



# THE JOURNAL OF NEAFCS

Journal of the National Extension Association of Family and Consumer Sciences

Volume 7, 2012

**National Extension Association of Family and  
Consumer Sciences**

**2012 Officers**

**President**

Carol Elizabeth Chandler  
Ohio State University Extension  
18000 St., Rt 4 Ste E  
Marysville, OH 43040-1195  
(937) 644-8117  
[chandler.4@osu.edu](mailto:chandler.4@osu.edu)

**President-elect**

Kathleen Ann Myhra Olson  
University of Minnesota Extension  
2285 Hallquist Avenue  
Red Wing, MN 55066-3957  
(651) 388-6544  
[kaolson@umn.edu](mailto:kaolson@umn.edu)

**Secretary**

Rhea Michelle Bentley  
University of Georgia Cooperative  
Extension  
420 Tenth St.  
Columbus, GA 31901  
(706)653-4200  
[rbentley@uga.edu](mailto:rbentley@uga.edu)

**Treasurer**

Peggy Ann Ehlers  
Purdue University Cooperative Extension  
229 Main Street  
Aurora, IN 47001-1357  
(812) 926-1189  
[pehlers@purdue.edu](mailto:pehlers@purdue.edu)

**Immediate Past President**

Amy L. Peterson  
University of Nebraska-Lincoln  
Extension  
Box 215  
400 Hawkeye  
Osceola, NE 68651-0215  
(402) 747-2321  
[apeterson3@unl.edu](mailto:apeterson3@unl.edu)

**VP Member Resources**

Susan E. Cosgrove  
Mississippi State University Extension

PO Box 188  
Decatur, MS 39327-0188  
(601) 635-7011  
[susanc@ext.msstate.edu](mailto:susanc@ext.msstate.edu)

**VP Professional Development**

Sonia Denise Koukel  
New Mexico State University Extension  
PO Box 30003, MSC 3AE  
Las Cruces, NM 88003-0031  
(575) 646-3006  
[sdkoukel@nmsu.edu](mailto:sdkoukel@nmsu.edu)

**VP Public Affairs**

Eleanor Nash Mathews  
Alabama Cooperative Extension  
72 Brockford Rd., Suite A  
Heflin, AL 36264-1677  
(256) 463-2620  
[emathews@aces.edu](mailto:emathews@aces.edu)

**VP Awards and Recognition**

Maude Elaine Kelly  
University of Missouri Extension  
113 North Missouri Street  
Potosi, MO 63664-1743  
(573) 438-2671  
[kellyme@missouri.edu](mailto:kellyme@missouri.edu)

**Central Region Director**

Gail Louise Brand  
University of Nebraska-Lincoln Extension  
216 S. 9<sup>th</sup> St.  
Seward, NE 68434-2424  
(402) 643-6574  
[gbrand@unl.edu](mailto:gbrand@unl.edu)

**Eastern Region Director**

Alexandra Greci  
Rutgers Cooperative Extension  
6 Gaunt Place  
PO Box 2900  
Flemington, NJ 08822  
(908) 788-1342  
[greci@njaes.rutgers.edu](mailto:greci@njaes.rutgers.edu)

**Southern Region Director**

Marian D. Ross  
Texas A&M AgriLife Extension  
200 Taylor St, Suite 500  
PO Box 1540  
Fort Worth, TX 76102  
(817) 884-1294  
[m-ross@tamu.edu](mailto:m-ross@tamu.edu)

**Western Region Director**

Cindy Schlenker Davies  
New Mexico State University Cooperative  
Extension  
1510 Menaul Blvd. NW  
Albuquerque, NM 87107-1026  
(505) 243-1386  
[csdavies@nmsu.edu](mailto:csdavies@nmsu.edu)

## National Extension Association of Family and Consumer Sciences

### Member Resources

Susan Cosgrove, Vice President

### 2012 Journal Editorial Subcommittee

#### Editor and Chair

Mary Lou Mueller  
Utah State University Extension  
117 South Main, PO Box 549  
Monticello, UT 84535  
435-587-3239  
[lou.mueller@usu.edu](mailto:lou.mueller@usu.edu)

#### Co-editor and Co-chair

Teresa B. Byington  
University of Nevada Extension  
8050 Paradise Road, Suite 100  
Las Vegas, NV 89123  
702-940-5421  
[byingtont@unce.unr.edu](mailto:byingtont@unce.unr.edu)

#### Apprentice

Laura L. Sant  
University of Idaho Extension--Franklin  
561 W. Oneida  
Preston, ID 83263  
208-852-1097  
[lsant@uidaho.edu](mailto:lsant@uidaho.edu)

#### Members

Traci Armstrong Florian  
University of Arizona Cooperative Extension  
4341 E. Broadway Rd.  
Phoenix, AZ 85040-8807  
[tarmstro@cals.arizona.edu](mailto:tarmstro@cals.arizona.edu)

Mary L. Blackburn  
University of California Extension  
1131 Harbor Bay Pkwy. #131  
Alameda, CA 94502-6540  
510-639-1274  
[mblackburn@ucdavis.edu](mailto:mblackburn@ucdavis.edu)

Karen Franck  
University of Tennessee Extension  
119 Morgan Hall  
2621 Morgan Circle  
Knoxville TN 37006-4540  
[kfranck@utk.edu](mailto:kfranck@utk.edu)

Angela Hairston  
University of Georgia Extension

1757 Washington Rd.  
East Point, GA 30344-4151  
404-762-4777  
[hairston@uga.edu](mailto:hairston@uga.edu)

Jessica Hill  
University of Georgia Extension  
4380 Memorial Dr., Suite 200  
Decatur, GA 30032

[jehill@dekalbcountyga.gov](mailto:jehill@dekalbcountyga.gov)

Ruth Carolyn Jackson  
University of Arizona Extension  
4341 East Broadway Rd.  
Phoenix, AZ 85040-8807  
602-827-8200 x 361  
[rjackson@ag.arizona.edu](mailto:rjackson@ag.arizona.edu)

Christine Kniep  
University of Wisconsin Extension  
625 E. County Rd. Y, Suite 600  
Oshkosh, WI 54901-8131  
920-232-1973  
[christine.kniep@ces.uwex.edu](mailto:christine.kniep@ces.uwex.edu)

Robin C. Mack-Haynes  
New Mexico State University  
Cooperative Extension Service  
100 N. Main, Suite 10-C  
Lovington, NM 88260  
505-396-2819  
[rmack@nmsu.edu](mailto:rmack@nmsu.edu)

Sarah Mammarella  
North Carolina Cooperative Extension  
PO Box 1358  
Rockingham, NC 28380  
910-997-8255  
[sarah\\_mammarella@ncsu.edu](mailto:sarah_mammarella@ncsu.edu)

Wendy Rice  
Colorado State University Extension  
2500 Main Ave.  
Durango, CO 81301-5900  
970-382-6361  
[ricekw@co.laplata.co.us](mailto:ricekw@co.laplata.co.us)

Marnie Ricks Spencer  
University of Idaho Extension  
583 W. Sexton  
Blackfoot, ID 83221-3847  
208-785-8060  
[marniers@uidaho.edu](mailto:marniers@uidaho.edu)

Lauren Weatherford  
West Virginia University Extension  
104 E. Wiseman Ave.  
Fayetteville, WV 25840  
304-574-4253  
[lauren.weatherford@mail.wvu.edu](mailto:lauren.weatherford@mail.wvu.edu)

Kimberly Wilson-Sweebe  
South Dakota State University Cooperative  
Extension  
SWG323, Box 2275A, SDSU  
Brookings, SD 57007  
605-688-4440  
[kimberly.wilson-sweebe@sdstate.edu](mailto:kimberly.wilson-sweebe@sdstate.edu)

# Journal of National Extension Association of Family and Consumer Sciences

## From the Editor

Here is your 2012 publication of the *Journal of National Extension Association of Family and Consumer Sciences*. There are some really great articles ahead! Each year it takes a tremendous amount of effort to publish the journal and success depends upon the support of many others. First, Co-editor Teresa Byington and Apprentice Laura Sant spent countless hours conducting the review process and merging reviewer's recommendations into manuscripts. The Journal Editorial Subcommittee also accepted assignments and provided helpful guidance along the way. Then all authors worked diligently to incorporate recommended edits, and these combined efforts have resulted in a thoroughly polished publication. Thank you, all.

**On a personal note.** It is with deep regret that I step down as editor of *JNEAFCS* to spend more quality time with my husband, Phil, who is battling Stage IV colon cancer. I have had the privilege of publishing three volumes as Editor, serving three years as Assistant Editor, and seven years as a member of the Journal Editorial Subcommittee—and I will continue to serve on the subcommittee. I am profoundly grateful for the opportunity I have had to associate with amazing people throughout NEAFCS. *If you will indulge my soapbox, I urge you, dear reader, to stay current on cancer screenings. Early diagnosis can save your life.*

**Back to business.** In this volume of *JNEAFCS* we expand on the category of Research and introduce articles featuring Best Practices and Implications for Extension. These three categories have allowed colleagues to contribute innovative program models, methods of delivery, and ideas for using new and ever-expanding technologies. Because every article contains elements of all three categories, articles are not separated into specific sections. You will find something informative and intriguing in every article.

- An understanding of social media is increasingly important if Extension professionals expect to stay current in today's marketplace. Franzen-Castle and Henneman (2012) provide insights into networking and marketing Extension programming through social media (e.g., Facebook, Twitter, Pinterest, YouTube, Vimeo, and SlideShare). Also included are ways to monitor the appeal of these resources for audiences.
- Garden-Robinson, Reule and Eighmy (2012) used three different study groups (i.e., face to face, online only, and a combination of face to face and online) to deliver their "Shape Up for Spring" program and determine the best method of delivery. Results indicated that participants using Facebook and e-mail experienced greater knowledge gain than the control group.
- Findings in research conducted by Varcoe, Johns, Donahue and Martin (2012) demonstrated that an online, bilingual financial education program was successful in helping participants achieve positive financial outcomes. Furthermore, participants liked online learning.

- Staying current on the latest financial crises in these challenging economic times is not easy. O'Neill (2012) describes the changing landscape of retirement and healthcare benefits, or “broken promises,” and provides strategies to mitigate challenges for Extension professionals and/or their clients.
- A major contributing factor to the success of any Extension program is the formation of community partnerships. Scarrow (2012) reported that a newly formed Coalition for Financial Asset Building revitalized Extension’s flagging efforts to implement a VITA program, netted \$300,000 in income tax returns, and aided in first-time home ownership for 16 clients.
- Working under a similar premise, MacArthur, Roberts, Christensen and Garcia (2012) formed a Latino Advisory Council to guide culture-specific programming for Latino audiences. Successful techniques and methodology for replication are offered.
- Teamwork to achieve success was the overall theme of Brower, MacArthur, Bradford, Albrecht, Bunnell and Lyons (2012) best practices model for organizing a statewide teen 4-H retreat or day camp. Collegiate-level 4-H volunteers and other key players, as well as their roles, are identified.
- Another community collaboration identifies an unusual partnership between Extension educators in four counties, and a District Attorney’s Office. St. Pierre, Routh, Gandy, Taylor and Lasley (2012) present findings of a financial management program for reducing bogus check writing with successful results.
- Radunovich, Toelle, Brinkley and Ross (2012) report results of efforts to train community childcare providers on Attention-Deficit/Hyperactivity Disorder. Results indicate significant knowledge gain, and their curriculum is offered free for the asking.
- Maintaining our focus on children, Tackie-Ofosu (2012) offers a rare insight into mother’s attitudes towards their children’s play in Teiman, Ghana. Lessons learned by Ms. Tackie-Ofosu will help us continue to provide culturally competent programming.
- Nutrition has always been a major focus of Extension. LeBlanc, Haws, Christensen, Christensen and Christofferson (2012) offer lessons learned to increase consumption of fruits and vegetables through the SNAP-Ed program.
- Results of research conducted by Christofferson, Allen, Smith and LeBlanc (2012) demonstrated that SNAP-Ed lessons teach safe food handling practices, even when specific lessons on food safety are not included.
- Improving marriage education efforts was the objective of a needs assessment conducted in three counties by Christensen, Brower, Washburn and Guy (2012). Respondents winnowed out topics of interest and desired methods of delivery.

A total of 15 manuscripts were submitted, with 13 recommended for acceptance by a totality of reviewers. That number represents a publication rate of 87 percent, and those are pretty good odds! Hopefully you will consider submitting results of your Research, Best Practices, and/or Implications for Extension. Also, encourage others in your state to contribute—I did, and the

response from my colleagues in Utah was impressive. Again, thank you for your confidence in me as your editor for the past three volumes—it has been a great experience!

---

Lou Mueller, MFHD, CFLE  
Associate Professor/Family and Consumer Sciences Agent  
Utah State University Extension  
117 South Main  
Monticello, UT 84535  
(435) 587-3239  
[lou.mueller@usu.edu](mailto:lou.mueller@usu.edu)

---

### References

- Brower, N., MacArthur, S., Bradford, K., Albrecht, C., Bunnell, J., & Lyons, L. (2012). Effective elements for organizing a healthy relationships teen 4-H retreat. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 64-68.
- Christensen, D., Brower, N., Washburn, C., & Guy, S. (2012). Identifying needs of couples attending marriage education in three Utah counties. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 104-110.
- Christofferson, D., Allen, K., Smith, J., & LeBlanc, H. (2012). SNAP-Ed improves food safety practices through nutrition education. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 98-103.
- Franzen-Castle, L. & Henneman, A. (2012). Evaluating the effectiveness of social media marketing. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 12-22.
- Garden-Robinson, J., Reule, A., & Eighmy, M. A. (2012). Shape Up for Spring: Comparing the effectiveness of social media and email in a nutrition and fitness education program. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 23-32.
- LeBlanc, H., Haws, S., Christensen, N., Christensen, D., & Christofferson, D. (2012). SNAP-Ed participants increase fruit and vegetable consumption. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 91-97.
- MacArthur, S., Roberts, A., Christensen, A. H., & Garcia, Z. Volunteer Latino advisory councils: A valuable resource to inform, recruit, and support Extension programs. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 58-63.
- O'Neill, B. (2012). Broken promises: Strategies to achieve financial security when employee benefits are reduced. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 48-53.
- Radunovich, H. L., Toelle, S., Brinkley, M., & Ross, M. (2012). Training childcare providers on the topic of ADHD in young children. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 75-82.
- Scarrow, A. (2012). Collaboration fuels financial outreach and positive economic impact. *Journal of National Extension Association of Family and Consumer Sciences, 7*, 54-57.
- St. Pierre, E., Routh, S., Gandy, B., Taylor, L., & Lasley, R. (2012). Making sense of money management: Addressing bogus check writing in partnership with regional district attorneys. *Journal of National Extension Association of Family & Consumer Sciences, 7*, 68-74.

