural background. Age-appropriate visuals and activities should be used to engage the target audience, while literacy considerations should be made for print materials, like handouts and recipes. Recipes and food preparation strategies should be consistent

with program goals, appeal to the target audience, and be appropriate for the financial needs and culture of the population. Many low-income nutrition education programs develop and publish recipes via cookbooks, handouts, or web media. The SNAP-Ed Connection website also houses a collection of low-cost recipes for use in programming. This website, found at http://recipefinder.nal.usda.gov, is a worthwhile starting point for finding recipes suitable for low-income audiences.

Ensure fidelity in program delivery, educator training, data collection, and evaluation

Fidelity refers to the implementation of an intervention consistently and as intended. Implementing an intervention with high fidelity to the original design increases the likelihood that the efficacy of the intervention will be replicated in the new setting. When multiple program sites implement the same intervention with fidelity, the aggregation of intervention outcomes is feasible. It is imperative for educators – or whoever is delivering the intervention in the field – to understand the importance of and how to maintain fidelity. This is a topic that may be introduced in the initial training, and – ideally – reviewed throughout employment.

Link evaluation to program design, program delivery, educator training, and appropriate levels of the Social-Ecological Model

Appropriate evaluation will determine if participants are gaining skills from experiential learning, goal setting, and other kinesthetic learning activities. Initial and ongoing training for nutrition educators should include program evaluation purposes and protocols. Educators should understand the importance of evaluation and how the design and delivery of programming can affect the accuracy of evaluation results. If educators are also involved in evaluation, training should include data collection protocols.

In addition, an evaluation component should be included for all levels of the Socio-Ecological Model in which programming is delivered. Traditional nutrition education has been delivered at the individual level; therefore, many – if not most – evaluation activities assess behavior change of the individual. With the passage of the Healthy Hunger-Free Kids Act of 2010, more policy and environmental-based activities are allowable in SNAP-Ed; thus, it is imperative that these new multi-level initiatives are also evaluated.

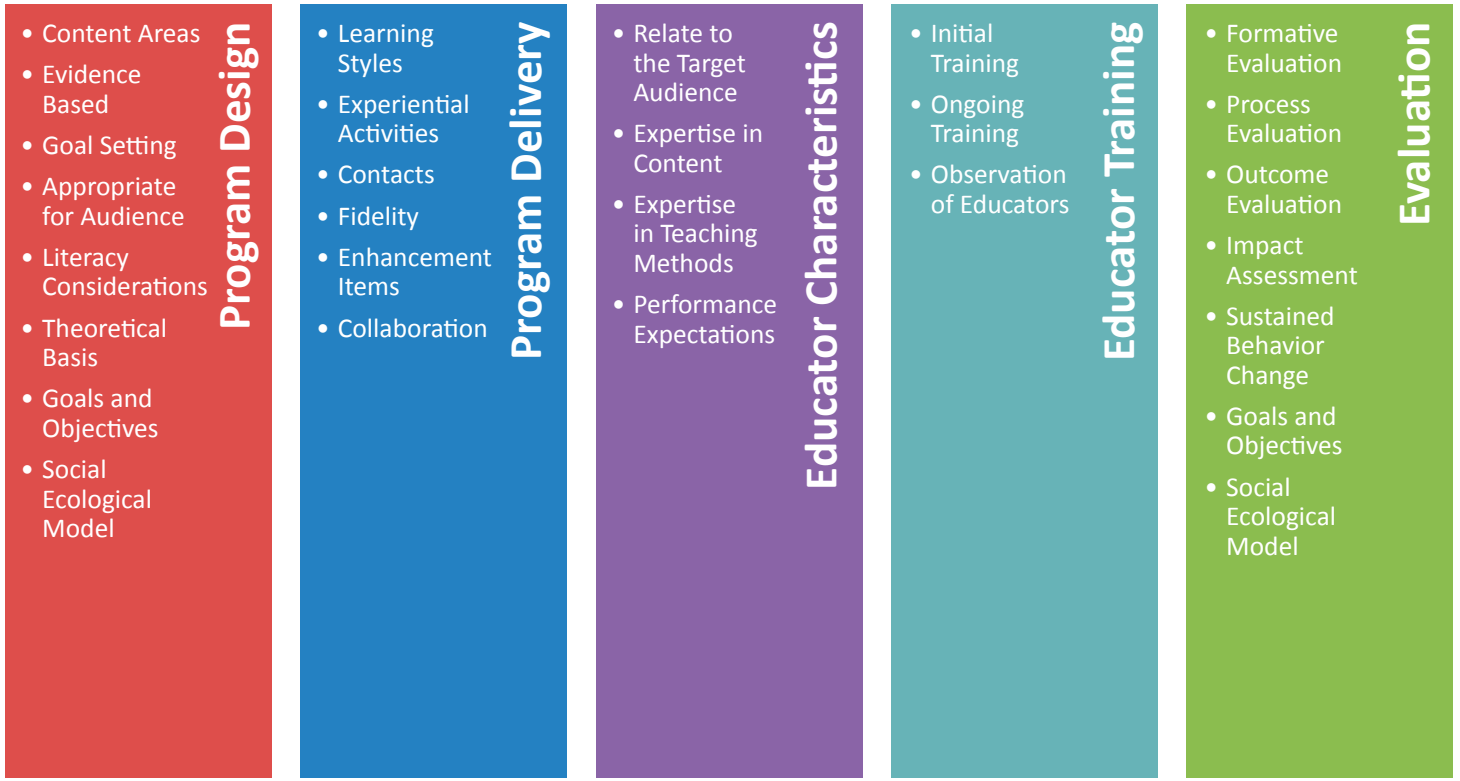
Conclusion

Use of best practices would promote consistency and efficacy among low-income nutrition education programs, including SNAP-Ed. Recommendations relate to using best practices as a guide throughout program planning, implementation, and evaluation.

How to Use This Document

Twenty-eight best practices are included in the following pages. The five domains are denoted by color, as noted below:

Program Design: Red
Program Delivery: Blue
Educator Characteristics: Purple
Educator Training: Teal
Evaluation: Green



The best practices are included within colored horizontal bars. Additional explanations for the best practices are also included in the colored bar, if applicable. Indicators are located below the best practices. These indicators can guide program leaders in determining if and to what extent the best practice is achieved within a specific program. To the right of the indicators are resources (citations or links to current resources) and case studies. Text in blue is a live link and can be accessed by the Internet. Case studies are included as examples of programs that exemplify one of these best practices but may also represent others. Researchers are not suggesting the programs these case studies represent are exemplary in terms of their use of all best practices, rather they have executed at least one of these identified best practices well.

Content Areas Curriculum includes accurate nutrition content and may also include current information related to physical activity, food resource management, food safety, eating behaviors, parent/child feeding relationship.

Indicated by:
- Expert review

To learn more:
- Core Nutrition Messages
  http://www.fns.usda.gov/core-nutrition/core-nutrition-messages
- Food Safety Resources
  http://www.fns.usda.gov/food-safety/food-safety-resources

Evidence Based Core topics and content in curriculum are based on accurate, reliable, and current research *Intervention includes the current Dietary Guidelines for Americans.*

Indicated by:
- Expert review
- Citations and sources used in curriculum
- Curriculum review by professional organization or peer-reviewed journal

To learn more:
- Dietary Guidelines for Americans
  http://www.health.gov/dietaryguidelines/
- **Case Study:** Evidence-Based Content

Goal Setting Curriculum includes participant behavior change goal setting.

