Key Resources for Creating Online Nutrition Education for Those Participating in Supplemental Nutrition Assistance Program Education

Abstract
Internet-based nutrition education is becoming an important tool in serving the rural, low-income community, yet the task of creating such programming can be daunting. The authors describe the key resources used in developing an Internet-based nutrition education program for those participating in Supplemental Nutrition Assistance Program Education. Extension program providers wanting to create an online program may benefit from becoming familiar with the resources and ideas described in this article.

Introduction and Background
Extension professionals in all areas of practice must balance budget constraints with demand for quality. This is especially true for Extension program leaders involved with Supplemental Nutrition Assistance Program Education (SNAP-Ed). The focus of SNAP-Ed, a component of the U.S. Department of Agriculture's Supplemental Nutrition Assistance Program (SNAP), is to provide low-income families with the nutrition education they need to eat healthfully on a limited budget. However, the traditional delivery method for this education—one-on-one or group classes—is associated with some of the highest cost items in the program budget: travel and wages.

The growing trend of technology use among Extension educators can be a solution to budget concerns for SNAP-Ed directors (Campbell, Koszewski, & Behrends, 2013; Case, Cluskey, & Hino, 2011). With evidence suggesting that nutrition education delivered via technology can be administered at a reduced cost (Cox, White, & Gaylord, 2003; Murri, Christensen, LeBlanc,
Anderson, & Smith, 2010) and that there is increased access to computers and the Internet among the low-income population (Bensley et al., 2006; Eysenbach, Powell, Kuss, & Sa, 2002; Fox, 2011; Morahan-Martain, 2004), the use of technology to deliver SNAP-Ed nutrition education is an important consideration.

Utah SNAP-Ed developed and launched a pilot online nutrition education program in November 2011. Results indicated a successful completion rate among SNAP participants and showed that online learning was their preferred learning method. Although further analysis of results is needed, these primitive data may confirm that nutrition information taught online is accessible, and in some cases preferred, for low-income audiences, suggesting that online education is a viable option for addressing needed reductions in program budgets.

The development of an online program can be a daunting task, but it does not have to be. This article describes key resources for developing an online nutrition education program. The information presented can aid Extension directors interested in developing programs similar to that undertaken by Utah SNAP-Ed.

**Key Resources**

Using a few key resources makes development of an online nutrition education program efficient and beneficial while limiting the hassle sometimes associated with establishing such programs. With the availability of current technologies and software programs, even those having only basic computer skills can create and upload professional-looking online materials. To develop an online program that provides accessible information to the general public and survey data collection tools for program administrators, Extension professionals should be prepared to use the following key resources:

- local media production resources,
- web lesson creation software, and
- an online data collection system.

**Local Media Production Resources**

Using video to teach is not required, but short video presentations are a helpful starting point for online nutrition education. The use of videos allows a teacher to show visuals and demonstrate food preparation as he or she would in a traditional face-to-face class. It has been found that low-income audiences like learning from visuals and that using video material is an effective method for teaching low-literacy populations (Bensley et al., 2006; Cox et al., 2003). After video clips are created, they can be posted online through YouTube, Vimeo, or other public access video hosting websites. Once on the web, videos can be linked to program websites or specific online lessons for viewing by participants.

Through experience in creating video content, Utah SNAP-Ed has found it helpful to take the following actions when producing instructional media:
• Write a detailed script of what will be said and presented in a video before filming begins.

• Choose enthusiastic teachers to be on camera to keep video content engaging.

• Use professional equipment and film crews.

• Partner with Extension marketing and university multimedia professionals to save time and create better overall video clips.

• Make content short, basic, and easily understandable for low-literacy populations. Video clips that are 3 min or less are ideal.

• Search for small grants that can be used for media production to help with program creation costs.

**Web Lesson Creation Software**

Web lesson creation software is user friendly and affordable and allows individuals to create quality interactive learning outlines and material in a format that can be uploaded directly to the Internet. Lessons created through such software can be accessed online through a learning management system, such as Blackboard. Lessons also can be burned to a DVD and distributed to participants who do not have online access. Another benefit of web lesson creation software is flexibility. Nutrition knowledge is constantly evolving, and web lesson software provides the opportunity to update content easily, minimizing maintenance costs.

Developing an online education program involves first using web lesson creation software to create interactive learning material and then using an online host program or learning management system to post lessons online. Utah SNAP-Ed found software offered by the SoftChalk company to be effective because it

• is user friendly,

• offers options for creating lessons that can be used with most learning management systems,

• allows users to create quizzes and track scores for knowledge testing, and

• offers a web lesson creation product and an online host program from the same company.

Utah SNAP-Ed recommends that those interested in developing web-based education programs use web lesson creation software such as Softchalk, Articulate, Udutu, or Moodle. Program developers should look for software with the qualities listed above for a better overall experience.

**Online Data Collection System**

Online data collection software is the final key resource needed for successful online teaching. Such software allows program developers to electronically collect and manage data for program reporting.
purposes. Surveys can be created, linked to online lesson content, and then filled in by program participants.

Utah SNAP-Ed found Remark Web Survey to be useful data collection software for its online program. The following benefits of the software are particularly noteworthy:

- The software user can create learner surveys without learning HTML.
- Use of the software eliminates the need to scan paper data into a computer, saving time and resources.
- Information entered by participants is automatically stored in a password-protected online database.

Summary

Utah SNAP-Ed found that using key resources can aid in the creation of a high-quality, effective online nutrition education program. SNAP-Ed program providers should become familiar with and use university media production resources, web lesson creation software, and data collection systems to help ensure successful online program development and launch. Creating and using online lessons can help expand program reach and facilitate quality data collection all while potentially helping programs stay within budget constraints.

References