- Tackie-Ofosu, V. (2012). Play without ceasing: Mother's involvement in traditional play activities with their children in Ghana. *Journal of National Extension Association of Family & Consumer Sciences*, 7, 83-90.
- Varcoe, K. P., Johns, M., Donahue, S., & Martin, A. (2012). Using an online financial literacy program to reach limited-resource, low-literacy audiences. *Journal of National Extension Association of Family and Consumer Sciences*, 7, 33-47.

## **Journal of National Extension Association of Family and Consumer Sciences**

### **President's Message**

It is my pleasure to present to you the 2012 *Journal of NEAFCS*. This research-rooted, peer-reviewed journal is one way for our members to inform others in our field and other related fields about our scholarly work as Family and Consumer Sciences professionals. The Journal highlights Research, Best practices, and Implications for Extension and is a valuable tool to help our members stay current with programming research and methodology that is specific to our learning and teaching environment.

As you read this volume of the Journal of NEAFCS, I know you will find informative and thought provoking information in each article. Consider what you have to share with your colleagues about impacts that have resulted from your programming. Make it one of your professional goals for 2013 to submit an article for a future Journal issue.

Please share the Journal with your administrators, local and state policymakers, advisory groups and peers. Since it is an online publication, you can easily forward them the link along with a personal note about it reflecting just a few examples of the valuable work done by extension family and consumer science educators all across the nation. We have learned that no one can tell the story of the impacts our work has on our clientele and communities better than we can.

Many, many thanks go to Lou Mueller of Utah State University Cooperative Extension, and Teresa Byington of the University of Nevada Cooperative Extension, for their hard work and dedication as our journal co-editors and co-chairs of the Journal Editorial Subcommittee. Our appreciation also goes to the members of the journal subcommittee, the peer reviewers, and to our vice presidents of Member Resources, Lora Lee Howard (2010 – 2012) and Susan Cosgrove (2012 – 2014), for their efforts in producing this quality professional publication.

Sincerely,

Carol E. Chandler, President (2012 – 2013)  
National Extension Association of Family & Consumer Sciences

***Journal of National Extension Association of Family and Consumer  
Sciences***

**Volume 7, 2012**

---

<b>Evaluating the Effectiveness of Social Media Marketing</b> Lisa Franzen-Castle and Alice Henneman	<b>12</b>
<b>Shape Up for Spring: Comparing the Effectiveness of Social Media and Email in a Nutrition and Fitness Educational Program</b> Julie Garden-Robinson, Angela Reule and Myron A. Eighmy	<b>23</b>
<b>Using an Online Financial Literacy Program to Reach Limited-Resource, Low Literacy Audiences</b> Karen P. Varcoe, Margaret Johns, Susan Donahue and Anna Martin	<b>33</b>
<b>Broken Promises: Strategies to Achieve Financial Security When Employee Benefits are Reduced</b> Barbara O'Neill	<b>48</b>
<b>Collaboration Fuels Financial Education Outreach and Positive Economic Impact</b> Andrea Scarrow	<b>54</b>
<b>Volunteer Latino Advisory Councils: A Valuable Resource to Inform, Recruit, and Support Extension Programs</b> Stacey MacArthur, Adrie Roberts, Amanda Horrocks Christensen and Zuri Garcia	<b>58</b>
<b>Effective Elements for Organizing a Healthy Relationships Teen 4-H Retreat</b> Naomi Brower, Stacey MacArthur, Kay Bradford, Clint Albrecht, Jolene Bunnell and Lauralee Lyons	<b>64</b>
<b>Making Sense of Money Management: Addressing Bogus Check Writing in Partnership with Regional District Attorneys</b> Eileen St. Pierre, Susan Routh, Brenda Gandy, Lisa Taylor and Ranel Lasley	<b>69</b>
<b>Training Childcare Providers on the Topic of ADHD in Young Children</b> Heidi Liss Radunovich, Stephanie Toelle, Monica Brinkley and Maisie Ross	<b>75</b>

<b>Play Without Ceasing: Mother’s Involvement in Traditional Play Activities with Their Children in Ghana</b>	<b>83</b>
Vivian Tackie-Oforu	
<b>SNAP-Ed Participants Increase Fruit and Vegetable Consumption</b>	<b>91</b>
Heidi LeBlanc, Susan haws, Nedra Christensen, Darlene Christensen and Debra Christofferson	
<b>SNAP-Ed Improves Food Safety Practices through Nutrition Education</b>	<b>98</b>
Debra Christofferson, Karin Allen, Janet Smith and Heidi LeBlanc	
<b>Identifying Needs of Couples Attending Marriage Education in Three Utah Counties</b>	<b>104</b>
Darlene Christensen, Naomi Brower, Carolyn Washburn and Stanley Guy	

## Evaluating the Effectiveness of Social Media Marketing

Lisa Franzen-Castle and Alice Henneman

This article provides a comprehensive look at popular social media that Extension professionals are using, or may consider using, to market content and programming to participants and other agencies. Social networking resources such as Facebook, Twitter, Pinterest, YouTube, Vimeo, and SlideShare will be discussed. Case studies and various measures of effectiveness for each media form will be described.

There has been dramatic growth in the use of social networking and social media in public and private sectors, in regards to information sharing and distribution. According to a recent survey by the Pew Internet & American Life Project, 65% of adult Internet users (equivalent to 50% of all adults) use social network sites (SNS), which is a sharp increase from a 2005 survey when only 8% (equivalent to 5% of all adults) reported using social network sites (Madden & Zickuhr, 2011). In 2007, social networking accounted for about 1 out of every 12 minutes spent online; in 2011, it accounted for 1 out of every 6 minutes spent online (Lipsman, 2011).

The terms “social media” and “social networking” are often used interchangeably; however, they are not the same. Social media, such as Facebook, Twitter, Pinterest, YouTube, Vimeo, and SlideShare, provides a communication channel through which people can share and disseminate information to a wide array of audiences. Social networking involves groups of people who have similar interests engaging in two-way conversations on social networking sites. Social media are the tools. Social networking is what people do in the social media communities. One can build and improve on the other, but they are not interchangeable (Graham, 2010). In other words, social networking is the “what,” and social media is the “how.”

With exponential growth in social media use, methods of accessing information have also increased. The number and type of devices with capacity to connect to the Internet is anticipated to grow tremendously, and has the potential to profoundly affect how people access and share information. According to a recent blog post from Cisco systems, “In 2010, there were 12.5 billion devices connected to the Internet. Looking to the future, Cisco Internet Business Solutions Group predicts there will be 25 billion devices connected to the Internet by 2015, and 50 billion by 2020” (Evans, 2011). The conversation has quickly changed from not “if,” but “how” should an organization use social media?

Statistics show social media is becoming a part of our daily lives. It is imperative that organizations use it to engage and communicate with the public. Erik Qualman, author of *Socialnomics*, states in a YouTube video on Social Media, “We don’t have a choice on whether we do social media; the question is how well we do it” (Qualman, 2010). Marketers using social media indicated several benefits. Eighty-eight percent indicated that their social media efforts generated more exposure for their businesses; 72% reported positive results in improving traffic and subscribers; and 62% reported an increase in search engine rankings. Facebook was the top social media tool used by marketers, followed by Twitter, LinkedIn, blogs, YouTube, and other videos (Stelzner, 2011).

The good news about social media is, there is a basic free version of most forms to experiment with and determine which is most effective for an organization. The bad news is, it takes time (which is not free) to use social media. Examples of time commitments related to social media include the following: 58% of marketers use social media for 6 hours or more

weekly, 34% for 11 or more hours, and 15% spend more than 20 hours weekly. For beginners doing social media, 59% typically spend 1 to 5 hours per week; and most involved for a few months or longer, spend 6 plus hours weekly (Stelzner, 2011). Social media can be used to directly promote Extension programming. Also, social media buttons can be included on websites, encouraging visitors to spread content further and stay engaged. At the time of this writing, buttons for YouTube, Facebook, Twitter, and Pinterest were posted at this eXtension website [http://www.extension.org/families\\_food\\_fitness](http://www.extension.org/families_food_fitness)

In developing a social media strategy, it is important to determine how an organization will maintain its identity. A helpful starting place is to determine what guidelines your organization will follow when engaging in social networking. An example of guidelines used by the University of Nebraska-Lincoln Extension can be accessed at [http://www.extension.unl.edu/c/document\\_library/get\\_file?uuid=c93093b6-1dab-467a-9041-9dfb8c2d5b1b&groupId=1873](http://www.extension.unl.edu/c/document_library/get_file?uuid=c93093b6-1dab-467a-9041-9dfb8c2d5b1b&groupId=1873)

## **Purpose**

The purpose of this article is to provide a comprehensive look at popular social media that Extension professionals are using, or may consider using, to market content and programming to participants and other agencies. Case studies and various measures of effectiveness for the following media forms will be discussed, including Facebook, Twitter, Pinterest, YouTube, Vimeo, and SlideShare.

## **Utilizing Social Media in Extension**

Social media can be an effective vehicle for expanding the reach of Extension programming, and broadening audience access to materials. It can elevate content and programming to not only be a “go to” resource for the public, but also for fellow professionals, organizations, and groups. Popular forms of social media with potential for Extension Family and Consumer Scientists include 1) social networking sites such as Facebook, 2) micro-blogging or short bursts of information such as Twitter, 3) virtual pin boards for organizing web-based information such as Pinterest, 4) video sharing through sites such as YouTube and Vimeo, and 5) presentation sharing through SlideShare. These social media forms have built-in methods for evaluation which are described in Figure 1 and will be discussed throughout the article.

## **Facebook**

By the end of June, 2012, Facebook had more than 955 million, monthly active users (Facebook, 2012a). Facebook is the most-visited site on the Web (Google, 2011), and the top social media tool used by marketers (Stelzner, 2011). Facebook users may create an account through a personal profile page or a professional or organizational page (formerly called a Fan page), or both (Facebook, 2012b). Profile pages (individual accounts) are for personal, non-commercial use only, and represent individuals under their own name or pseudonym. Professional or organizational pages are for professionals and allow for an organization or business to market and maintain a presence on Facebook. An organization can set up a Facebook page and encourage others to “like” it, to promote their business or organization and provide helpful tips, information (e.g., notice of upcoming programs and events), answer questions, and more.

**Evaluating effectiveness.** There are several ways to gauge the effectiveness of Facebook marketing through Facebook pages using a feature called “Insights” (Facebook, 2012c).

Insights allow users to 1) determine the number of people who have clicked on a post; 2) identify the number of people who “Like,” “Share,” comment, or respond to a comment or question; and 3) identify visitor demographics such as gender, age and location, and referrals.

“Google Analytics” can be used to indicate whether people are visiting a website as a result of Facebook posts. This is a free product that monitors websites and provides statistics about visitors. Google Analytics can illustrate how a site was discovered, explored, and suggest possible improvements for the visitor experience. A Web administrator can set up Google Analytics on a site for gathering data.

## **YouTube**

YouTube is the second most-visited site on the Web (Google, 2011), and is one of the top four social media tools used by marketers (Stelzner, 2011). According to YouTube (2011), over 800 million unique users visit YouTube each month. A “unique visitor” is determined by the number of individual computer addresses a site receives. For example, if someone visits a website from the same computer five times during the measurement period, this is counted as one unique visitor. Over 4 billion hours of YouTube videos are watched each month, with 72 hours of videos uploaded to YouTube every minute (YouTube, 2012). YouTube videos can market an organization in many ways. Videos can be embedded by the organization or by others on their websites. YouTube has an option for sharing videos through other social media such as Facebook, Twitter, and LinkedIn (a professional networking site). Information can be included in videos to help drive traffic to specific websites.

**Evaluating effectiveness.** “YouTube Analytics” provides aggregate data on each video including 1) “Performance” statistics showing how many people viewed the video and number of channel subscribers (“Channel” subscribers are individuals who sign up to receive an email notification when people upload a new video to their YouTube site); 2) “Engagement” showing likes, dislikes, comments, shares, and favorites; 3) “Demographics” showing geographic locations of viewers, and 4) “Discovery” showing top playback locations (e.g., YouTube embedded on another website), traffic source, and referrals. “View Reports” allows the user to discover gender and age of viewers, where views are coming from, and whether viewers watch the entire video or drop off before the video is completed. This way, users can gain insights into whether their efforts are reaching the intended audience.

## **Twitter**

Thirteen percent of online adults use Twitter (Smith, 2011), making it one of the top four social media tools used by marketers (Stelzner, 2011). Twitter has more than 200 million accounts (Rowinski, 2011). Potential marketing through Twitter includes tweeting about new information added to a website, upcoming programs, and answering current questions in one’s area of expertise. Hashtags (the # symbol) can be used to mark keywords or topics in a Tweet, and help interested parties more easily find information in a Twitter search. An example of using a hashtag in a Tweet could look like the following: “November is American Diabetes Month - Resources, videos <http://bit.ly/s2UhWf7> #diabetes”

**Evaluating effectiveness.** There are several ways to check if anything is happening as a result of tweeting. Google Analytics shows 1) how many people visited a website because of Twitter; 2) a quick approximation of how others are retweeting (i.e., others sharing your tweet with their followers); 3) how many times your user name is mentioned (i.e., any Twitter update that contains your @username anywhere in the body of the tweet), 4) when tweets have been

“favorited,” and 5) any new followers. This information can be found by clicking on “Interactions,” and “Mentions,” on the “Connect” page (Twitter Help Center, 2012).

## **Pinterest**

Pinterest describes itself as a “virtual pin board” (Pinterest, 2012). Pinterest lets people create personal pin boards to organize and share information accessed from the Web. Pinterest has experienced close to a 900% increase in unique visitors since it began in September 2009, with 17.8 million unique monthly views in February of 2012 alone (Kelly, 2012).

**Evaluating effectiveness.** As with some of the other types of social media, Google Analytics can be used to indicate whether people are doing more than pinning, and actually visiting other websites as a result of Pinterest “pins.” Paying attention to re-pins per pin helps highlight content considered of interest by Pinterest, and content that is not. “Likes” and the number of followers also indicates the degree of interest in each item being pinned.