Indicated by:
- Expert review
- Feedback from participants
- Documented observation of educator while teaching

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers. Page 276

Appropriate for Audience Curriculum is appropriate for the target audience.

Available in languages appropriate for the target audience, visuals and activities are appropriate for the target audience, and recipes are consistent with program goals and appeal to the target audience.

Indicated by:
- Expert review
- Feedback from participants
- Documented observation of educator while teaching

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 2
  Chapter 17
  Page 368
- **Case Study:** Appropriate for Target Audience
- SNAP-Ed Connection Recipe Finder
  http://recipefinder.nal.usda.gov/

Literacy Considerations Curriculum considers literacy level of the target audience.

Indicated by:
- Expert review
- Feedback from participants
- Computer analysis of reading level

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Page 410

Theoretical Basis Curriculum is based on behavior change theories that are used appropriately for the content and target audience. Theories may address knowledge, attitudes, and/or behaviors (physical, cognitive, and/or affective).

Indicated by:
- Expert review
- Published review or evaluation of curriculum

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 4
  Chapter 5

Goals and Objectives

Program has clearly stated goals and objectives that drive both the intervention and the evaluation.

Objectives are Specific, Measurable, Attainable, Relevant, and Timely (SMART).

Indicated by:

- Key performance indicators
- Evaluation tools

To learn more:

- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 10

Social Ecological Model

Programs are strengthened by the inclusion of multiple levels of the Social-Ecological Model (SEM) and enhanced by the inclusion of policy, systems, and environmental supports.

Indicated by:

- Expert review
- Feedback from participants

To learn more:

- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 3
  Chapter 6
- **Case Study:** Social-Ecological Model (MD)
- **Case Study:** Social-Ecological Model (MN)

Learning Styles Program delivery accommodates visual, auditory, and kinesthetic (hands-on) learning styles.

Indicated by:
- Expert review
- Feedback from participants
- Program evaluation
- Documented observation of educators while teaching

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Page 353

Experiential Activities Program delivery incorporates research- and/or practice-based learner-centered methodologies for the sharing of new information and includes experiential activities with minimal lecture.

Indicated by:
- Expert review
- Documented observation of educators while teaching

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Page 353

Contacts Program delivery includes contacts of appropriate frequency and duration to achieve learning objectives.

Indicated by:
- Expert review
- Educational and Reporting System (EARS) for SNAP-Ed
- Nutrition Education Evaluation and Reporting System (WebNEERS), an EFNEP reporting system appropriate for many SNAP-Ed programs
- Other reporting systems used by nutrition education programs

To learn more:
- **Case Study:** Contacts

Fidelity Program is implemented as designed to maintain the theoretical basis and is delivered in its entirety.

Indicated by:
- Documented observation of educator while teaching
- Educator requests of curriculum supplies
- Documentation of implementation by educator
- Consistent outcomes program-wide

To learn more:
- **Case Study:** Fidelity

Enhancement Items Program utilizes enhancement items and other strategies to reinforce learning at home.

Enhancement items may include food preparation and storage items (such as measuring cups), physical activity tools (such as pedometers), and other skill-building items (such as grocery lists).

Indicated by:
- Expert review
- Documentation of educator while teaching
- Feedback from participants
- Program evaluation

Collaboration Collaboration exists within and among national, state, and local nutrition education and health promotion initiatives, including organizations serving the target audience, to coordinate delivery of the intervention and reach participants in multiple settings.

Indicated by:
- Cross referral systems in place
- Formal and informal collaborative agreements (i.e., signed MOUs)
- Feedback from collaborative agency personnel
- Program evaluation
- Systems changes reflecting collaboration

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Page 422
  Page 302
- **Case Study:** Collaboration (SAFB)
- **Case Study:** Collaboration (WI)

Relate to the Target Audience Community-based educators possess the ability to relate well to the target audience.

Indicated by:
- Feedback from target audience
- Job description
- Feedback from program leaders

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Page 38
- Development of Core Competencies for Paraprofessional Nutrition Educators Who Deliver Food Stamp Nutrition Education
  http://www.csrees.usda.gov/nea/food/fsne/pdfs/paraprof_core_comp.pdf

Expertise in Content Community-based educators have expertise in content prior to delivering intervention.

Indicated by:
- Documented observation of educators while teaching
- Review of training materials
- Training evaluations completed by educators
- Outcomes of intervention
- Position announcements and/or hiring criteria
- Assessment of content knowledge before and after training

Expertise in Teaching Methods **Community-based educators have expertise in teaching methods appropriate for the target audience prior to delivering intervention.**

Indicated by:

- Documented observation of educators while teaching
- Review of training materials
- Training evaluations completed by educators
- Outcomes of intervention
- Teaching experience and/or credentials, if applicable
- Assessment of knowledge of teaching methods before and after training

Performance Expectations **Clearly defined performance expectations are shared with the community-based educator upon hire and/or initial training.**

Indicated by:

- Performance appraisal of educator
- Performance expectations in program policy manual
- Staffing organizational chart
- Personnel activity reports
- Reports documenting progress toward achievement of objectives and/or expectations
- Feedback from participants, including success stories

Initial Training Initial training, conducted prior to program delivery, accommodates visual, auditory, and kinesthetic (hands-on) learning styles and provides an opportunity to learn:
Content, andragogy (how adults learn)/pedagogy (how children learn), cultural sensitivity and diversity, program evaluation, and program protocols and processes.

Indicated by:
- Training evaluations completed by educators
- Observation of training
- Review of training materials
- Documented observation of educators while teaching

To learn more:
- Development of Core Competencies for Paraprofessional Nutrition Educators Who Deliver Food Stamp Nutrition Education
  http://www.csrees.usda.gov/nea/food/fsne/pdfs/paraprof_core_comp.pdf
- EFNEP and SNAP-Ed Initial Paraprofessional Training Materials and Methods
  http://www.joe.org/joe/2012april/tt6.php
- **Case Study:** Initial Educator Training

Ongoing Training Ongoing training accommodates visual, auditory, and kinesthetic (hands-on) learning styles, allows for shadowing, mentoring, and sharing of successes among educators, and provides an opportunity to learn:
Content, andragogy (how adults learn)/pedagogy (how children learn), cultural sensitivity and diversity, program evaluation, and program protocols and processes.

Indicated by:
- Training evaluations completed by educators
- Observation of training
- Review of training materials
- Documented observation of educators while teaching

To learn more:
- Development of Core Competencies for Paraprofessional Nutrition Educators Who Deliver Food Stamp Nutrition Education
  http://www.csrees.usda.gov/nea/food/fsne/pdfs/paraprof_core_comp.pdf

Observation of Educators Observation of community-based educator teaching occurs at least annually (more often for new hires) to determine:
Fidelity to intervention, quality of lesson delivery (including the use of dialogue-based, hands-on teaching methods), accuracy of content shared, and performance management/contractual fulfillment.
****Results of observation may be shared with the educator and/or used by program leaders to identify trends and training needs.***

Indicated by:

- Documented observation of educator while teaching

To learn more:

- Development of Core Competencies for Paraprofessional Nutrition Educators Who Deliver Food Stamp Nutrition Education
  http://www.csrees.usda.gov/nea/food/fsne/pdfs/paraprof_core_comp.pdf

Formative Evaluation Use of formative evaluation in the development of the intervention.

Indicated by:

- Expert review
- Published results of pilot studies
- Curriculum description/overview
- Published research about the development of the curriculum or intervention

To learn more:

- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 14
  Page 322
- Challenges of Conducting Effective SNAP-Ed Evaluations: A Step-by-Step Guide
  http://www.fns.usda.gov/sites/default/files/SNAPEDWaveII_Guide.pdf
- **Case Study:** Formative Evaluation

Process Evaluation Use of process evaluation in monitoring and decision making.

To assure intervention is implemented as designed and that intervention is continually reviewed to ensure fidelity and adapted as needed.

Indicated by:

- Program documentation
- Interviews with program developers
- Annual program reports
- Feedback from participants on usefulness and acceptability of program
- Feedback from educators on usefulness and acceptability of program
- Documented observation of educator while teaching

To learn more:

- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 14
  Pages 323, 324
- Challenges of Conducting Effective SNAP-Ed Evaluations: A Step-by-Step Guide
  http://www.fns.usda.gov/sites/default/files/SNAPEDWaveII_Guide.pdf
- **Case Study:** Process Evaluation

Outcome Evaluation Use of outcome evaluation for program assessment, reporting, and revisions.

Indicated by:

- Pre- and post-intervention measures
- Case studies

To learn more:

- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 14
  Pages 322, 325
- Challenges of Conducting Effective SNAP-Ed Evaluations: A Step-by-Step Guide
  http://www.fns.usda.gov/sites/default/files/SNAPEDWaveII_Guide.pdf

Impact Assessment Impact assessment measured by comparison group if intervention has not yet been formally tested.

Indicated by:

- Published research about evaluation of the curriculum or intervention
- Annual program reports
- Pre- and post-intervention measures

To learn more:

- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 14
  Pages 322, 325
- Challenges of Conducting Effective SNAP-Ed Evaluations: A Step-by-Step Guide
  http://www.fns.usda.gov/sites/default/files/SNAPEDWaveII_Guide.pdf
- **Case Study:** Impact Assessment

Sustained Behavior Change
Evidence that participants maintain behavior change into the future.

Indicated by:
- Delayed post-intervention measures
- Feedback from participants
- Feedback from program partners

To learn more:
- **Case Study:** Sustained Behavior Change

Goals and Objectives
Evaluation is designed to measure achievement of program goals and objectives.

Indicated by:
- Comparison of program-wide goals and objectives with evaluation tools

To learn more:
- Contento, I.R. (2007). Nutrition education: Linking research, theory, and practice. Sudbury, MA: Jones and Bartlett Publishers.
  Chapter 14
  Page 323

Social Ecological Model
Evaluation is designed to address each level of the Social-Ecological Model included within program.
An evaluation plan should be included for each level of SEM addressed in program design.

Indicated by:
- Policy changes as a result of the intervention
- Environmental changes as a result of the intervention
- Refer to outcome, impact, and sustained behavior change indicators for individual-level

To learn more:
- Challenges of Conducting Effective SNAP-Ed Evaluations: A Step-by-Step Guide
  http://www.fns.usda.gov/sites/default/files/SNAPEDWaveII_Guide.pdf

Program Design

Best Practice: *Curriculum is appropriate for the target audience.*
Also: Evaluation – *Process Evaluation*

Iowa Nutrition Network, Iowa Department of Public Health

Until recently, state and local SNAP-Ed programs relied on a match system of funding. It was under this system that the Iowa Nutrition Network collaborated with the Iowa Area Agencies on Aging to bring the Chef Charles program to older Iowans at congregate meal sites. The program served a third of eligible meal sites. Iowa Nutrition Network (INN) used experienced nutrition educators to implement the Chef Charles program. Educators traveled to multiple congregate meal sites to provide direct, small-group nutrition education to older adult participants before their midday meal. The nutrition educator used a newsletter and leader's teaching guide that were published monthly by state staff to lead the small-group lessons.

Utilizing an experienced nutrition educator provided confidence that evidenced-based information was being delivered to participants in an appropriate manner. While successful in its design, implementation of this model was time-intensive and inefficient. The nutrition educator in some rural areas often had to drive a significant distance to get to any given congregate meal site. In addition, because lessons were typically provided before mealtime, the number of presentations was inherently limited.

The elimination of matched funding, coupled with the desire to create a more resource-efficient intervention, prompted the process evaluation of Chef Charles. Conducted in large part by Dr. Sarah Francis of Iowa State University with funds from a Wellmark grant, the purpose of the evaluation was to solidify the theoretical framework and create a more efficient program model that could be scaled up and implemented by all of Iowa's Area Agencies on Aging.

Program leaders recognized the importance of and need for a strong, consistent theoretical basis for the newsletter. The Health Belief Model was chosen as the theoretical basis as it aims to reduce real and perceived barriers to health-related behaviors. A small, six-month evaluation of the program materials utilized a comparison group; the intervention group received the modified newsletters/leader guides – those with a strong theoretical basis and core health content framed for

Supported by the National Institute of Food and Agriculture (NIFA), USDA, through Award 2012-48757-20337;
Funded by the Food and Nutrition Service (FNS), USDA, through Interagency Agreement No. 12-IA-22-20-235.

maintaining independence – while the comparison group received the pre-existing Chef Charles newsletters/guides. The modified newsletters and focused activities were well received by the intervention group, who showed improvements in dietary intake.

The Department of Public Health then contracted with Pam McCarthy to conduct multiple focus groups to glean information from both program participants and program educators on preferred content, design, and delivery of the newsletters and program. Program participants desired that the program educator value participants' previous life experiences and recognize their prior knowledge. As older adults, the target audience no longer wanted to prepare meals for themselves; however, they did express a desire to be self-sufficient. Therefore, program leaders decided to frame core health content – such as consumption of fruits and vegetables, physical activity, and consumption of calcium-rich foods and beverages – in terms of helping participants maintain their health and independence for as long as possible.

The process evaluation yielded data that led to plans to change the delivery of programming and the educator-training model. Six part-time program coordinators will be hired through the Area Agencies on Aging. These coordinators will recruit local volunteers and meal site staff to deliver programming and will prepare their local staff using a video, training manual and individual training as needed. This collaboration will provide access to older adults across the entire state. To ensure that volunteers and staff are implementing the program as designed, coordinators will use a fidelity checklist. While the modification of newsletters and facilitation guides is underway, the Area Agencies on Aging are preparing to hire their coordinators. The Network plans to report on the outcomes of the new educator model at a later date. Chef Charles will be re-named "Fresh Conversations" beginning January 2014 coinciding with the new program delivery model. Fresh Conversations will initially be piloted to a sample of congregate meal sites – perhaps those with a larger percentage of participants qualifying for SNAP or other federal assistance programs. After this first year, Iowa Nutrition Network will seek approval to conduct a more rigorous evaluation of the design and delivery of Fresh Conversations.