## **Vimeo and SlideShare**

Vimeo, a video-sharing site, and SlideShare, a site for sharing presentations (especially PowerPoints®) are also forms of interactive social media. These sites provide a great venue for presenters to share PowerPoints® and videos with people who have limited opportunities to attend live presentations. While Vimeo and SlideShare do not rank as highly as YouTube, they offer additional opportunities for sharing educational information. Both offer options for uploading presentations that may be viewed, embedded, and downloaded by others (depending on the permissions granted). Viewers can leave comments, and both sites provide possibilities for sharing through other social media. Both also provide the option for using “tags” to identify subject matter that aid in searches for specific topics. A “tag” is a keyword or term assigned to a piece of information, usually chosen by the presentation’s creator.

**Evaluating effectiveness.** Both Vimeo and SlideShare provide data on how many people viewed materials, whether they embedded the materials on their own sites, geographical location of viewers, whether viewers “liked” or “favorited” the material, and the number of downloads. Daily breakdowns are available for some of the data so it is possible to gauge the success of various marketing campaigns. SlideShare also provides statistics on the number of shares through various social media, plus how people found the presentations.

## **Case Studies**

### **Online Newsletter**

The newsletter, “Cook It Quick,” focuses on helping consumers prepare healthy food quickly. To enhance distribution, the newsletter is posted to a webpage where Vimeo, Slide Share, and YouTube presentations are imbedded, and can be promoted and shared through Facebook, Twitter, LinkedIn, and more recently, Pinterest. An online follow-up survey (generated through Qualtrics®, an online survey software) indicated the use of social media had generated new subscribers, and that subscribers were beginning to share information through social media (Figure 2). Over 700 people took the follow-up survey. Responses came from all over the United States, Canada, and a few other countries. Respondents ranged in age from 19 to 70; 95% were female. There were long-term subscribers (5 years plus), as well as new subscribers (within the last 6 months). People heard about the newsletter through listservs

(16%), forwards from e-mail (25%), Internet searches (27%), on-site program sign-ups (18%), and other (21%), including newspapers, blogs, co-workers and friends, meetings, radio, and employers.

Approximately 82% of respondents reported sharing the information, with total outreach in the thousands. This included diverse audiences such as single moms groups, college students, patient exam rooms, Family and Consumer Science teachers, school food service, and childcare providers. Forty-one percent used information for professional purposes: such as for presentations (65%); other (36%), which included fliers and handouts, consultations, e-mail and website wellness; news columns (20%); and social media (12%) such as Facebook and Twitter.

### **Choose MyPlate Key Messages Presentation**

A highly visual, 66-slide PowerPoint®, “Choose MyPlate: Selected Consumer Messages,” was placed on SlideShare. The target audience was the general adult population and content was based on the U.S. Department of Agriculture’s (USDAs) basic consumer messages (USDA, 2010). The PowerPoint® was self-paced with viewers moving the slides at their own rate. Additionally, the PowerPoint® was embedded on a webpage for a second viewing site. SlideShare collected data for views on its own site and all sites on which a PowerPoint® was embedded. The PowerPoint® was promoted through Twitter and Facebook. Individuals searching for information about MyPlate on SlideShare brought up the video. There were 41,041 views of the PowerPoint® since June, 2010 (accessed August 15, 2012).

A Google search (August 15, 2012) for “choose myplate powerpoint” brought up the webpage on which it was embedded as the first option. A search on the Slideshare website for “choose myplate” (August 15, 2012) also brought up this PowerPoint® as the top one on its site. Over 230 visitors completed an evaluation (embedded into the webpage site), and 92% indicated they planned to use it to reach a potential of 45,077 people, with 87% indicating they learned something new.

### **Conclusion**

Through working directly with social media and training others, several lessons were learned. The first lesson was that simply providing a class on social media is not good enough to get Extension professionals to use it significantly. The class must include time for one-on-one assistance, with the availability of follow up after the class.

A second lesson, and driving force for writing this article, was the necessity to examine whether social media efforts were effective. Many were unaware that their webmaster could get Google Analytics data for whether social media was effective at driving traffic to websites and increasing information access. Results demonstrated that social media was not only a vital tool for Extension professionals, but also valuable for taking stock of client engagement. For example, were people re-tweeting or re-pinning information?

A third lesson was the importance of using visual images in social media. Websites needed pictures that could be pinned on Pinterest, or posted on Facebook, or attached and tweeted on Twitter. Using an identifying image instead of a default outline also added credibility and professionalism when setting up profiles on social media like Facebook, Pinterest, and Twitter. To optimize the use of social media, information on websites must be presented as more than links to PDF files, such as Pinterest and Facebook, which will not display an image on a PDF file. For example, a regular webpage, complete with picture, can be developed to introduce an article, link to the PDF file, and include a short, embedded evaluation that links directly back to the content. Though including photographs may take longer, quality images can increase users’ interest in, and accessibility to, postings through various forms of social media

(Cohen, 2012). It is important to note that when using images, one must have permission to reproduce and provide appropriate credits. One may also use copyright free photos, such as those usually available for a fee from many online photo services.

In a world of constant change, one thing that can be counted on is that new things are always being introduced, so it is important to be proactive about social media practices and evaluation methods. Existing content often can be repurposed such as articles, newsletters, programs, lesson plans, and webinars, to distribute through social media channels. Regardless of the form of networking (in person or online), heed this Seth Godin quote in a YouTube interview on social networking: "Networking that matters is helping people achieve their goals. Doing it reliably and repeatedly [is important] so that over time people have an interest in helping you achieve your goals" (Godin, 2008.)

---

Lisa Franzen-Castle, MS, PhD, RD  
Extension Nutrition Specialist, Assistant Professor  
University of Nebraska–Lincoln Panhandle Research and Extension Center  
4502 Ave I, Scottsbluff, NE 69361  
308-632-1256  
[lfranz2@unl.edu](mailto:lfranz2@unl.edu)

---

## References

- Cohen, H. (2012, August 6). *Photographs: social media's hot content marketing asset*. Retrieved from <http://www.clickz.com/clickz/column/2196727/photographs-social-medias-hot-content-marketing-asset>
- Evans, D. (2011, May 17). *How the Internet of things will change everything—including ourselves*. [Cisco Blogs]. Retrieved from <http://blogs.cisco.com/news/how-the-Internet-of-things-will-change-everything%E2%80%94including-ourselves/>
- Facebook. (2012a). *Statistics*. [Facebook press room online]. Retrieved from <http://newsroom.fb.com/content/default.aspx?NewsAreaId=22>
- Facebook. (2012b). *Build a presence with pages*. [Facebook for Business online]. Retrieved from <https://www.facebook.com/help/pages/>
- Facebook. (2012c). *About Facebook Insights*. [Facebook Help Center online]. Retrieved from <https://www.facebook.com/help/pages/insights>
- Godin, S. (2008, September 19). *Seth Godin on social networking and how to do it right*. [Video File]. Retrieved from <http://www.youtube.com/watch?v=OujgPgNCLvk>
- Google. (2011, July). *The 1000 most-visited sites on the web*. Retrieved from <http://www.google.com/adplanner/static/top1000/>
- Graham, A. (2010, June 14). *There's more to social media than Twitter, Facebook and LinkedIn*. Retrieved from <http://www.forbes.com/sites/work-in-progress/2010/06/14/social-media-twitter-facebook-linkedin/>
- Lipsman, A. (2011, June 15). *The network effect: Facebook, LinkedIn, Twitter & Tumblr reach new heights in May*. [comScore Blog]. Retrieved from [http://blog.comscore.com/2011/06/facebook\\_linkedin\\_twitter\\_tumblr.html](http://blog.comscore.com/2011/06/facebook_linkedin_twitter_tumblr.html)
- Kelly, T. (2012, March 21). *Pinterest popularity explained: what's behind the pinning addiction?* Retrieved from [http://www.huffingtonpost.com/2012/03/21/pinterest-popularity-explained-infographic\\_n\\_1370238.html](http://www.huffingtonpost.com/2012/03/21/pinterest-popularity-explained-infographic_n_1370238.html)

- Madden, M. & Zickuhr, K. (2011, May 26). *Sixty-five percent of online adults use social networking sites*. Retrieved from <http://www.pewInternet.org/~media//Files/Reports/2011/PIP-SNS-Update-2011.pdf>
- Pinterest. (2012). *What is Pinterest?* Retrieved from <http://pinterest.com/about/>
- Qualman, E. (2010, May 5). *Social media revolution*. [Video file]. Retrieved from <http://www.socialnomics.net/2010/05/05/social-media-revolution-2-refresh/>
- Rowinski, D. (2011, May 18). *Has Twitter eclipsed 300 million users?* Retrieved from [http://www.readwriteweb.com/archives/has\\_twitter\\_eclipsed\\_300\\_million\\_users.php](http://www.readwriteweb.com/archives/has_twitter_eclipsed_300_million_users.php)
- Smith, A. (2011, June 1). *Twitter update 2011*. Retrieved from <http://pewInternet.org/Reports/2011/Twitter-Update-2011/Main-Report.aspx>
- Stelzner, M. (2011). *2011 Social media marketing industry report: How marketers are using social media to grow their businesses*. Retrieved from <http://www.socialmediaexaminer.com/SocialMediaMarketingReport2011.pdf>
- Twitter Help Center. (2012). *About the activity and interactions tabs*. Retrieved from <https://support.twitter.com/groups/31-twitter-basics/topics/111-features/articles/20169398-about-the-activity-and-username-tabs>
- US Department of Agriculture. (2010). *Selected messages for consumers*. Retrieved from <http://www.choosemyplate.gov/print-materials-ordering/selected-messages.html>
- YouTube. (2012). *Statistics*. [YouTube Press Room]. Retrieved from [http://www.youtube.com/t/press\\_statistics](http://www.youtube.com/t/press_statistics)

**Figure 1:** Summary of Social Media and Potential Evaluation Tools

Social Media	Summary of Social Media Evaluation Tools
Facebook	Evaluation Tools  Facebook Insight data includes: <ul style="list-style-type: none"><li>• Number of “engaged users” or number of people who have clicked on a post</li><li>• Number of people liking, sharing, commenting, responding to an event, or answering a question</li><li>• Demographics</li></ul>
YouTube	YouTube Analytics includes: <ul style="list-style-type: none"><li>• Views and number of subscribers</li><li>• Engagement: likes, dislikes, comments, shares</li><li>• Favorites</li><li>• Demographics</li></ul>
Twitter	Google Analytics <ul style="list-style-type: none"><li>• Visitors sent to a website by Twitter</li></ul> Twitter <ul style="list-style-type: none"><li>• Number of retweets, mentions, favorite tweets, and followers</li></ul>
Pinterest	Google Analytics <ul style="list-style-type: none"><li>• Visitors sent to a website by Pinterest</li></ul> Pinterest <ul style="list-style-type: none"><li>• Number of re-pins, likes, and followers</li></ul>
Vimeo and Slideshare	Both provide data on: <ul style="list-style-type: none"><li>• How many people viewed materials</li><li>• Whether materials were embedded on other websites</li><li>• Geographical location of viewers</li><li>• Number of downloads</li><li>• Whether viewers “liked” or “favorite” the material.</li></ul> SlideShare also provides statistics on: <ul style="list-style-type: none"><li>• Number of shares through various social media</li><li>• How people found the presentations.</li></ul>

**Figure 2: Survey Questions and Possible Responses**

Questions	Possible Responses
1. Please select which state you live in or if you live outside the US from the drop down menu.	All states listed Option at the end – live outside the US
2. If you live outside the US, please list what country you are from.	If a participant selected “live outside the US” they had the option to type in country of residence
3. If you live in Nebraska, please select which county you live in from the drop down menu.	If a participant listed they were a Nebraska resident, they were asked to select which county they reside in.
4. Please check which age category you fit under.	Participants had the option to select one of the following: <ul style="list-style-type: none"> <li>• 19-25 years</li> <li>• 26-29 years</li> <li>• 30-39 years</li> <li>• 40-49 years</li> <li>• 50-59 years</li> <li>• 60-69 years</li> <li>• 70 + years</li> </ul>
5. Which of the following best describes you? (Select all that apply)	Participants had the option to select all that applied from the following: <ul style="list-style-type: none"> <li>• Native American Indian</li> <li>• Black/African American</li> <li>• White (Not Hispanic)</li> <li>• Asian/Pacific Islander</li> <li>• Hispanic</li> <li>• Other</li> </ul>
6. What is your gender?	Participants had the option to select one of the following: <ul style="list-style-type: none"> <li>• Male</li> <li>• Female</li> </ul>
7. Approximately how long have you received "Cook It Quick" newsletters?	Participants had the option to select one of the following: <ul style="list-style-type: none"> <li>• 6 months or less</li> <li>• 6 months to one year</li> <li>• 1 to 2 years</li> <li>• 2 to 3 years</li> <li>• 3 to 4 years</li> <li>• 4 to 5 years</li> <li>• 5 plus years</li> </ul>
8. How did you learn about "Cook it Quick" newsletters (check all that apply)?	Participants had the option to select all that applied from the following: <ul style="list-style-type: none"> <li>• Listserv</li> <li>• Forward from e-mail</li> <li>• Internet search</li> <li>• Signed up at a program</li> <li>• Facebook</li> </ul>

	<ul style="list-style-type: none"> <li>• Twitter</li> <li>• Other (please specify in the space provided below)</li> </ul>
9. Have you shared any of the information from "Cook it Quick" with others?	<p>Participants had the option to select one of the following:</p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>
10. How many people did you share information with?	<p>If the participant selected "yes" on question 9, they were asked to select how many people they shared information with from the following options:</p> <ul style="list-style-type: none"> <li>• 1-2 people</li> <li>• 3-4 people</li> <li>• 5-6 people</li> <li>• 7-8 people</li> <li>• 9-10 people</li> <li>• Please write in the number if it is above 10</li> </ul>
11. What changes have you made or cooking practices have been reinforced based upon what you have learned from "Cook it Quick?" (check all that apply)	<p>Participants had the option to select all that applied from the following:</p> <ul style="list-style-type: none"> <li>• Gained ideas for preparing foods faster and/or easier.</li> <li>• Reduced sodium in recipes.</li> <li>• Used more whole wheat flour in recipes.</li> <li>• Used healthier fats in recipes (more oils and less hard fats).</li> <li>• Used and/or offer smaller portions of food.</li> <li>• Cooked more food at home for myself and/or my family (please list how many nights a week you eat from home).</li> <li>• Included a greater variety of foods in the meals I prepare.</li> <li>• Handled foods more safely.</li> <li>• Improved cooking practices.</li> <li>• Saved money.</li> <li>• Please write in additional items in the text box provided below, if not mentioned above.</li> </ul>
12. Which of these ways did you use the information (check all that apply):	<p>Participants had the option to select all that applied from the following:</p> <ul style="list-style-type: none"> <li>• Used personally</li> <li>• Used professionally</li> </ul>
13. If you have used "Cook it Quick" for professional purposes, please check all that apply below.	<p>If the participant selected "used professionally" on question 12, they were asked to select how they used it from the following options:</p> <ul style="list-style-type: none"> <li>• Blog</li> <li>• Twitter</li> <li>• Facebook</li> <li>• Print news column</li> <li>• Presentations</li> <li>• Radio</li> <li>• Web article</li> </ul>

	<ul style="list-style-type: none"><li>• Magazine</li><li>• Book</li><li>• Other (please write other ways in the text box provided)</li></ul>
14. Please list any additional comments here.	Participants had a chance to provide additional comments in a text box.

## **Shape Up for Spring: Comparing the Effectiveness of Social Media and Email in a Nutrition and Fitness Educational Program**

Julie Garden-Robinson, Angela Reule  
and Myron A. Eighmy

Americans are not meeting current nutrition and fitness guidance promoted in the Dietary Guidelines for Americans (2010). However, technology shows promise in complementing health-related education. The purpose of the six-week, “Shape Up for Spring” study was to assess the influence of educational delivery modes (email, Facebook) on nutrition and physical activity knowledge and behavior compared with a control group. An online survey was used to assess knowledge gain and achievement of individual goals related to nutrition and fitness. Of the 92 participants, both the Facebook and email groups increased their knowledge scores, whereas there was a slight decrease in the knowledge scores for control group participants. The Facebook group and email group assigned themselves higher average ratings in goal achievement than the control group.

Inadequate nutrition and a sedentary lifestyle are linked to the development of obesity, which in turn is directly related to several chronic diseases including heart disease, cancer, and diabetes—with a high cost to society (Centers for Disease Control and Prevention [CDC], 2010). Americans are not meeting current nutrition and fitness guidance promoted in the Dietary Guidelines for Americans (2010). According to the CDC (2009), an estimated 23.5% of Americans consumed fruits and vegetables five or more times per day, far short of national targets. An estimated 3 out of 4 Americans do not meet the physical activity recommendations, and 1 out of 4 do not get any physical activity at all (Taylor, 2008).

Some intensifying factors in the obesity epidemic may be related to technological and entertainment innovations (i.e., TVs, computers, and other technology), which have promoted decreased levels of physical activity during leisure time (International Risk Governance Council, 2010). In recent years online social media including MySpace, Twitter, Facebook, and YouTube have grown in popularity. Emerging technologies such as Facebook are finding expanded use in higher education to support nutrition, communication, and collaboration (Brug, Oenema, Kroeze, & Raat, 2005; Roblyer, McDaniel, Webb, Herman, & Witty, 2010).

The use of social media has grown exponentially in the past few years. In 2009 Qualman estimated that 96% of Generation Y (those born in the mid-1980s or later) would be members of a social network by 2010. In a 2010 interview at the World Economic Forum in Davos, Switzerland, Facebook Chief Operating Officer Sheryl Sandberg stated that 175 million people log onto Facebook every day (Arrington, 2010). More than 30 billion pieces of content (e.g., Web links, news stories, blog posts, notes, photos) are shared by Facebook users every month, and 50% of active Facebook users log onto the site daily (Facebook Social Media Assistant, 2011).

Although many people may surmise that these fairly new technologies would promote poor health, some studies have shown the opposite effect in some health promotion areas, particularly smoking cessation. Lenert, Munoz, Perez, and Bansod (2004) compared two Web-based smoking cessation interventions: a single-point-in-time educational intervention, and an enhanced intervention that sent educational messages timed to participants’ quit efforts. The messages that were sent at the participants’ most challenging times had the greatest positive

impact. In a study published in the *New England Journal of Medicine*, Christakis and Fowler (2008) found that a person's decision to stop smoking was strongly affected by whether a spouse, sibling, friend, and/or others in their social network quit.

Researchers suggest it may be possible to take advantage of the power of social networks in encouraging healthful eating and physical activity, and in customizing messages to promote healthy behaviors (White & Dorman, 2001). Svensson and Lagerros (2010) reviewed the potential of technological methods, including Internet and data loggers, in promoting weight loss. Technological approaches were seen as complementary methods that could save both time and money. Bennett and Glasgow (2009) suggested that tailored messages and use of social networks may enhance Internet-based health interventions.

### **Objectives/Purpose**

The purpose of the "Shape Up for Spring" study was to assess the influence of Facebook and email in promoting knowledge gain and behavior change related to nutrition and fitness. The objectives of the six-week study were a) to improve knowledge of current nutrition and physical activity recommendations, and b) to assess achievement of Facebook and email participants' goals related to nutrition and physical activity.

### **Methods**

#### **Participants**

Participants were recruited through an email invitation sent via listservs on a college campus, and to Extension employees throughout a state. To be eligible to participate in the study, participants needed to be 18 years of age or older and have daily access to email and the Internet. The email message provided a link where those interested in participating could begin the registration process. Ninety-two people (87% female, 97.8% Caucasian) volunteered to participate in the study. Most participants were in the age 55 years or older category (31.5%), followed by ages 45-54 (25.0%), ages 25-34 (21.7%), ages 35-44 (15.2%), and ages 18-24 (6.5%).

#### **Study Design and Intervention**

Following the registration process, participants initially were divided into two groups based on whether or not they were current Facebook users. Participants assigned to the Facebook group ( $n = 32$ ) were placed in a "closed group" not available to the other participants. The remaining participants were assigned randomly to either the email group ( $n = 31$ ) or the control group ( $n = 29$ ).

A protocol reviewed and approved by the university's Institutional Review Board (IRB) was followed throughout the study. The subscription-based SurveyMonkey online survey tool was used ([www.surveymonkey.com](http://www.surveymonkey.com)) for data collection. Participants agreed to the study protocol by reading the informed consent page and clicking "next" on the first page of the survey. Participants completed a 19-item online pre-survey and a 31-item online post-survey at the end of the study. The pre- and post-surveys included demographic, knowledge, and behavior items related to nutrition and physical activity. After completing the pre-survey, the control group received no further information until the end of the study. On the post-survey, all participants were asked to rate their success in changing health behaviors related to nutrition fitness on a 5-point scale (1 = *not successful, no changes made*; 5 = *very successful, I met my goals*). At the conclusion of the study, the control group received all of the messages in an emailed document.

Eighteen messages were delivered to the email group and Facebook group throughout the study. Examples of the messages are provided in Appendix A. The participants received one message at a time, three times per week, for six weeks. The messages included information about goal setting, taking steps toward achieving their goals, current nutrition and fitness guidance based on the Dietary Guidelines for Americans (2010), and “assignments” that promoted the use of online tools to assess health status and track health indicators, including fruit and vegetable intake and fitness levels. The tools included an online Body Mass Index (BMI) calculator, which served as a means of determining weight status. Facebook and email participants were asked to set an individual goal related to nutrition. For example, their nutrition goal might be eating more fruit, vegetables, and/or whole grains, or making healthier beverage choices, including drinking more water. They also were asked to set an individual goal related to fitness, such as walking thirty minutes on most days of the week.

Participants were provided with a document delivered by email or posted on Facebook to record their goals and to chart their progress in nutrition and fitness. Facebook participants were encouraged to interact and discuss the content of the messages with the researchers and others in their group, while email participants could interact only with the researcher. All participants were eligible for weekly random prize drawings, in which five participants were selected from each group to receive a prize. The prizes included cutting boards, recipe books, vegetable brushes, pedometers, and snacks such as dried fruit. A grand prize winner received a basket of food- and fitness-related prizes.

## Data Analysis

Data was downloaded from SurveyMonkey and analyzed using the Statistical Product and Service Solutions Software (SPSS) version 16.0. Differences were determined using Duncan’s Multiple Range test ( $p < .05$ ).

## Results/Findings

Table 1 and Figure 1 show the results of the pre- and post-surveys. Of the 92 who completed the pre-survey, 85 (92%) completed the post-survey. About 66% of the “Shape Up for Spring” participants considered themselves overweight and 68.5% were attempting to lose weight at the beginning of the study. Email group participants showed the greatest knowledge gains, with scores increasing from an average of 72.1% on the pre-survey, to 82% correct on the post-survey. Among Facebook participants, knowledge scores increased from an average of 73.1% correct on the pre-survey, to 78% correct on the post-survey. The control group had the highest mean pre-survey score (79.6%), but the lowest mean post-survey score (76.9%). About 77.8% of the Facebook group, and 72.4% of the email group, printed the forms and other documents provided to assist with goal setting and monitoring. On the post-survey, about 79.3% of email group participants, and 66.7% of Facebook participants, perceived themselves as overweight and indicated current attempts to lose weight; while 55.2% of the control group rated themselves as overweight.

On a scale from 1 = *not successful*, to 5 = *very successful*, the Facebook group rated their achievement of behavioral goals a mean score of 3.22, while the email group and the control group rated themselves at 3.07 and 1.97, respectively. Analysis of variance showed significant differences between all pairings of control, email, and Facebook groups ( $p < .05$ ). After the study, email and Facebook group participants were asked to rate whether they would recommend this type of educational activity to others. On a scale from 1 = *not likely*, to 5 = *most likely*, Facebook group participants rated their likelihood of recommending the activity to others at a mean score of 3.37, which was higher than the rating given by the email group participants (3.03), although not significantly different.

In their comments at the conclusion of the project, participants had somewhat mixed reactions to Facebook, with some reporting a greater satisfaction and comfort level in sharing information and discussing their health online than others:

- “Using Facebook as a tool for education was something new, so it kept my attention. Each time I logged onto Facebook, I had the opportunity to read the new messages, and I thought this was great. It kept me motivated! I'd try this approach again on another subject.”
- “I liked the community feel – working toward a common goal.”
- “Without face to face involvement I felt less committed.”
- “Facebook can be a good motivator; the feedback and interaction is helpful, though not a silver bullet, of course. Although I didn't reach my goal of losing 10 pounds, I did lose a little (2.5 - 3 lbs), and I actually exercised more in the past six weeks than I did all winter. The Facebook conversations were the primary motivator for me.”
- “The weekly nutrition messages were not only educational, but also served as reminders. Also I liked the peer influence and knowing that others also were headed toward similar goals.”
- “I would have been more comfortable sharing my goals and progress if I knew the people, or knew that they shared similar goals. It seemed some people were really into it, while others were just doing it just because it was offered. It made me feel a little self conscious to post because I didn't know everyone and because I felt like everyone wasn't as goal-oriented as I was. Everyone seemed to be at different points with their fitness and nutrition and I was a little nervous of being judged by others who weren't at the same point as I was.”
- “I liked conversing with other people involved in the program. It was nice to not have to be at a certain location and time to be involved in the conversation.”

## Discussion

The “Shape Up for Spring” study allowed participants to set individual goals and work to achieve them; both email and Facebook helped promote and support knowledge gain and self-reported behavior change. Knowledge scores related to nutrition and fitness concepts improved among those in the email and Facebook groups, but decreased among those in the control group. Although unexpected, simply signing up to participate in the program resulted in slight improvements in self-reported behavior/goal achievement among those in the control group, which shows they were motivated at the start of the project to make health-related changes. The control group was eligible to receive nutrition and fitness incentive prizes throughout the study, and 31% of the control group participants became involved in or continued their involvement in other nutrition and/or fitness programs during the study, compared with 20.7% of the email group, and 22.2% of the Facebook group. The finding that the control group had a much lower percentage of participants who perceived themselves as overweight cannot be explained by the data collected, but it may be related to the fact that they did not receive the BMI calculator.

The Facebook group may have been more successful in achieving their goals if the participants had known each other prior to the project. Unlike typical Facebook “friends,” most of the participants were strangers prior to being placed in a Facebook group with each other. Despite this lack of familiarity, as other studies have shown, social support through Facebook appeared to be more effective in helping participants achieve their goals, compared to the other groups who did not have the same type of social support available. Future research could explore facilitating a Facebook group of existing “friends” to arrive at a common health-related goal, such as eating more vegetables or whole grains, and tailoring messages specifically to achieving the group’s goal.

## Implications for Extension

To continue to thrive and reach a younger generation, Extension educators need to be on the cutting edge of technology use to complement their traditional educational programming (e.g., face-to-face interactive presentations). Technology, including social media, represents a low-cost means for educators to reach younger clientele, as well as those who may live in isolated rural areas. The present intervention reached 92 people at least 18 times during a six-week period with nutrition and fitness education, and the total cost of the incentive prizes for the program was about \$1,000. Unlike typical face-to-face Extension programs, there was no expense for printing or travel associated with the project.

Extension educators often reach clientele with limited financial resources and sometimes limited literacy. Despite concerns that technology use in Extension programming may exclude some of the potential clientele, the “digital divide” is narrowing. A growing number of Americans now have access to technology as a result of increased availability and decreasing costs for computers and other technology. In 2010, 77% of Caucasians, 66% of Hispanics, and 65% of African Americans reported using the Internet. About 65% of Caucasian households, 52% of African American households, and 45% of Latino households reported having broadband Internet access at home (Livingston, 2011). Informal education, the usual approach used by Extension, may be best promoted through a balance of traditional methods, with technological enhancements used when possible and appropriate, to extend the learning of their clientele. To keep up with the ever-changing world of technology, Extension educators will want to continue to seek continual professional development in technology, and to boldly explore the use of the technological advances at their fingertips.