Program leaders believe this model is more realistic for achieving statewide reach. The program evaluation of Chef Charles (now Fresh Conversations) fulfills multiple best practices including utilizing a strong theoretical basis, ensuring fidelity of delivery, and gathering and applying feedback from the target audience for evaluating the intervention. In addition, the Iowa Nutrition Network focused their training materials on the importance of selecting educators who are likeable and relate well to the target audience, which is another best practice.

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Program Delivery

Best Practice: *Program delivery includes contacts of appropriate frequency and duration to achieve learning objectives.*
Also: Evaluation – Impact Assessment

Alabama - Auburn University

Body Quest: Food of the Warrior (BQ) is a nutrition education and obesity prevention intervention for elementary-aged youth. Program leaders sought to create a novel and meaningful intervention for youth and did so by developing and testing the utility of a technology-based pedagogy to supplement direct education.

Direct education and content delivered by SNAP-Ed educators are primary, and iPad apps are used to reinforce lesson content. In total, BQ is a seventeen-week curriculum; each of the six lessons is taught by the educator and then reinforced the following week (for a total of twelve lessons). Additional introductory and follow-up lessons round out the seventeen weeks. Classroom and app content focus on delivering a fun and interactive message about increasing consumption of fruits and vegetables. In addition to these activities, youth participate in weekly taste tests of various fruits and vegetables. Because fruit is often well-received and consumed by the youth, taste tests now focus solely on vegetables.

BQ apps utilize six animé warrior characters – three male and three female. A pilot test determined that this type of character was meaningful to the youth audience. Both male and female students identified with the characters and consider the warriors to be role models for healthy eating. Initially, BQ was going to employ laptop computers. The first generation of iPads was released during the intervention development period, and program leaders found iPads were more manageable in terms of convenience and size for both the educators and youth. Each SNAP-Ed educator is considered a "rolling [computer] laboratory," carrying twenty-five iPads into each classroom. In its first year, children shared an iPad in a group of two or four children. Now, each child is provided with a tablet.

A significant amount of data is collected from participants before, during, and after the intervention. Behavior change is the desired outcome for BQ, although knowledge change is measured, too. The evaluation strategy has shifted year-to-year based on the evaluation results. In the first year of BQ, participants completed an assessment during each of the seventeen classes. Now, in its third year,

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participants complete an assessment before and after the intervention, as well as weekly during weeks eight through twelve (mid-intervention) as significant knowledge change is found around the tenth week. These mid-intervention assessments may allow program leaders to better understand an ideal dosage for the intervention delivery.

Participants complete evaluations of the taste tests live in the classroom via clicker; all answers are immediately sent from the classroom to the central office location. The *What's For Lunch?* (W4L) tally sheet has also been used consistently throughout BQ; each day, after lunch, students report their lunch consumption using tally marks. The tally sheet is updated each week to reflect foods served in the school lunch program. These tools allow program leaders to glean taste preferences, ideal program dosage, efficacy of iPad pedagogy, dietary intakes at lunchtime, and knowledge gain of the youth participants.

Constant communication and support from the state office was critical to the success of BQ. The initial purchase of iPads was a shared expense; however, with the elimination of matched funding, BQ is now 100% federally funded. This initial cost share may have contributed to getting federal approval. The inclusion of a comprehensive, logical evaluation plans for the four-year impact evaluation may have contributed to approval, as well.

BQ is currently being pilot tested in Louisiana and may soon be implemented in other states, as well. iPad apps provide a novel, interactive pedagogy to accompany direct nutrition education. A comprehensive impact evaluation plan allowed program leaders to evaluate the effects of BQ on elementary-aged youth; results of this impact evaluation provide confidence of intervention success as it is implemented in other settings.

Supported by the National Institute of Food and Agriculture (NIFA), USDA, through Award 2012-48757-20337;
Funded by the Food and Nutrition Service (FNS), USDA, through Interagency Agreement No. 12-IA-22-20-235.

Program Delivery

Best Practice: *Program is implemented as designed to maintain the theoretical basis and is delivered in its entirety.*

Nevada - University of Nevada Cooperative Extension

All 4 Kids is an intervention for preschool-aged children. The teachers and parents are the secondary target audiences. The intervention lasts twenty-four weeks, primarily in Head Start and other SNAP-Ed eligible preschools, and is divided into three units. Units one and two are each eight weeks and unit three is five weeks. An open-house event for families occurs after each unit in which parents can learn what the child has learned. The intervention also engages parents by sending home newsletters and other materials with the children.

The first unit of All 4 Kids focuses on physical activity and whole body movement. Nutrition concepts comprise the second unit and preschoolers learn about "go, slow, whoa" foods. However, as preschoolers often are dichotomous in their thinking, educators primarily focus on the "go" and "whoa" foods addressing two opposite categories. In addition, this unit also emphasizes hunger and fullness cues and choosing healthy snack options The third and final unit focuses on healthy living at any shape and size. This unit emphasizes that children– regardless of shape and size – can live healthy, eat smart, and be active. The curriculum itself is extremely methodical and designed with program objectives and prekindergarten education standards in mind.

All 4 Kids was developed by three field experts in exercise science, nutrition, and early childhood development. "When you take the time to develop a program that is very specific to that audience, with expertise in those areas applied to that audience, fidelity is key," says Anne Lindsay, program leader. Therefore, educators are provided with the tools and resources needed to deliver the intervention with fidelity to the intended design. These tools and resources are provided via Moodle, an online training program. This online training protocol began in 2007 and includes both written content and videos. Program leaders expect to update the text and videos periodically to keep the online training up-to-date with technology and required content. Training is also provided to the classroom teachers, where they learn about the content, design, and delivery of the intervention. In addition, suggestions are given for how teachers can be supportive of the intervention both during and between unit lessons.

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Educators are observed periodically, and program managers use an in-house form during the observation; this form tracks progress through the lesson according to how the lesson should be taught. Program leaders found 90% inter-rater reliability for these educator observations. Educator observations can be used to ensure that all lessons are being taught according to the outline provided in the curriculum; if all educators are delivering the intervention as designed, program leaders can be confident that statewide data can be aggregated and outcomes will be achieved.

Improvement in movement skills, conceptualization of “healthy” and “unhealthy,” and consumption of healthy snacks by the preschool-aged youth are an example of items measured in the evaluation. This intervention has been evaluated with a control group and has shown improvements in participant knowledge and behavior. Therefore, if data suggests that the children are not improving as a result of the intervention, then the intervention is likely not being delivered according to the curriculum.

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Program Delivery

Best Practice: *Collaboration exists within and among national, state, and local nutrition education and health promotion initiatives, including organizations serving the target audience, to coordinate delivery of the intervention and reach participants in multiple settings.*

Texas - San Antonio Food Bank

The San Antonio Food Bank (SAFB) provides food to 535 different non-profits within a sixteen county area. This food feeds approximately fifty-eight thousand individuals each week. The food bank wanted to provide the raw food ingredients as well as educate individuals on how to prepare, cook, and store food safely and economically. To do this, the SAFB offers a variety of classes and works to collaborate with multiple community partners.