---

Julie Garden-Robinson,  
North Dakota State University Extension Service - HNES  
EML 351, NDSU Department 7270  
P.O. Box 6050  
Fargo, ND 58108-6050  
(701)231-7187  
[Julie.Garden.Robinson@ndsu.edu](mailto:Julie.Garden.Robinson@ndsu.edu)

---

## References

- Arrington, M. (2010). Facebook COO: 175 million people log into Facebook every day. *TechCrunch* [Web log post]. Retrieved from <http://techcrunch.com/2010/02/01/Facebook-coo-sheryl-sandberg-world-economic-forum-davos/>
- Bennett, G. G., & Glasgow, R. E. (2009). The delivery of public health interventions via the Internet: Actualizing their potential. *The Annual Review of Public Health, 30*, 273-92.
- Brug, J., Oenema, A., Kroeze, W., & Raat, H. (2005). The Internet and nutrition education: Challenges and opportunities. *European Journal of Clinical Nutrition, 59*(1), S130-S139.
- Christakis, N. A., & Fowler, J. H. (2011). The collective dynamics of smoking in a large social network. *The New England Journal of Medicine, 358*, 2249-2258.
- Centers for Disease Control and Prevention (2009). *Fruits and vegetables 2009*. Office of Surveillance, Epidemiology, and Laboratory Services. Retrieved from <http://apps.nccd.cdc.gov/brfss/list.asp?cat=FV&yr=2009&qkey=4415&state=All>
- Centers for Disease Control and Prevention. (2010). *Chronic disease prevention and health promotion*. Retrieved from <http://www.cdc.gov/chronicdisease/stats/index.htm>
- Dietary Guidelines for Americans. (2010). U.S. Department of Agriculture and U.S. Department of Health and Human Services. Retrieved from [www.dietaryguidelines.gov](http://www.dietaryguidelines.gov)
- Facebook Social Media Assistant. (2011). *40 interesting Facebook facts*. Retrieved from [www.Facebook.com/note.php?note\\_id=141377535935074](http://www.Facebook.com/note.php?note_id=141377535935074)
- International Risk Governance Council. (2010). *The obesity epidemic*. Retrieved from [http://www.irgc.org/IMG/pdf/Emerging\\_risks\\_Obesity.pdf](http://www.irgc.org/IMG/pdf/Emerging_risks_Obesity.pdf)
- Lenert, L., Munoz, R. F., Perez, J. E., & Bansod, A. (2004). Automated e-mail messaging as a tool for improving quit rates in an Internet smoking cessation intervention. *Journal of the American Medical Informatics Association, 11*(4), 235-240.
- Livingston, G. (2011, February). *Latinos and digital technology, 2010*. Pew Hispanic Center. Retrieved from <http://www.pewhispanic.org/2011/02/09/latinos-and-digital-technology-2010/>
- Qualman, E. (2009, August). Statistics show social media is bigger than you think. *Socialnomics* [Web log post]. Retrieved from <http://www.socialnomics.net/2009/08/11/statistics-show-social-media-is-bigger-than-you-think/>
- Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *Internet and Higher Education, 13*, 134-140.
- Svensson, M., & Lagerros, Y. T. (2010). Motivational technologies to promote weight loss: From Internet to gadgets. *Patient Education and Counseling, 79*, 356-360.
- Taylor, S. E. (2008). *Health Psychology* (7th ed.). New York: McGraw-Hill.

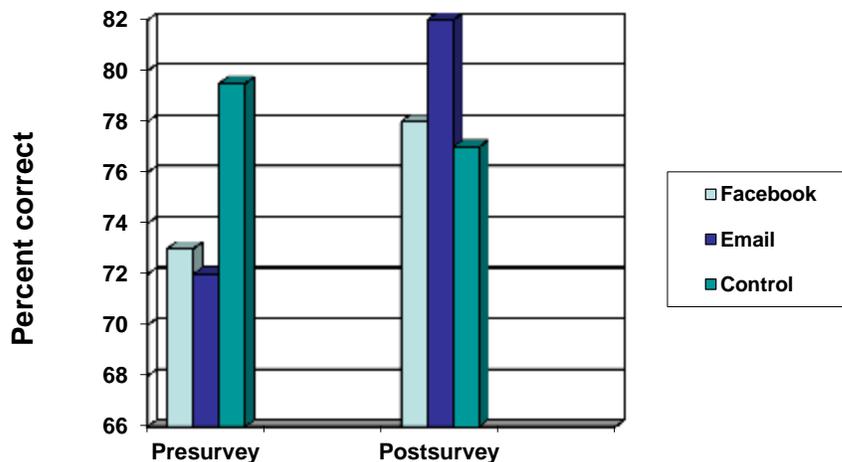
White, M., & Dorman, S. M. (2001). Receiving social support online: Implications for health education. *Health Education Research*, 6(6), 693-707.

**Table 1:** Pre- and Post-survey Results of Control, Facebook, and Email Groups\*

	Total group		control	email	Facebook
	Pre <i>n</i> = 92	Post <i>n</i> = 85	Post <i>n</i> = 29	Post <i>n</i> = 29	Post <i>n</i> = 27
Consider themselves over - weight (%)	66.3	67.2	55.2	79.3	66.7
Trying to lose weight (%)	68.5	71.8	69.0	79.3	66.7
Printed forms related to goal setting and goal tracking (%)	N/A	N/A	N/A	72.4	77.8
Read 13 or more of the 18 messages (%)	N/A	N/A	N/A	79.3	55.5
Were involved in other nutrition or fitness programs besides this program (%)	N/A	24.7	31.0	20.7	22.2
Self-rating of success in achieving health improvement goals (1 = <i>not successful</i> ; 5 = <i>very successful</i> )	N/A	2.74	1.97 <sup>a</sup>	3.07 <sup>b</sup>	3.22 <sup>b</sup>
Likelihood to recommend this type of activity to others (1 = <i>not likely</i> ; 5 = <i>most likely</i> )	N/A	N/A	N/A	3.03 <sup>a</sup>	3.37 <sup>a</sup>

\*Note: Participants were not assigned to the respective groups until after the pre-survey. Results (mean self-rating scores) in rows with different letters are significantly different ( $p < .05$ ).

**Figure 1.** Changes in knowledge scores among experimental groups as a result of participating in Shape Up for Spring.



## Appendix A

### Message 1

#### Let's Get Started

Making changes and setting goals in life is easier said than done. Changing something as crucial as one's health behaviors can be just as challenging. Keep the following in mind. Be SMART about your goals.

- **S:** Specific
- **M:** Measurable
- **A:** Attainable
- **R:** Relevant
- **T:** Time Bound

#### How to Set a Goal

When setting a goal, keep in mind why you made the goal. Here is a useful way to set a goal.

- Backward Goal-setting
  - Write down your ultimate goal: What do you want to achieve?
    - "By Aug. 1, 2012, I will be ready to enter and finish a 10k marathon."
  - What do you need to do to achieve this goal, and by when?
    - "By May 2012, I will have entered and finished a local marathon to test my progress."
  - Work back again: What do you need to do to achieve the previous goal?
    - "By Jan. 1, 2012, I will have progressed enough to start a marathon training program."
  - Keep working back until you reach the first milestone you need to accomplish.
    - "By the spring of 2010, I will have started a conditioning program to get me to a point of running at least 30 consecutive minutes."
- 1-3-5 Method
  - Set one goal at a time.
    - "I want to lose 20 pounds by the summer of 2012."
  - List three reasons why you want to achieve this goal.
    - "I want to be in better health."
    - "I want to be able to keep up with my kids."
    - "I want to be ready for swimsuit season."
  - List five techniques you'll use to achieve this goal.
    - "I will go for daily walks/run with my dog."
    - "I will join a local fitness center."
    - "I will eat a healthful, well-balanced diet."
    - "I will keep an activity/food journal to track my progress."
    - "I will set weekly goals for myself and reward myself when I achieve them."
- For more information on setting goals, check out this video:
  - [www.youtube.com/watch?v=7imRSZh--t4&feature=channel](http://www.youtube.com/watch?v=7imRSZh--t4&feature=channel)

### Message 2

#### Are You Ready to Get Started?

One way to keep you on the right path to achieving your goal is to track your progress. You will find that consistently checking and reviewing the progress you have made will be a very helpful motivation tool.

- (Link to tracking sheet)

Now that you know about the different goal-setting methods, choose one that is best for you. You then can print the appropriate form, fill it out and keep it with your tracking form. This will remind you why you want to achieve your goal and what you said you would do to achieve it. Good luck!

- (Link to goal sheet 1)
- (Link to goal sheet 2)

“A goal properly set is halfway reached” – *Abraham Lincoln*

Check out this video about goals:

- [www.youtube.com/watch?v=78CszNQw5A0](http://www.youtube.com/watch?v=78CszNQw5A0)

*Message 3*

### **How Will You Stay Motivated?**

Staying motivated to reach your goal is often the hardest part. The following are some things to keep in mind when trying to accomplish that goal. Remember, you can do it!

- Start with one goal at a time. Don't overwhelm yourself.
- Keep it simple. Be realistic about what you're trying to accomplish.
- Find inspiration. If others can do it, you can, too!
- Post your goal where you can see it. It will serve as a constant reminder of what you're trying to accomplish.
- Go public. Holding yourself accountable can be the one thing that helps you accomplish your goal.
- Build on the small successes. Every little step counts!
- Think positively and rule out the negative. Reaching your goal will get hard, but think about how good you'll feel afterward.

How motivated are you? Take this self-motivation quiz to find out:

- [www.mindtools.com/pages/article/newLDR\\_57.htm](http://www.mindtools.com/pages/article/newLDR_57.htm)

Did you remember to track your progress for the week?

## Using an Online Financial Literacy Program to Reach Limited-Resource, Low-Literacy Audiences

Karen P. Varcoe, Margaret Johns,  
Susan Donahue and Anna Martin

Making Every Dollar Count (MEDC) is a bilingual financial education program available online or in written format directed at improving the financial capacity of limited-resource, low-literacy audiences. Data were collected on knowledge gain and retrospective behavior ( $N = 140$ ) as part of a pilot test in 2008, and as part of a follow-up evaluation of the on-going program in 2011 ( $N = 85$ ). For both the pilot-test and the follow-up evaluation, participants perceived they had learned from the program and were taking positive financial actions. Participants liked using the computer to learn, and the incentives that encouraged continued participation.

Financial educators are seeking methodologies that will effectively improve the financial capacity and financial decision making of limited-resource families. In 2006, the Financial Literacy and Education Commission (FLEC) stated that there are a “myriad of ongoing financial education efforts within the United States, targeting a wide variety of topics and audiences and employing various strategies to deliver financial education” (vi.). While there may be many financial education materials available, a report prepared for the Woodstock Institute stated that many of the materials available in low-income communities to teach financial education are of little use (Jacob, Hudson & Bush, 2000). They suggest that multilingual formats are “crucial for this population,” and that graphics and technology used on the computer could be successful at teaching financial education as these techniques had been used successfully with low-income populations in South Africa.

### Purpose

This paper will discuss a bilingual (English/Spanish) online financial education program, *Making Every Dollar Count* (MEDC), directed at improving the financial literacy of low-literacy, limited-resource audiences. Data on the effectiveness of the financial management curriculum as well as an assessment of the usability of the program, both online and classroom versions, for use with low-literacy limited-resource audiences will be discussed.

The content and mode of delivery of a bilingual (English/Spanish) online financial education program, *Making Every Dollar Count*, was tested for effectiveness as suggested by Fox, Bartholomae, and Lee (2005) and the Financial Literacy and Education Commission, who identified the importance of evaluating the delivery of financial education to identify effective approaches and delivery channels as one of the top nine research priorities for the financial field (2011). The purpose of the research was to determine if the pilot program was effective and to assess whether or not the on-going program is still meeting the needs of the clientele.

The model for this program is based on the premise that increasing human capital, such as personal skills and abilities, will build the individual's capacity to improve well-being (Bryant & Zick, 2006). A study of family management skills among low-income rural women (Hanson, Varcoe, & Ontai, 2009) supported the theory that well-informed, educated consumers made better decisions for their families (Hogarth, 2002). In the Hanson et al. study, increased family management skills were associated with increased parental confidence; thus, future child behavior problems were decreased. Theoretically, teaching family management skills could increase confidence in other areas such as parenting and could lead to better family outcomes.

## **Method**

Focus groups were held with participants of Gateway to a Better Life—a 23 lesson, welfare-to-work program developed and implemented by University of California Cooperative Extension Advisors. This program reached low-literacy, limited-resource audiences throughout California. Participants in focus groups discussed the lessons and recommended that the following eight lessons be included in the Making Every Dollar Count program 1) Setting Goals, 2) Making Choices, 3) Stretch Your Dollars, 4) Budgeting Basics, 5) Paying Bills on Time Saves Money, 6) When You Can't Pay Cash, 7) Saving Money on Food, and 8) Food Advertising. Special attention was given to inclusion of information on income-targeted benefits such as the Earned Income Tax Credit (EITC) and use of SNAP (Supplemental Nutrition Assistance Program), since these resources tend to be underutilized (Anderson, Zhan & Scott 2004; Varcoe, Lees & Lopez 2006). During development of materials, a conscious effort was made to maintain a 6<sup>th</sup> grade or below reading level to address the needs of low-literacy individuals. Program results will be reported in two phases—pilot-testing in 2008, and a follow-up evaluation in 2011.

### **Pilot-testing**

In 2008, the eight lessons in the curriculum were tested with SNAP eligible individuals in five counties using both the printed format and the Web-based format. Participants in each county were divided into three delivery groups in order to compare three methods of delivery—online only, classroom-only, and combined online and classroom. At each of the five sites, participants were randomly divided into three groups. Printed curriculum was used in the classroom format with lessons being taught once a week for eight weeks. Participants using the online format used a self-paced to review lessons over a period of ten weeks. The last group of participants received classroom instruction with online activities also taught over a ten week period. The lessons were available in Spanish and taught in Spanish when needed. Participants from all groups were asked to complete a follow-up survey. Incentives have been proven to be effective in encouraging program participation and reducing drop-out rates (Anderson, Zhan, & Scott 2004). A variety of incentives (i.e., grocery bags, calculators, financial booklets, budgeting calendars, and certificates of completion) were utilized to encourage completion of program materials and follow-up surveys.

A pre-test was given at the beginning of instruction, with an identical post-test given after all lessons had been taught. Fisher's Exact Test (Agresti & Finlay 1997) was used to determine if there was significant change in knowledge scores from pre- to post-test. There were no significant changes in scores for any of the lessons. At the end of the pilot-program, participants were asked a group of retrospective questions which allowed them to score their level of perceived knowledge before and after the program using a scale of 1 to 5, with 1 being low and 5 being high. Participants rated different topics related to financial management such as how to make choices, easy ways to save money, and understanding food ads. Statistical analysis was completed using the t-test.

**Follow-up Evaluation.** The Making Every Dollar Count program is part of ongoing educational curricula for SNAP eligible recipients in California. To ensure that the program continued to be effective, follow-up evaluations were conducted. Data from a recent follow-up with participants from a continuing education center in Kern County, California, will be reported here ( $N = 85$ ). The class was taught weekly over a ten week period. At the end of the MEDC program, participants completed the same retrospective evaluation used in the pilot-test to assess perceived knowledge gains and behavior changes related to the education. While the online version of the program was being used throughout the state, all instruction for this assessment was in the classroom, with the online program used for out-of-class exercises. Statistical analysis was completed using the t-test.

## Results

Table 1 indicates findings for the pilot-test. Matched pairs of data were analyzed from 140 participants ( $n = 67$  in classroom format), ( $n = 36$  in computer-only format), and ( $n = 37$  for combination of classroom and computer format). Nearly two-thirds (64%) of participants were from 20 to 40 years of age, with a mean age of 36. Eighty percent were female, with 39% being Asian or Pacific Islander and 32% being Hispanic; and 27% were white (non-Hispanic). Only 5% of the sample had a total household income per month of more than \$2,501. A third (33%) of the sample had a total household income per month of less than \$500; with 40% from \$501 to \$1500, and 22% from \$1,501 to \$2,500. When asked about social service assistance programs they were using at the beginning of their participation in the program, 39% were participating in the Women, Infants and Children (WIC) nutrition support program, and 54% received assistance from SNAP. No one had received the Earned Income Tax Credit (EITC).

The majority of the sample (57%) lived in a town or city with a population of 10,000 to 50,000; an additional 34% lived in the central city or suburb of over 50,000. Fifty-five percent of the entire sample indicated they had a computer and access to the Internet. Not surprisingly, 94% of those in the online only group had a computer, but only 83% of that group had access to the Internet. For the classroom-only group, only 36% had a computer, yet 43% had access to the Internet. Sixty-two percent of the online and classroom group had a computer, and 58% had access to the Internet.

There was a significant perceived increase ( $p < .001$ ) in the participants' knowledge from before the program to after the program for all items with one exception—the classroom group did not have a significant perceived increase in knowledge about community resources (Table 2). Participants at the end of the program were also asked a series of questions that reflected actions they had taken or planned to take because of MEDC (Table 3). These questions asked about their planned behavior such as writing a personal goal, using EITC, and making decisions. For all tasks and all groups, the majority of participants indicated that they had either completed the specified task or planned to do so, with at least a third of the participants having already taken the specified action. Of particular note were responses to the questions regarding whether or not they were eligible for the EITC, with 43% of the combination group, 39% of the classroom group, and 33% of the computer group having already checked to see if they were eligible. An additional 51% of the online and classroom group, 34% of the classroom group, and 33% of the computer group were planning to check on their eligibility.

Participants were also asked, "How much has the MEDC program been worth to you?" On a scale from 1 to 5, with 1 being "not worth my time" to 5 being "very much worth my time," at least 95% of all groups rated the program as a 4 or 5. Those in the computer-only group indicated that they liked using the computer to learn, with one-fourth saying they would have preferred to have classroom teaching only. Over half (53%) of the computer-only group indicated they also would have liked to have classroom teaching to assist in the learning

process, while 56% felt they had learned as much using just the computer as they would have with classroom teaching. For the classroom-only group, 57% indicated they wanted classroom teaching to assist in learning the lessons, and 45% indicated they would have liked to use the computer to learn. Over a third (35%) of the online and classroom-only group preferred classroom teaching, while only 51% indicated they liked using the computer to learn. Fifty-seven percent indicated that they wanted classroom teaching in addition to the computer to assist in learning the lessons.

### **Findings for Follow-up Evaluation**

Participants were 60% female, 60% Hispanic/Latino, 10% African American, and 30% Caucasian; 40% lived in rural areas and 60% in urban areas. Forty percent of the group was currently receiving SNAP. A group of retrospective questions were asked of each participant at the end of the instruction (Table 4). Participants were asked to score their level of perceived knowledge before and after the program using a scale of 1 to 5, with 1 being low and 5 being high. Participants reported significant ( $p < .05$  to  $p < .001$ ) perceived increases in knowledge in all areas.

At the end of the program, participants were also asked a series of questions about different topics related to financial management behaviors that reflected actions they had taken or planned to take because of MEDC (Table 5). For all tasks, the majority of participants indicated that they had either completed the specified task or planned to do so. Seventy-two percent had written a personal goal, 73% had used the choice-making steps to help with a decision, and 74% had identified community resources they could use. Only 19% of participants had determined if using a coupon was better than buying the store brand, while 76% plan to do this. Twenty percent had used one of the easy ways to save on food, with 64% planning to do this. Responses to the questions regarding eligibility for the EITC were interesting with 20% of the group having already checked to see if they were eligible, with an additional 50% planning to check. The participants were also asked, "How much has the MEDC program been worth to you?" On a scale of 1 to 5, with 1 being "not worth my time," to 5 being "very much worth my time," 94% rated the program as 4 or 5.

## Summary

Can financial education be delivered online to limited-resource audiences and have a positive impact on financial behavior/literacy? The findings from this study indicate that it can, and that participants liked using the computer to learn independently. Many had access to computers and the Internet made online financial education a real possibility and a way to extend programming during a time of decreasing resources. These findings are similar to Haynes, Haynes, and Weinart (2011) who found that distance education, via computer technology, may be a way to deliver financial education to willing adult learners. These findings also support comments by the Chairman of the Federal Reserve System who stated that consumers who can make better financial decisions support not only their own well-being, but also help to promote broader economic stability (Bernanke, 2012).

There were no significant increases in knowledge in the pilot test. In reviewing the pre- and post-tests that were used for this sample, it is possible that the questions were too simple and that it may have been easy to “guess” the answers. It was ultimately decided to use only the retrospective questions for evaluations. This decision was based on research that indicated a retrospective evaluation helped to reduce the underestimation of program effects (Pratt, McGuigan, & Katzev, 2000). Thus, the follow-up evaluation relied only on results from the retrospective. The participants in both the pilot test and the follow-up evaluation did perceive that they had increased their financial skills, and either had or were planning to complete a number of recommended tasks. Of special note is the Earned Income Tax Credit, where the majority of participants in both groups had either already checked or planned to see if they were eligible.

Overall, participants in both the pilot and follow-up evaluations believed they learned from the program and were taking or planning to take actions suggested by programmatic content. Additionally, both groups indicated that the program was worth their time. Incentives provided for the program, especially grocery bags and financial booklets, were especially popular and helped encourage completion of program materials and follow-up surveys. Using even small incentives such as certificates of completion helped to keep participants in the program.

This study provides data useful to agencies working with low-literacy, limited-resource audiences. The assessment of the pilot-test provided evidence that low-literacy, limited-resource audiences can, are willing to, and in fact, like using the computer to learn financial information. Online education is an option for reaching this audience with financial education, indicating that the Internet may also be a viable alternative for reaching them with other information. The follow-up evaluation indicated that the materials were still relevant and were effective in providing financial education for limited-resource, low-literacy clientele.

## Limitations

The primary limitation of this study was the sample. In both the pilot test and the pre-test, a convenience sample was used consisting of individuals participating in SNAP or FSNEP (Food Stamp Nutrition Education Program). In each county, three groups were randomly selected within the counties based on their availability and whether or not they had access to the Internet. In one county, the program was implemented where the participants were in a computer skills class and the teacher decided the class would test the online program.

The second limitation was the instrument used to test pre and post-results. As previously stated, the questions may have made guessing the answers easy; thus, there were no changes from the pre-test to the post-test. Better questions need to be designed and tested that will provide more accurate results. Also, the evaluation was gathered the last day of class allowing no time for behavior change to have occurred for the items discussed on the last day of class.

---

Karen P. Varcoe, Ph.D.  
Consumer Economics Specialist  
University of California, Riverside  
139 Highlander Hall, Bldg. C.  
Riverside, CA 92521 USA  
(951) 827-5241  
[karen.varcoe@ucr.edu](mailto:karen.varcoe@ucr.edu)

---

## References

- Agresti, L. J., & Finlay, M. H. (1997). *Statistical methods for the social sciences*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Anderson, S. (2002). Ensuring the stability of welfare-to-work exits: The importance of recipient knowledge about work incentives. *Social Work, 47*(2), 162-170.
- Anderson, S., Zhan, M., & Scott, J. (2004). Targeting financial management training at low-income audiences. *Journal of Consumer Affairs, 38*(1), 167-177.
- Bernanke, B. S. (2012). *A teacher town hall meeting, Federal Reserve*. Retrieved from <http://www.federalreserve.gov/newsevents/speech/bernanke2012080...>
- Bryant, K. W., & Zick, C. D. (2006). *Economic organization of the household*. New York, NY: Cambridge University Press.
- Campbell, J. Y. (2006). Household finance. *The Journal of Finance, 61*(4), 1553-1604.
- Coleman, S. (2008). Why do students like online learning? *WorldWideLearn*. Retrieved from <http://www.worldwidelearn.com/education-articles/benefits-of-online-learning.htm>.
- Financial Literacy and Education Commission. (2006). *Taking ownership of the future: The national strategy for financial literacy*. Retrieved from <http://www.mymoney.gov/sites/default/files/downloads/ownership.pdf>.
- Financial Literacy and Education Commission. (2011). *2012 Research Priorities and Research Questions*. Retrieved from <http://www.mymoney.gov/>
- Fox, J., Bartholomae, S. J., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs, 39*(1), 195-211.
- Hanson, H., Varcoe, K. P., & Ontai, L. (2010). Proceedings from Eastern Family Economics and Resource Management Association: *Family management skills among low-income rural women: Implications for behavioral outcomes in children*. Retrieved from

- <http://mrupured.myweb.uga.edu/pdfs/eferma2009lifeskillsfinal012010.pdf>.
- Haynes, D. C., Haynes, G. W., & Weinert, C. (2011). Outcomes of on-line education for chronically ill rural women. *Journal of Financial Counseling and Planning*, 22(1), 3-17.
- Hogarth, J. M. (2002). Financial literacy and family and consumer sciences. *Journal of Family and Consumer Sciences*, 94(January), 14-28.
- Jacob, K., Hudson, S., & Bush, M. (2000). *Tools for survival: An analysis of financial literacy programs for lower-income families*. Chicago, IL: Woodstock Institute.
- Kassop, M. (2003). Ten ways online education matches, or surpasses, face-to-face learning. *The Technology Source Archives at the University of North Carolina*. Retrieved from [http://technologysource.org/article/ten\\_ways\\_online\\_education\\_matches\\_or\\_surpasses\\_facetoface\\_learning/](http://technologysource.org/article/ten_ways_online_education_matches_or_surpasses_facetoface_learning/).
- Pratt, C. C., McGuigan, W. M., & Katzev, A. R. (2000). Measuring program outcomes: Using retrospective pretest methodology. *American Journal of Evaluation*, 21(3), 341-349.
- Shockey, S. S. (2002). Low-wealth adults' financial literacy, money management behaviors, and associated factors, including critical thinking. Unpublished doctoral dissertation, The Ohio State University. (AAT 3039524)
- Varcoe, K. P., Lees, N., & Lopez, M. (2004). Rural Latino families in California are missing earned income tax benefits. *California Agriculture*, 58(1), 24-27.

**Table 1.** Demographics of Participants in Making Every Dollar Count – Pilot-test

	(n = 140)	(n = 140)
	N	%
Format for Instruction:		
Classroom-only	67	48
Computer-only	36	26
Combination	37	26
Gender:		
Female	112	80
Male	28	20
Age:		
Less than 20 years	6	4
20 to 40 years	90	64
40 to 50 years	22	16
Older than 50	22	16
Mean age = 36		
Nationality:		
Asian or Pacific Islander	54	39
Hispanic	45	32
White	38	27
Other	3	2

<b>Table 1.</b> (continued)	(n = 140) N	(n = 140) %
<b>Household Income:</b>		
Less than \$500	46	33
\$501 to \$1500	56	40
\$1501 to \$2500	31	22
\$2501 and over	7	5
<b>Participated in:</b>		
WIC (Women, Infants, and Children)	54	39
SNAP (Supplemental Nutrition Assistance Program)	76	54
No Assistance Program	10	7
EITC (Earned Income Tax Credit)	0	0

**Table 2.** Results of Retrospective Evaluation of Selected Financial Knowledge Areas Making Every Dollar Count – Pilot-test

Financial Knowledge Areas:	Mean Score					
	<u>Combo (n = 37)</u>		<u>Classroom (n = 67)</u>		<u>Computer (n = 36)</u>	
	Before	After	Before	After	Before	After
Setting Personal Goal	2.6	4.1***	3.0	4.6***	2.6	4.0***
Understanding Values	3.0	4.3***	3.1	4.5***	2.7	4.4***
Knowing the Difference Between a Need & a Want	2.6	4.4***	3.2	4.7***	2.9	4.6***
How to Make Choice	2.5	4.5***	3.1	4.7***	2.7	4.6***
Knowing Personal Skill & Resources	2.6	4.4***	3.1	4.4***	2.8	4.3***
Knowing Community Resource	2.4	4.2***	3.8	4.6 ns	2.5	4.4***
Using Resources to Make Your Money Go Further	2.5	4.2***	3.0	4.6***	2.4	4.3***
Knowing Easy Ways to Save Money on Food	2.5	4.3***	3.1	4.7***	2.6	4.4***
Knowing simple Healthy Meals to Make at Home	2.7	4.5***	3.0	4.5***	2.4	4.4***
Understanding Food Ads	2.7	4.4***	2.9	4.5***	2.4	4.4***

Notes: N = 140.

\*p<.05, \*\*p<.01, \*\*\*p<.001.

**Table 3.** Financial Behaviors Completed or Planned to Complete or a Result of Participation in Making Every Dollar Count – Pilot-test

		All		
		Combo	Classroom	Computer
		( <i>n</i> = 37)	( <i>n</i> = 67)	( <i>n</i> = 36)
		%	%	%
Because of the Making Every Dollar Count program have you:				
1. Written a personal goal?	Yes	36	66	36
	No	0	7	0
	Plan to	64	27	64
2. Use the choice-making steps with a decision you needed to make?	Yes	42	60	42
	No	3	3	0
	Plan to	55	37	58
3. Identified community resources you can use if needed?	Yes	47	57	44
	No	6	5	0
	Plan to	47	38	56
4. Checked to see if you are eligible for Earned Income Tax Credit?	Yes	43	38	33
	No	6	28	11
	Plan to	51	34	56

**Table 3.** (continued)

		All			
		Combo	Classroom	Computer	
		(n = 37)	(n = 67)	(n = 36)	
		%	%	%	
Because of the Making Every Dollar Count program have you:					
5.	Used one of the easy ways to save on food?	Yes	50	48	40
		No	0	3	0
		Plan to	50	49	60
6.	Determined if using a coupon is better than buying the store brand?	Yes	58	50	61
		No	0	7	3
		Plan to	42	43	36
How much has the Making Every Dollar Count program been worth to you? <sup>1</sup>		1	0	0	0
		2	0	0	0
		3	22	5	0
		4	42	22	14
		5	56	73	86

Notes: N = 140

<sup>1</sup> Rated on a scale from 1 = Not worth my time to 5 = Very much worth my time.