SAFB delivers about three hundred classes per month to varying populations. The diversity of the populations – including youth and seniors, homeless or disabled – forces program leaders and SNAP-Ed educators to stay flexible with their curricula and delivery strategies. For example, one of the programs at the food bank helps families apply for federal food assistance programs such as SNAP or WIC. About one hundred individuals come to the food bank each day to apply, and clients may wait twenty to thirty minutes for their appointment. SNAP-Ed educators use a portable demonstration kitchen in the lobby of the food bank to provide information on nutrition and physical activity, in addition to taste-testing recipes, to the individuals waiting for an appointment.

Collaborators from the community include senior centers, after-school programs, schools (elementary, middle, and high school), shelters, emergency food pantries, and churches. Classes may be offered at a shelter for young mothers, where they learn about nutrition for themselves and their children. At a different shelter, teenagers about to transition into adulthood and independence receive classes on grocery shopping and cooking.

Each individual or organization in the collaboration brings something to the 'toolkit,' and – if there is a funding or programming gap – the collaborators strategize how to address the identified gap. There is generally no expense incurred as a result of the partnership, unless program leaders decide to collectively pursue resources. For example, funding may be sought so each participant can receive an apron or cooking utensils while participating in the class. A recent collaboration with the local

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RadioDisney station resulted in an in-school, hour-long presentation about nutrition and physical activity. Participants were also given Disney-themed items for their participation.

The San Antonio Food Bank reports collaboration in their SNAP-Ed Year End Report. In addition, outcome data is made available to the community partners. Funding organizations can also use these data in programmatic and investment decision-making. While the Program Director and her staff nourish the many and diverse relationships with collaborators, all staff members within the organization participate in initiating, building, and maintaining community collaborations.

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Program Design

Best Practice: *Curriculum is appropriate for the target audience.*
Also: Evaluation – *Process Evaluation*

Iowa Nutrition Network, Iowa Department of Public Health

Until recently, state and local SNAP-Ed programs relied on a match system of funding. It was under this system that the Iowa Nutrition Network collaborated with the Iowa Area Agencies on Aging to bring the Chef Charles program to older Iowans at congregate meal sites. The program served a third of eligible meal sites. Iowa Nutrition Network (INN) used experienced nutrition educators to implement the Chef Charles program. Educators traveled to multiple congregate meal sites to provide direct, small-group nutrition education to older adult participants before their midday meal. The nutrition educator used a newsletter and leader's teaching guide that were published monthly by state staff to lead the small-group lessons.

Utilizing an experienced nutrition educator provided confidence that evidenced-based information was being delivered to participants in an appropriate manner. While successful in its design, implementation of this model was time-intensive and inefficient. The nutrition educator in some rural areas often had to drive a significant distance to get to any given congregate meal site. In addition, because lessons were typically provided before mealtime, the number of presentations was inherently limited.

The elimination of matched funding, coupled with the desire to create a more resource-efficient intervention, prompted the process evaluation of Chef Charles. Conducted in large part by Dr. Sarah Francis of Iowa State University with funds from a Wellmark grant, the purpose of the evaluation was to solidify the theoretical framework and create a more efficient program model that could be scaled up and implemented by all of Iowa's Area Agencies on Aging.

Program leaders recognized the importance of and need for a strong, consistent theoretical basis for the newsletter. The Health Belief Model was chosen as the theoretical basis as it aims to reduce real and perceived barriers to health-related behaviors. A small, six-month evaluation of the program materials utilized a comparison group; the intervention group received the modified newsletters/leader guides – those with a strong theoretical basis and core health content framed for

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maintaining independence – while the comparison group received the pre-existing Chef Charles newsletters/guides. The modified newsletters and focused activities were well received by the intervention group, who showed improvements in dietary intake.

The Department of Public Health then contracted with Pam McCarthy to conduct multiple focus groups to glean information from both program participants and program educators on preferred content, design, and delivery of the newsletters and program. Program participants desired that the program educator value participants' previous life experiences and recognize their prior knowledge. As older adults, the target audience no longer wanted to prepare meals for themselves; however, they did express a desire to be self-sufficient. Therefore, program leaders decided to frame core health content – such as consumption of fruits and vegetables, physical activity, and consumption of calcium-rich foods and beverages – in terms of helping participants maintain their health and independence for as long as possible.

The process evaluation yielded data that led to plans to change the delivery of programming and the educator-training model. Six part-time program coordinators will be hired through the Area Agencies on Aging. These coordinators will recruit local volunteers and meal site staff to deliver programming and will prepare their local staff using a video, training manual and individual training as needed. This collaboration will provide access to older adults across the entire state. To ensure that volunteers and staff are implementing the program as designed, coordinators will use a fidelity checklist. While the modification of newsletters and facilitation guides is underway, the Area Agencies on Aging are preparing to hire their coordinators. The Network plans to report on the outcomes of the new educator model at a later date. Chef Charles will be re-named "Fresh Conversations" beginning January 2014 coinciding with the new program delivery model. Fresh Conversations will initially be piloted to a sample of congregate meal sites – perhaps those with a larger percentage of participants qualifying for SNAP or other federal assistance programs. After this first year, Iowa Nutrition Network will seek approval to conduct a more rigorous evaluation of the design and delivery of Fresh Conversations.

Program leaders believe this model is more realistic for achieving statewide reach. The program evaluation of Chef Charles (now Fresh Conversations) fulfills multiple best practices including utilizing a strong theoretical basis, ensuring fidelity of delivery, and gathering and applying feedback from the target audience for evaluating the intervention. In addition, the Iowa Nutrition Network focused their training materials on the importance of selecting educators who are likeable and relate well to the target audience, which is another best practice.

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Program Design

Best Practice: *Programs are strengthened by the inclusion of multiple levels of the Social-Ecological Model (SEM) and enhanced by the inclusion of policy, systems, and environmental supports.*

Minnesota – The University of Minnesota

Three years ago, program leaders ran an "implementation study" to determine which strategies are most effective for SNAP-Ed educators whose work yields positive evaluation results. This study included surveys and interviews with paraprofessional nutrition educators, feedback from agencies, and observations of the educators teaching lessons.

Program leaders found that the most effective educators were employing what they termed the "optimal learning model," a combination of delivering lessons based on a very significant and strategic environmental scan of their participants. The most effective educators learned about their participants before setting foot in a classroom: where they shop and do physical activities and what agencies they use. This allowed the educators to make appropriate adaptations for program delivery. This "optimal learning model" makes use of extensive interaction between the educator and participants in the classroom and educator familiarity with the community. For example, when an educator is teaching about whole grains in the classroom, he or she may ask the grocery store to put whole grain products on sale. They may ask one of the local agencies to serve oatmeal for breakfast. Thus, participants are receiving the same messages from multiple avenues within the community.

Youth are also receiving complimentary messages outside the classroom. Minnesota has developed and implemented a curriculum that teaches about fruits and vegetables, dairy, and whole grains. Educators attempt to coordinate the delivery of these lessons with the foods served by the school lunch or snack program. In addition, newsletters are sent home to parents that provide food group-specific recipes.