**Table 4.** Results of Retrospective Evaluation of Selected Financial Knowledge Areas Making Every Dollar Count – Follow-up Evaluation

Financial Knowledge Areas	Mean Score (n = 85)	
	Before	After
Setting Personal Goal	3.0	4.6***
Understanding Values	3.2	4.6***
Knowing the Difference Between a Need & a Want	3.2	4.6***
How to Make Choice	3.1	4.7*
Knowing Personal Skills & Resources	3.1	4.4***
Knowing Community Resource	2.7	4.5**
Using Resources to Make Your Money Go Further	2.8	4.5***
Knowing Easy Ways to Save Money on Food	2.9	4.7***
Knowing Simple Healthy Meals to Make at Home	2.9	4.6***
Understanding Food Ads	2.8	4.6***

*Note:* \*p<.05, \*\*p<.01, \*\*\*p<.001.

**Table 5.** Financial Behaviors Completed or Planned to Complete or a Result of Participation in Making Every Dollar Count – Follow-up Evaluation

		(n = 85)
		%
Because of the Making Every Dollar		
Count program have you:		
1. Written a personal goal?	Yes	71
	No	2
	Plan to	27
2. Use the choice-making steps with a decision you needed to make?	Yes	73
	No	8
	Plan to	19
3. Identified community resources you can use if needed?	Yes	74
	No	6
	Plan to	20
4. Checked to see if you are eligible for Earned Income Tax Credit?	Yes	30
	No	28
	Plan to	42
5. Used one of the easy ways to save on food?	Yes	23
	No	2
	Plan to	74

**Table 5.** (continued)

			(n = 85)
			%
Because of the Making Every Dollar			
Count program have you:			
6. Determined if using a coupon is	Yes		19
better than buying the store	No		5
brand?	Plan to		76
How much has the	1		0
Making Every Dollar Count	2		0
program been worth to you? <sup>1</sup>	3		6
	4		32
	5		62

*Note:* <sup>1</sup> Rated on a scale from 1 = Not worth my time to 5 = Very much worth my time.

## **Broken Promises: Strategies to Achieve Financial Security When Employee Benefits are Reduced**

Barbara O'Neill

In the wake of the Great Recession, increasing numbers of public and private employee benefit plans are being overhauled as employers realize that previously promised benefits are unsustainable and/or unaffordable. This article explores the growing trend of “broken promises” by employers with respect to retirement and health care benefits provided to workers, and how to mitigate the financial impact of these benefit losses. Strategies for Extension educators to use and share with clients experiencing financial challenges are provided.

In recent years, employee benefit losses have been particularly visible in the public sector. Since Extension faculty fall into this employment category, these trends affect *Journal of the National Extension Association of Family and Consumer Sciences (JNEAFCS)* readers personally, as well as the clients they serve. Benefit cuts have been experienced in both pension plans (Pension Problems, 2011; State and Local Government, 2012) and health insurance coverage, which increasingly costs workers more for premiums, deductibles, and copayments. Since 2000, average premiums for family coverage through an employer have increased 114% (Carpenter, 2011).

Like private sector workers over the past few decades, public sector employees are learning they cannot count on benefits in their current labor contract, not to mention promises made years ago when they were originally hired. Benefits are subject to change. For example, some state and local governments are phasing out defined benefit (DB) pensions and replacing them with 401(k)-style plans (McWhirter & Belkin, 2011). While recent media reports have covered angry protests directed toward public employees whose benefit packages lasted longer than most in the private sector, the real issue is that all workers have lost critical pillars of financial support that they thought they could count on, and face the challenge of securing their financial future in an uncertain economic environment.

### **Extension Impacts**

Extension educators may be asked by clients who have lost previously promised benefits to provide assistance with re-planning careers and retirements with reduced employer support. If people do not adjust to their new economic realities, they run the risk of accumulating debt, setting aside inadequate savings, and/or outliving retirement assets. Take the case of an employer's suspension of cost of living adjustments (COLAs). Inflation will be an especially serious risk for recent retirees and those about to retire who will experience its most corrosive impacts. Without a COLA, pension benefits steadily decrease in real dollars. Using present value factor analysis with a 4% inflation rate, a \$10,000 annual pension payment will have the purchasing power of only \$4,563 in 20 years, and \$3,083 in 30 years. Like most other workers, public employees will increasingly have to adjust to a fixed income or proactively plan to mitigate benefit losses (e.g., downsizing homes, saving more).

When teaching personal finance topics such as insurance and retirement planning, Extension educators should include a menu of options in their educational presentations for workers to consider in the increasingly likely event that their promised employer benefits are reduced or rescinded. Many educators may also need to consider these strategies themselves. This article describes ten strategies that can be used to mitigate the effects of employee benefit reductions.

## **Reductions in Employee Benefits**

The United States is experiencing an extended period of slow economic growth, stubbornly high unemployment, precarious job security, a struggling housing market, and tightened credit (O'Neill, 2011). One of the historical outcomes of severe financial crises is an increase in government debt as tax revenues decline (Reinhart & Rogoff, 2009). Struggling governments have been scrutinizing public sector benefits and, in many cases, scaling them back. Extension educators may be working with some clients, including those who lost previously promised employee benefits, who are grieving the loss of a living standard that has changed for the worse (O'Neill, 2011).

Employee benefit reductions are likely to remain in place after the economy improves. Widespread questioning of the long-term sustainability of public sector benefits is reminiscent of similar changes made to private sector benefit plans a generation ago as corporations made benefit cutbacks to remain globally competitive. In the case of health coverage, costs passed on to employees can be substantial as employers reduce the benefits they offer workers or make employees pay more for them (Johnson, 2010). The employee share of the \$19,393 annual price for health care for a family of four in a preferred provider plan (PPO) is \$8,008 (Stat Bank, 2011). Additionally, workers are contributing a greater share of health insurance premiums: 19% for single coverage and 30% for family coverage in 2010, versus 17% and 27%, respectively, in 2009 (Carpenter, 2011).

Retirement benefits are decreasing as well. Employers have serious budget gaps that need to be plugged. In the public sector, 90% of workers have available retirement plans compared to 65% of private-sector workers, so more public sector workers have something to lose (Murray, 2010). Most government employees participate in DB pensions, many of which have rising unfunded liability levels. In the wake of shortfalls caused by the recession's impact on state revenues, benefit reductions are increasingly being made, especially for new hires that may be placed in less attractive defined contribution plans, instead of defined benefit pensions (McWhirter & Douglas, 2011). Retirement ages have also been raised, benefits reduced, the length of time required to vest benefits increased, and automatic COLAs scaled back or tied to pension plan performance (McWhirter & Douglas, 2011).

## **Strategies to Mitigate Employee Benefit Reductions**

Below are ten strategies for Extension educators to use and share with clients who are experiencing financial challenges.

**Work Longer Than Planned.** The most potent antidote to reductions in retirement benefits and rising health care costs is working a few years longer than planned (Fahlund, 2011). Staying on the job longer provides additional time to receive employee benefits, recoup investment losses, make retirement savings plan contributions, and earn higher Social Security and/or DB pension benefits through income and service-based formulas. There are also fewer years without a paycheck to have to make savings withdrawals, thereby stretching a person's retirement savings (O'Neill, 2011). Combining these benefits with compound interest, even just

a few additional years of work (e.g., working to age 65 instead of 62) can make a big difference in available annual retirement income and how long it will last. In addition, there is no guarantee that workers' benefits will be "grandfathered" if they retire early. For example, New Jersey workers learned this the hard way in 2010 when a state pension COLA freeze affected both future and current retirees.

**"Retire" While Working.** A new retirement planning strategy has emerged in the financial planning community to address the concerns of clients who want to retire early but risk running out of money, and those who fear "waiting too long" (e.g., due to death, disability, widowhood, and health "issues") to retire and enjoy a good quality of life. You delay retirement, but not your retirement dreams (Fahlund, 2011). With this approach to retirement planning, those who can afford to do so would continue to work but stop some or all new retirement savings plan deposits (e.g., 401(k), 403(b), or IRA deposits) and use the money, instead, to pursue retirement aspirations (e.g., travel) during holidays and vacations. This strategy eliminates the need to make withdrawals from savings while working and boosts Social Security and formula-based DB benefits through continued employment.

**Accelerate Debt Repayment.** Debt is especially problematic when people receive word that their employee benefits are being cut, eliminated, or will require additional out-of-pocket "cost-sharing." Simply put, debt decreases financial flexibility because a portion of a worker's paycheck is already "spoken for" via required monthly debt repayments. A way to mitigate losses associated with a broken promise is to pay off outstanding consumer debt before a change takes effect (e.g., an announced increase in health insurance premium cost-sharing). Additionally, aim to pay off your mortgage before retirement.

**Save the Shortfall.** Boston College's Center for Retirement Research placed an average \$2,300 price tag on lost retirement benefits *each year* due to anemic wage growth caused by the Great Recession (Butrica, Johnson, & Smith, 2011). Benefit reductions (e.g., lost pension COLAs) increase employee shortfalls even further. Saving more money can help compensate for these losses. Using a frequently cited rule of thumb, multiply the additional amount of savings needed to withdraw each year in retirement by 25 to determine an approximate shortfall savings goal. Doing the math, a worker who wants to compensate for a \$6,000 annual income/benefit loss would need to accumulate \$150,000 by retirement ( $\$6,000 \times 25$ ). For a 45-year old worker, this amounts to a \$3,660 of annual savings (\$305 per month), assuming a 7% return. If employer matching is available, the personal savings requirement is less.

**Consider Career Changes.** Public (and private) sector employment benefits are generally not as attractive as they once were and are becoming even less so for younger workers. Extension educators and their clients might consider changing jobs or aggressively demonstrating their value to their current employer in an effort to earn more money and/or receive valuable benefits. Another strategy is to freelance their skills for additional income to replace lost "day job" take-home pay resulting from pay freezes, furloughs, and/or higher health insurance cost-sharing, or for increased retirement savings plan contributions.

**Invest More Aggressively.** Even with elimination of COLAs, employees with DB pensions have a steady source of income for life, unlike most workers with defined contribution plans who must make whatever savings they've accumulated during their career last a lifetime. Discussing the fact that DB pension benefits (as well as Social Security) act like an annuity by providing regular lifetime income may convince some clients with a moderate or higher risk

tolerance to feel more confident about investing in equities (e.g., stocks and stock mutual funds) to try and earn a higher average annual return and hedge inflation.

**Spend Less and Shop Savvy.** Unpleasant as it is to realize, clients who have experienced broken promises may need to revise their spending plans downward to avoid running out of money during their lifetime. Adjusting to less support from an employer and/or the government is a necessity, not an option. Depending on their age, spending reductions can take place before and/or after retirement and include everything from fewer trips and gifts, to moving to a smaller home or cheaper geographic location in retirement. Reviewing strategies to live on a reduced income may also be helpful.

**Investigate New Benefit Alternatives.** Employee benefit options that were not necessary to consider previously should be explored. For example, a public employee earning \$50,000 could have seen payroll contributions for health insurance rise from “0,” to 1.5% of pay (\$750), to 30% of a \$18,000 price tag for family health coverage (\$5,400). At this point, the costs and benefits of high-deductible health insurance and a corresponding health savings account (HSA) should be investigated and decisions made about their appropriateness.

**Define Success Differently.** Financial education programs must always be grounded in both historical perspectives (e.g., average annual returns on investments over time) and current realities (e.g., state of the economy and stock market trends). Before the financial crisis and its aftermath, financial success might have meant periodic raises, counting on contracted employment terms, being able to buy “more,” and not having to worry about paying bills. In the current economic environment, financial success is more likely to be having a job, having a salary that did not get cut (too much), a flat or slightly higher net worth, and the ability to pay bills after a thorough review and paring down of expenses.

**Control What is Possible.** Extension educators and their clients generally have no control over reductions to their health and retirement benefit plans. These decisions are made by employers, governors, and state legislatures. They also have no control over the speed of the economic recovery, the volatility of financial markets, the political environment (i.e., it may be politically popular to slash public employee benefits), and improvements in employment numbers and housing values. What they *can* control are personal health practices, spending and saving habits, human capital investments, investment expenses (e.g., mutual fund expense ratios) and how they spend their time (O’Neill, 2011). Extension educators can provide a valuable “reality check” to their clients in this regard and integrate health and personal finance subject matter for a holistic approach to enhancing family well-being. *The Small Steps to Health and Wealth™* workbook (O’Neill and Ensle, 2012) is a helpful resource for interdisciplinary program planning.

### Implications for Extension

Many Extension educators have personally experienced “broken promises” and/or will serve clients whose employee benefits are being reduced. If benefit cuts have not yet been made, they’re probably coming. Below are six prudent planning strategies to consider:

1. Prepare a “menu” of options to mitigate employee benefit reductions using the ten strategies listed above as a starting point.

2. Present the “retire while you work” strategy to cushion the disappointment of clients who need to work longer but don’t want to postpone their retirement dreams (i.e. “bucket list”).
3. Plan conservatively for retirement with projections that assume no or low pension COLAs and lower benefit calculation formulas.
4. Plan an annual review of available health plan options and increases in employee benefit costs.
5. Consider strategies to increase income to compensate for reductions in take-home pay due to increased employee contributions for health and/or retirement benefits.
6. Consider increased savings to compensate for anticipated retirement benefit shortfalls.

In summary, this article explored the growing trend of “broken promises” by employers, with respect to employee benefits, and listed 10 strategies to mitigate impact on the personal finances of affected workers. *JNEAFCS* readers have both the personal experience and technical expertise to address this issue head-on and improve the lives of those they serve. The sooner that people adjust to their current employee benefit realities, the more time they will have to develop a proactive response.