In addition to the adult and youth curricula, Minnesota utilizes the "Simply Good Eating for English Language Learners" curriculum. This curriculum is mostly oral (rather than written) and uses more graphics than text; therefore, it is useful for SNAP-Ed participants with low literacy levels or those who are learning the English language. Minnesota SNAP-Ed also employs educators who speak languages respective to the learners and can interact with various ethnic audiences.

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Educators are trained on implementing this “optimal delivery model.” During training, educators are also provided with resources for learning about the developmental stages of youth. This delivery model requires relationships with multiple agencies across counties and regions. Due to this shift, in addition to recent budget cuts, Minnesota has also moved to a new staffing model. Key elements of this optimal learning model are included in the position description. The “SNAP-Ed Regional Educator” title has now replaced a county-based educator title. The regional educators are responsible for a larger region, however all counties in Minnesota will still be served by SNAP-Ed.

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Program Design

Best Practice: *Core topics and content are based on accurate, reliable, and current research.*

New Hampshire – University of New Hampshire Cooperative Extension

New Hampshire has a relatively limited budget for providing SNAP-Ed programming to eligible participants. In fiscal year 2012, New Hampshire educated SNAP-eligible adults using the "Adult SNAP-Ed Toolkit." Educators could use this toolkit for single lessons or series of lessons; each lesson focuses on a specific message, such as MyPlate, food resource management, food safety, food groups, and parent/child feeding relationships. Each educator was given a lesson outline, and each lesson had corresponding handout(s). Program leaders expected that the educators followed the outline. If the Adult SNAP-Ed Toolkit was delivered as a series of lessons, participants needed to participate in a minimum of six lessons to graduate. In addition, the series participants also completed pre- and post-intervention food recalls and behavior checklists.

In the middle of fiscal year 2013, SNAP-Ed federal funding was cut. Funding was cut by about one fourth, or $250,000, for New Hampshire. Program leaders were determined, however, to avoid staffing cuts as a result of the budget and therefore took the opportunity to evaluate which characteristics of their programming they wanted to keep and which could be eliminated. A newsletter, once sent out to all SNAP recipients in New Hampshire, and a telephone survey of SNAP recipients were eliminated. These projects were "relatively big" for New Hampshire's budget, said Debbie Luppold. The content and design of the program was tightened and refocused, while also retaining experienced educators and, thus, keeping the program accessible for participants.

Around this same time, the federal SNAP-Ed Guidance urged SNAP-Ed program leaders to utilize evidence-based curricula. In late fiscal year 2012, New Hampshire had just implemented a "learn-at-home" series for certain SNAP-eligible seniors and families with children; however, with a limited budget to test the intervention's effectiveness, these materials were not included in New Hampshire's SNAP-Ed plan.

Program leaders valued the direct education component that is delivered to adults and youth in New Hampshire. The Adult SNAP-Ed Toolkit was a collection of lessons, content, and handouts from a variety of sources and curricula. The change in the federal SNAP-Ed guidance, coupled with the (1) time,

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effort, and money needed to update the Toolkit and (2) the federal push to use evidence-based curricula prompted program leaders to purchase the Families Eating Smart and Moving More curriculum from North Carolina State University. Choosing this program allowed program leaders to continue providing direct education for adults, utilizing a curriculum that was designed using research-based content and behavior change theory. New Hampshire opted to utilize this previously-tested curriculum rather than allocate resources into content development; thus, the program was able to focus on the delivery of the education to participants.

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Evaluation

Best Practice: *Evidence that participants maintain behavior change into the future.*

Wyoming - Cent$ible Nutrition Program

In Wyoming, SNAP-Ed programming is delivered to low-income families, adults, and children. SNAP-Ed is administered through University of Wyoming Extension; therefore, educators are primarily located in the county Extension offices. As Wyoming tends to have a more stable population – that is, individuals tend to be less transient– it was an appropriate location to implement a long-term evaluation on the behavior change of SNAP-Ed participants.

Wyoming has implemented the Cent$ible Nutrition curriculum for at least ten years, and it has been updated several times. The curriculum contains hands-on cooking in each lesson, and the lessons are delivered using a dialogue-based, learner-centered approach. While there are seventeen lessons in the Cent$ible Nutrition curriculum, most adults participate in eight lessons.

Evaluation data is collected for both one-time and series lessons. For one-time lessons, demographic data and intent-to-change variables are collected. For adults completing a series of lessons, the participants complete both a behavior checklist and a 24-hour recall before and after the series of lessons. Demographic data is also collected for these participants. Local educators enter the data into the WebNEERS system. Program leaders at the state level can then aggregate data and prepare quarterly and annual reports.

The sustained behavior change study had IRB approval, as well as approval from the EFNEP National Program Leader (in order to enter the WebNEERS system to find past graduates) and approval from the FNS Regional Nutritionist. The evaluation project was written into the SNAP-Ed State Plan and a small portion was funded with SNAP-Ed monies. The total cost of this project – excluding labor – was around $13,000.

Program leaders desired to find participants who had completed the Cent$ible Nutrition Program at least one year and up to four years prior to the follow-up assessment. Past graduates who completed both pre- and post-behavior checklists and 24-hour recalls were identified from the WebNEERS System. Local educators reviewed the participant lists to identify participants who had perhaps moved or passed away.

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The study included quantitative and qualitative assessments. The quantitative portion of the study followed survey methodology by Don Dillman. Once participants were identified, they were sent a postcard introducing them to the project. A follow-up behavior checklist was then mailed, along with an informed consent and a reinforcement item (calculator). In the case of no response, a follow-up contact and reminder postcard were also sent. In all, nearly 500 participants (46.4% response rate) responded to the survey. The second part of the study was qualitative in nature. Mary Kay Wardlaw interviewed twenty randomly selected individuals about the behavior and lifestyle changes they had made as a result of the program.

Many participants maintained food resource management behaviors, such as making a grocery list, buying items on sale, cooking from scratch, and reducing use of convenience items. Related to nutrition, participants continued to select and cook foods lower in fat, sugar, and salt and increase fruit and vegetable intake.

This project was a way of systematically collecting data to assess if program participants make or sustain behavior changes beyond the post-class assessment. It was expected that participants would decline slightly in behavior change over time, but reported behavior change regression was minimal. In fact, the study found that if a participant maintained his or her behavior change to one-year post-completion of his or her direct education class, the behavior change was also sustained into the future.

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Program Delivery

Best Practice: *Collaboration exists within and among national, state, and local nutrition education and health promotion initiatives, including organizations serving the target audience, to coordinate delivery of the intervention and reach participants in multiple settings.*

Wisconsin – Five Implementing Agencies

In Wisconsin, SNAP-Ed is administered by the Division of Public Health (DPH), which also administers many other FNS nutrition programs. This administrative structure enhances coordination of nutrition education for the SNAP-Ed target audience at the state and local levels. Funding for implementation is provided to five partners: The University of Wisconsin-Extension, Hunger Task Force, Fit Families Program, Great Lakes Inter-Tribal Council, and Ho-Chunk Nation.

The University of Wisconsin-Extension (UW-EX) SNAP-Ed is the major portion of what is named the Wisconsin Nutrition Education Program (WNEP) within the Cooperative Extension Family Living Programs. WNEP/SNAP-Ed offers nutrition education in collaboration with over 900 local agency partners in 68 out of the 72 Wisconsin counties. County-based program emphasis and structure are based on local needs and opportunities. UW-EX has twelve "educational projects;" each county determines what needs exist in that area and then chooses which educational project(s) to focus on during the fiscal year. In addition to direct education, UW-EX SNAP-Ed colleagues are active in local and statewide collaborative projects at the local systems and environmental levels, which contributes to effective nutrition education and obesity prevention.

Hunger Task Force (HTF) is a non-profit organization located within the Milwaukee metropolitan area that works primarily with issues related to hunger. Funding for this program is allocated toward a nutrition education and obesity prevention program for 3rd and 4th graders attending five SNAP-Ed eligible schools and summer meal sites. This program includes a school garden education, nutrition education during the school day, and other components that create a larger public health impact at the community level. Because of their focus on hunger, HTF has strong collaboration with many community partners, including food pantries and agencies that administer The Emergency Food Assistance Program (TEFAP) and other FNS programs.

In fiscal year 2013, the Fit Families SNAP-Ed Program included seventeen WIC agencies across Wisconsin. The Wisconsin SNAP-Ed Coordinator coordinates Fit Families with representatives from four Fit Families agencies and a Program Evaluator from the University of Wisconsin Population Health Institute. Families with toddlers are selected for a guided coaching program that empowers families and supports efforts

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to adopt healthy eating and physical activity behaviors, such as increasing physical activity, decreasing screen time, increasing fruit and vegetable consumption, and increasing intake of water or decreasing sugar-sweetened beverage consumption. Counselors encourage parents to model these behaviors for their children. Community partnerships are developed to reinforce Fit Families health messages and promote the health of all children in participating communities. As the Women, Infants, and Children (WIC) Program is administered at the state-level by the DPH, Fit Families achieves strong collaboration and coordination of services with WIC agencies.

Great Lakes Inter-Tribal Council (GLITC) and Ho-Chunk Nation (HCN) SNAP-Ed agencies provide nutrition education in tribal communities to high-risk and hard-to-reach population groups. Nutrition educators for these agencies are knowledgeable about tribal culture and connect with populations serviced. GLITC works in tribal clinics and community settings in rural areas of northern Wisconsin. The program administers SNAP-Ed on behalf of a consortium of five smaller tribes in Wisconsin. HCN nutrition education is primarily delivered out of two tribal clinics and is also offered in settings where tribal community members frequently congregate. Tribal SNAP-Ed nutrition educators, in addition to other SNAP-Ed providers in the state who work with tribal members, interact and share resources and best practices via Tribal Nutrition Educator Group (TNEG) meetings, which occur four times per year.

The five partners within Wisconsin share (1) a mission statement and (2) state-wide goals and objectives. Tony Zech, SNAP-Ed Coordinator at the Wisconsin Department of Health Services, facilitated mission statement development and continually monitors progress toward goals and objectives. This collaboration was “an opportunity for us to have a long term vision of where we’re going and how we’re going to get there and have everyone give their buy-in,” says Beverly Phillips, program leader for the UW-EX; the collaboration also facilitates the sharing of common resources and limits a duplication of efforts. In addition, the partners have jointly participated in an evaluation workshop where an evaluation specialist discussed strategies to be utilized in the state projects.

Beverly Phillips says programming is often “deliberately reinforcing” rather than “accidentally redundant,” especially between the Fit Families and UW-EX educators who both conduct programming at WIC agencies. Local relationships between these two SNAP-Ed partners are often reported in county-based plans and reports; relationships include sharing of information, sitting on the same coalitions, and coordinating activities for participants.

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Program Design

Best Practice: *Programs are strengthened by the inclusion of multiple levels of the Social-Ecological Model (SEM) and enhanced by the inclusion of policy, systems, and environmental supports.*

Maryland - The University of Maryland Extension

In the past, the University of Maryland Extension relied on newsletters, family classes, and special school events to get parents involved in nutrition education. However, barriers – such as job schedules and lack of childcare – exist for many parents wishing to attend these events. Program leaders sought to create a program that would consistently reach and educate parents. *Text2BHealthy* is a text-message-based program that reaches the parents whose children receive SNAP-Ed education in the classroom. *Text2BHealthy* is the first text-message-based program approved by USDA FNS for use in SNAP-Ed programs. This program is not available as stand-alone education. Rather, it has been designed to link text messages to the direct nutrition education received in the classroom.

An "opt-in" code, such as *kiwi* or *apple,* allows for messages to be tailored to the participants' location and school. When the parent texts the opt-in code to a web-based platform (housed in the program's state office), they are enrolled to receive those geographic- and school-specific targeted text messages. Parents may also enroll in the program on surveys or at select face-to-face events; program leaders mentioned that face-to-face interaction has been helpful in marketing to and recruiting participants. Text messages may relate to a food item, sales flyer from the local grocery store, classroom content, or local programs or events. Examples include: *"Second and third graders tried apples in class today. Ask your child if they liked tasting the apples and look for apple recipes in the newsletter in your child's backpack", "It's a beautiful day outside. Try going to XYZ park and play tag as a family," or "Free Zumba class at the XYZ YMCA at 6:30PM Tuesday. Bring the whole family!"* Messages are sent from the web-based platform in the program's state office. State office staff follows protocols for staying abreast of local sales flyers, farmers markets, health fairs, and community events.

The program's state office also relies on local educators to inform them of local and school events. This process has been refined over time. Initially, educators were unsure of their role in *Text2BHealthy*; educators now see their input as relevant and critical to the success of the program. For example: the state of Maryland initiated "produce drops" at local food banks. When a produce drop is scheduled to take place near one of the "texting" schools, they text parents where and when this event occurs. On the day of the produce drop, local

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SNAP-Ed educators deliver short presentations and distribute produce-based recipes at the event. The link between the program's state office, schools, local events, and organizations enables *Text2BHealthy* to reach participants at multiple levels of the Socio-Ecological Model.

Substantial evaluation – formative, process, and outcome – has been completed on this project because of its significance as the first text-message-based program implemented in SNAP-Ed. Focus groups in the formative stage allowed program leaders to gain insight on the perceptions of the program name, cell phone usage, "text-isms," and desired messages. In addition, considerable effort was made by program leaders to ensure that participants are not burdened with any additional costs as a result of receiving the text messages. This was imperative in order for the University of Maryland Extension to receive federal approval and funding.

In the first and second years of *Text2BHealthy*, all parents received an eight-page pre and post survey, given to students in their backpacks. Spanish surveys were given to all Spanish-speaking schools. The survey asked questions related to fruit and vegetable consumption, physical activity behaviors, health behaviors, income level, and family demographics. It also tried to glean who is responsible for the grocery shopping in the household; program leaders want this person to receive the text messages. Pre and post-survey data can be linked to enrollment (or no enrollment) in the *Text2BHealthy* program. In school year 2013-2014, some participants received an abbreviated, two-page survey. Printing and distributing eight-page surveys in both English and Spanish was costly for the implementing agency, however selected schools still receive this longer version.

Throughout the school year, program leaders conduct focus groups and interviews with parents enrolled and parents not enrolled in the *Text2BHealthy* program. These focus groups and interviews aim to discern why a parent decided to enroll or not and, for those enrolled, program strengths and weaknesses. In addition, focus groups helped to increase the willingness of participants to fill out the survey. When focus groups were not feasible due to space or timing, program leaders and graduate students conducted short face-to-face interviews to gather the same information. Evaluation questions were also sent to program participants via text message. A unique response system allows program leaders at the state level to send a follow-up question based on the participant's answer.

Considerable effort has been made by the implementing agency to lay the groundwork for this type of program. Evaluation – both before and during the intervention – has been critical to developing and implementing a program that is feasible, allowable, and effective for the federal funding agency, the implementing agency, schools, educators, and participants.

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Evaluation

Best Practice: *Use of formative evaluation in the development of the intervention.*

New Mexico - The University of New Mexico Prevention Research Center

A social marketing campaign – based on the FNS Core Nutrition Messages and targeted to Spanish-speaking mothers of young children in New Mexico – was developed in three phases. Project leaders at the University of New Mexico (UNM) Prevention Research Center (PRC) did not want to "reinvent the wheel" with the social marketing campaign; rather, they envisioned an extension of the work already completed by FNS. In addition, the SNAP-Ed state agency desired a social marketing campaign that would reinforce the messages in the direct education delivered around the state of New Mexico by other implementing agencies. The best way to do this, in their opinion, was to use the FNS Core Nutrition Messages.

Many program participants are native Spanish speakers of New Mexico or recent immigrants from Mexico. Any educational material is always translated into Spanish before use in the UNM program. Therefore, UNM focused on the translation of the core messages into Spanish for this social marketing campaign. The FNS Core Nutrition Messages fall into several categories: low-fat milk, whole grains, fruits and vegetables, and child feeding. In phase one, focus groups – comprised of Spanish-speaking mothers of young children – identified whether these categories resonated with the target audience. Phase one resulted in the preferred categories – low-fat milk and fruits and vegetables – and, in addition, some mothers contributed preferred messages or "slogans" for the campaign.

Additional focus groups were conducted in phase two to refine the language in the messages. Program leaders wanted to use both the correct translations and the words and phrases preferred by the target audience. Participants were also asked about delivery preference. This audience preferred to receive information in a poster or banner format; they also mentioned videos. Participants mentioned trusting almost anything from teachers and school representatives; if a poster was hung at school, they would stop and read it. Focus group leaders went on to probe about location within the school (office, classroom door, and cafeteria) and about poster design. Participants wanted pictures of families, and, specifically, wanted pictures including a father figure – regardless of the mother being the target

Supported by the National Institute of Food and Agriculture (NIFA), USDA, through Award 2012-48757-20337;
Funded by the Food and Nutrition Service (FNS), USDA, through Interagency Agreement No. 12-IA-22-20-235.

audience for the campaign. Pictures should also depict smaller families, as the participants relayed that families rarely have more than two or three kids. The focus groups suggested the use of billboards, television, and radio, but the project budget prohibited them from exploring those options. Posters and banners were feasible within the budget. Project leaders also created four videos in Spanish that are similar to Core Nutrition Messages videos produced by FNS.

A pilot study was conducted in a rural community. Based on focus group results, program leaders placed posters and banners at grocery stores, elementary schools, and Head Start centers. Prior to placement, these posters and banners were also tested for the pictures, font, messages, and placement. Posters and banners were based on two topics: consumption of fruits and vegetables and consumption of low-fat dairy.

Program leaders at UNM worked both with regional and federal representatives throughout the campaign development. This project was written into New Mexico's SNAP-Ed Plan and program leaders presented the results of two of the phases to the regional SNAP-Ed coordinator in 2012. Program leaders mentioned that their regional nutritionist was delighted with their use of the FNS Core Messages and also their use of social marketing to reach multiple levels of the Social-Ecological Model.

The research team hopes to develop a toolkit that other SNAP-Ed programs could use. Other program leaders could download the videos, banners, and other promotional materials in a variety of sizes and would also allow personalization of the items with logos, contact information of local SNAP and WIC offices and local healthcare providers. Program leaders envision this toolkit enhancing the consistency of messaging within programming but not being stand-alone education; this idea aligns well with the assumption that social marketing campaigns can enhance direct delivery and other forms of education.

Results from the focus groups and pilot study are included in UNM's Year-End Report. However, program leaders reported limited space for the variety of data they wanted to share. Therefore, in addition to the Year-End Report, program leaders compose and publish results from campaign development. Phase one and phase two results are available and program leaders intend to publish the results of phase three soon.

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Educator Training

Best Practice: *Initial training, conducted prior to program delivery, accommodates visual, auditory, and kinesthetic (hands-on) learning styles and provides an opportunity to learn: content, andragogy/pedagogy, cultural sensitivity and diversity, program evaluation, and program protocols and processes.*

New York - Cornell University Cooperative Extension

Navigating for Success is a nineteen-unit training program for paraprofessional educators. This training program was designed based on a needs assessment, literature review, and the publication "Development of Core Competencies for Paraprofessional Nutrition Educators Who Deliver Food Stamp Nutrition Education." For the needs assessment, educators and supervisors provided feedback on the knowledge and skills necessary to succeed in the position.

Each of the nineteen training units lasts approximately one day; the educators – in a group of at least six educators – complete one unit per week in a face-to-face, in-person manner. The *Navigating for Success* educator training lasts approximately nineteen weeks and covers a variety of topics, including food preparation, physical activity, and nutrition. Units are designed to incorporate hands-on activities with didactic content delivery. Training facilitators model the kind of interactions that they'd like educators to have with participants. *Navigating for Success* emphasizes the principles of adult learning in training to engage learners and maximize potential. In New York, the *Navigating for Success* training program is required of paraprofessional educators who work for the Expanded Food and Nutrition Education Program (EFNEP) or SNAP-Ed. However, various state and community groups have requested seminars relating to one or more units covered in *Navigating for Success*; these units are often applicable to the knowledge or skills surrounding adult education.

SNAP-Ed and EFNEP program counties are grouped into five regions within the state of New York. Hiring and training cycles differ across regions; however, the training of new educators with *Navigating for Success* must be started within six months of hire. New paraprofessional educators also receive extensive on-the-job orientation from their county managers; topics include how to fill out time sheets, working in the office, and state and regional protocols.

It is an expectation that a knowledge and/or content assessment will be completed for newly hired and trained educators; however this responsibility is delegated to the county managers. The

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assessment may include an on-site observation of the educator teaching a lesson. An observation tool is utilized for this assessment to track whether the lessons are being delivered appropriately. Paraprofessionals are formally observed quarterly to track performance and progress toward goals. A state office team completes a formal site visit once every two years, which includes observations and also encompasses a review of program documentation, materials, and fiscal procedures.

Each region is required to conduct an ongoing training once per quarter. Topics vary and may be developed by individuals in the state office, however most topics are developed at the regional level and based on region-specific needs. Training topics may include nutrition-related issues, such as breastfeeding, alternative sweeteners, or food allergens, or may be a refresher on programmatic processes and protocols, such as entering data into a reporting system. Each of these regional trainings is planned for one, six-hour training day.

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