---

Barbara O'Neill, Ph.D., CFP®, CRPC®  
Extension Specialist in Financial Resource Management and Professor II  
Rutgers Cooperative Extension  
Cook Office Building- Room 107  
55 Dudley Road, New Brunswick, NJ 08901  
(948) 932-9126  
[oneill@aesop.rutgers.edu](mailto:oneill@aesop.rutgers.edu)

---

### References

- Butrica, B.A., Johnson, R.W., & Smith, K.E. (2011, May). *The potential impact of the great recession on future retirement incomes*. Chestnut Hill, MA: Center for Retirement Research at Boston College. Retrieved January 25, 2012 from [http://crr.bc.edu/images/stories/Working\\_Papers/wp\\_2011-9\\_508.pdf](http://crr.bc.edu/images/stories/Working_Papers/wp_2011-9_508.pdf)
- Carpenter, C.E. (2011, March). Federal health reform’s impact on employer-sponsored health insurance. *Journal of Financial Service Professionals*, 65(2), 23-26.
- Fahlund, C. R. (2011, July). Delaying retirement, but not your retirement dreams. *AAll Journal*, 33(7), 13-14, 17.
- Johnson, A. (2010, Sept. 3). Employers sharply raise workers’ share of health costs. *The Wall Street Journal*, p. A6.
- McWhirter, C. & Belkin, D. (2011, June 22). A push in Atlanta to replace public pensions with 401(k)s. *The Wall Street Journal*, p. A6.
- Murray, S. (2010, July 28). Public Employees Get More Benefits. *The Wall Street Journal*, p.A2.
- O’Neill, B. (2011, November). Helping grieving clients navigate the postfinancial crisis “new normal.” *Journal of Financial Services Professionals*, 65(6), 40-49.

- O'Neill, B. & Ensle, K. (2012). *Small steps to health and wealth* (2<sup>nd</sup> Ed.). Ithaca, NY: Natural Resource, Agriculture, and Engineering Service.
- Pension problems (2011, April). *Financial Advisor*, 12(4), 24.
- Reinhart, C. M.. & Rogoff, K.S. (2009). The aftermath of financial crises. *American Economic Review*, 2009, 99(2): 466–72.
- Stat Bank (2011, July). *Journal of Financial Planning*, 24(7), 14.
- State and local government defined benefit pension plans: The pension debt crisis that threatens America*. (2012, January). Washington, DC: U.S. Senate Committee on Finance. Retrieved January 24, 2012 from [http://hatch.senate.gov/public/\\_cache/files/ecfaf678-a3ec-45a4-a2bf-3bca4fe9475d/Hatch%20Report%20-%20The%20Pension%20Debt%20Crisis%20that%20Threatens%20America.pdf](http://hatch.senate.gov/public/_cache/files/ecfaf678-a3ec-45a4-a2bf-3bca4fe9475d/Hatch%20Report%20-%20The%20Pension%20Debt%20Crisis%20that%20Threatens%20America.pdf).

## **Collaboration Fuels Financial Education Outreach and Positive Economic Impact**

**Andrea Scarrow**

From 2007 to 2009, Extension Family and Consumer Sciences (FACS) in Colquitt County, Georgia, worked alone to provide financial education and income tax assistance to residents, with minimal results. In view of increasing financial hardships for the working poor, Extension FACS formed the Coalition for Financial Asset Building (CFAB) with community partners and achieved greater financial education outreach and positive economic impact for Colquitt County during 2010 and 2011. During these two years, the Volunteer Income Tax Assistance (VITA) program conducted by the coalition brought more than \$300,000 back to Colquitt County residents through income tax refunds. In addition, participation in housing and financial education programs offered by Cooperative Extension FACS increased with 16 lower to middle income families becoming first time home owners.

In 2007, results of the Colquitt County Poverty Task Force Report indicated that “poverty rates for all racial and ethnic groups in Moultrie City and Colquitt County are higher than state and national poverty rates (Nielsen & Malega, 2007, p. 17). “Despite progress in the 1990s, Colquitt County poverty rates remain six percentage points higher than Georgia as a whole” (p. 13) This report also found that “non-Hispanic Blacks and Hispanics represent a disproportionate percentage of those persons living in poverty” (p. 18).

Low credit scores and limited financial skills contribute to the vicious cycle of poverty in Colquitt County. There is a great need for financial education among the working population. Seventy percent of the county’s traditional working-age population has a high school or less education, compared to 50% in the state. In 1999, almost 36% of Colquitt County households reported incomes of less than \$20,000 (University of Georgia Cooperative Extension, 2009). Dependence upon high cost/high risk finance companies, title pawn loans, rent to own purchases, and tax refund anticipation loans is prevalent among the poor of Colquitt County.

Colquitt County Family and Consumer Sciences (FACS) built a community partnership to address the issues of poverty by creating the Coalition for Financial Asset Building (CFAB) to increase financial education and assets for local consumers. The coalition includes a number of key community partners including: Cooperative Extension, Colquitt County Family Connection Collaborative on Children and Families, Moultrie Technical College (MTC), Abraham Baldwin Agricultural College, Moultrie YMCA, Riverside Manufacturing, Colquitt Electric Membership Corporation, Migrant Head Start, the Georgia Department of Labor, United Way, Southwest Georgia Community Action Council, and local businessmen (e.g., local banks).

### **Objectives**

The objectives of the Coalition for Financial Asset Building were to 1) open new venues for financial education, 2) equip community partners with research-based educational resources, and 3) provide a Volunteer Income Tax Assistance (VITA) program for Colquitt County.

## **Method**

To achieve these objectives the coalition met quarterly. Community partners demonstrated characteristics of successful collaborations, such as commitment to a common mission, mutual responsibility and joint decision making, and willingness to share resources leading to a sustainable endeavor (Fanning Institute, 2006). Student volunteers from local colleges and the University of Georgia (UGA) were trained and certified as volunteer income tax preparers. In addition, CFAB collaborated with the Internal Revenue Service (IRS), coordinating the VITA program with guidance from the IRS Area Representative.

The method is best described by delineating the role played by each of the community partners. Colquitt County Extension FACS worked with the IRS to gain advanced level certification for tax preparation, to coordinate volunteer training, and to become the site coordinator responsible for overseeing the preparation and submission of tax returns at the VITA site. FACS also coordinated a University of Georgia financial management specialist and Economics professor to provide quality review at the VITA site, and service-learning opportunities for UGA students. Local FACS also gave oversight to the purchase of laptop computers, coordinated technical set up, and hosted students who traveled from the University of Georgia to participate as volunteer income tax preparers. Colquitt County FACS organized and chaired the quarterly meetings of the Coalition for Financial Asset Building, and represented the local coalition at statewide stakeholder meetings.

The Cooperative Extension financial management specialist worked with Colquitt County FACS to provide quality review of the prepared tax returns and financial education at the VITA site. Financial education included exhibits on “How You Spend Makes a Difference,” and “Your Good Credit.” Program participants had the opportunity to speak with financial educators about issues specific to their personal financial goals and circumstances. The Extension financial management specialist also coordinated with the UGA Economics professor and students in their supporting roles with tax preparation.

Family Connection, a local collaborative of community agencies and service providers, was the champion for a Georgia Department of Community Affairs, Community of Opportunities grant awarded to Colquitt County/City of Moultrie in the amount of \$3,750 to support VITA during 2009 and 2010. Family Connection also coordinated publicity, secured volunteers from local banks, and planned refreshments for the volunteers.

Moultrie Technical College (MTC) hosted certification training for VITA volunteers; 20 of whom were MTC accounting students. MTC coordinated the students’ volunteer hours and service learning experience, and provided quality review (including achieving advanced certification) at the VITA site. The students from MTC and UGA achieved intermediate or advanced certification as volunteer tax preparers and contributed more than 500 volunteer hours collectively to the effort during February 2010, and more than 600 volunteer hours in 2011. The Moultrie YMCA took appointments by phone for clients to participate in VITA. The YMCA also hosted the VITA site on four different days. On alternative days the VITA site met at the Ryce Community Center. Other coalition partners contributed to the program by bringing community awareness to the coalition’s efforts for building financial assets, providing venues for financial education, researching opportunities such as individual development accounts, and providing sustainability for a local VITA site.

## **Results**

Colquitt County’s Coalition for Financial Asset Building (CFAB) opened new venues for financial education. As a result, 400 residents received financial management workshops delivered by Cooperative Extension FACS in 2011. Outcomes demonstrated a significant increase in financial assets for participants. In 2010, income tax refunds to Colquitt County

residents through VITA totaled \$106,267; in 2011, income tax refunds to Colquitt County residents through VITA totaled \$200,024. Additionally, 110 adults pledged to begin savings programs, resulting in cumulative pledges totaling \$8,535 monthly. Cooperative Extension FACS helped 20 families prepare to buy their first home in 2010 and 2011, with 16 of those families achieving home ownership. As a result of this program, local businesses are exploring ways to offer VITA and financial education classes on site, and local colleges are looking to add service learning credits for their students who wish to participate as VITA volunteers.

### **Summary**

Human capital and volunteer hours were the greatest resources needed for targeting the issue of financial asset building and poverty reduction in Colquitt County through the VITA program. With added volunteers, the Coalition for Financial Asset Building projects a 50% increase (153 families) to be served by VITA in 2012. Additional goals for outreach through financial education workshops will increase participants by 25% (500 residents). Where Extension FACS struggled to provide effective financial education and positive economic change working alone, the Coalition for Financial Asset Building has fueled a much greater impact for Colquitt County by building community partnerships. The CFAB has demonstrated elements of excellent team leadership including clear goals, a unified effort, and notable impact (Northouse, 2010). The residents of Colquitt County are the beneficiaries of these collaborative efforts.

This study lacked an evaluation tool for measuring how many different financial education activities each participant attended. For example, we did not track which of the VITA participants also attended a financial education or housing workshop with Cooperative Extension. Another limitation was the lack of conclusive follow-up data for 110 adults who pledged to begin savings programs. At this time, the number of adults who accomplished their savings goals is unknown.

### **Implications for Extension**

Strieter and Blalock (2006) found that, “The ability to cobble together the resources needed for successful Extension programming is vital due to ongoing budgetary restraints, reduced staffing, and other challenges to continued growth.” The challenge faced by Extension FACS to make a greater impact in Colquitt County is certainly not unique. Collaborations offer a pathway to success for other Extension professionals. While Extension educators provide excellent research-based resources and expertise, community partners can provide new venues, volunteers, and structural support for implementing programs that have long reaching, sustainable impacts. When an entire community owns a project, resistance and obstacles are diminished and results and positive changes are realized.

---

Andrea Scarrow  
Colquitt County Extension Agent  
University of Georgia  
350 Bldg. 1, Rm. 132  
Veterans Parkway N.  
Moultrie, GA 31788  
(229) 616-7455  
[ascarrow@uga.edu](mailto:ascarrow@uga.edu)

---

## References

- Nielsen, R. B., & Malega, R. (2007). *Colquitt county poverty task force report* (HACE-E-68). Athens: University of Georgia.
- Northouse, P. G. (2010). Team leadership. *Leadership theory and practice*. Los Angeles: Sage.
- Strieter, L., & Blalock, L.B. (2006). Journey to successful collaborations. *Journal of Extension*, 44(1). Retrieved from <http://www.joe.org/joe/2006february/tt4.php>
- University of Georgia, Fanning Institute. (2006). Building communities through partnerships and collaboration [Participant Materials]. *Community leadership program* (4th Edition, Revised). Athens: The University of Georgia Fanning Institute.
- University of Georgia Cooperative Extension, College of Agricultural and Environmental Sciences, Center for Agribusiness and Economic Development. (2009). *The Georgia county guide* (ISSN# 1044-0976). Athens: The University of Georgia Printing Department.

## **Volunteer Latino Advisory Councils: A Valuable Resource to Inform, Recruit, and Support Extension Programs**

Stacey MacArthur, Adrie Roberts,  
Amanda Horrocks Christensen and Zuri Garcia

One goal of Extension is to reach underserved populations, including ethnic minority groups such as Latinos who have historically experienced barriers in receiving services. This article describes successful techniques of incorporating a volunteer Latino Advisory Council to inform and assist in Extension programming for Latino communities. Using a focus group technique, the volunteer council produced a myriad of recommendations for successful Latino programs. Program results, replication needs, and implications for Extension personnel are discussed.

A goal of Extension is to reach underserved populations, including ethnic minorities. Underserved populations include groups of people for which barriers such as culture, class, ethnicity, race, and/or language differences have historically existed in Extension (Thering, 2009). In Utah, the Latino population accounts for 13%, both statewide and in Cache County (U. S. Census, 2010). Mexicans are the largest Latino subgroup in the state, with a population of one million (Ennis, Rios-Vargas, & Albert, 2011). With limited success, county Extension personnel have offered programs for this growing population. In seeking to address the needs of the local Latino community, and increase participation in Extension programs, the authors conducted a literature review and interviewed local members of the Latino population to gain a greater understanding of how to reach this target audience.

Some successful techniques have been identified when recruiting Latinos for educational programming. First, knowledge and respect for the local Latino culture are foundational for success in Latino educational programs (Delgadillo, Horrocks, Roberts & Skogrand, 2009; Hobbs 2007; Olson & Skogrand, 2009). In addition, the literature clearly states that establishing trust by building relationships with Latino leaders, organizations, and businesses is also critical (Farner, Rhoads, Cutz & Farner, 2005; Hobbs). Research has also specified that to be successful, education must be delivered by bilingual/bicultural instructors and trusted Latino community members (Delgadillo et al., L.; Farner et al.; Hobbs; Olson & Skogrand; Sousa et al., 2007; Umaña-Taylor & Bámaca, 2004).

Program implementation suggestions included holding classes in the evening (Farner et al., 2005) and using a location that is trusted by the Latino community such as a church or school (Delgadillo et al., 2009; Hobbs, 2007; Olson & Skogrand, 2009). In addition, classes must include the entire family, so providing meals and childcare is advised (Delgadillo et al.; Farner et al.; Hobbs; Olson & Skogrand; Umaña-Taylor & Bámaca, 2004). Finally, the topic of the class must be relevant, important, and beneficial to the local Latino culture (Farner et al.; Umaña-Taylor & Bámaca) and taught by bilingual instructors (Hobbs). To accomplish this, it is recommended that program personnel utilize focus groups or advisory councils to understand the culture, concerns, interests, and needs of the local Latino members (Delgadillo et al.; Farner et al.; Sousa, Gregory, Campbell, Dasher & Snell, 2007; Umaña-Taylor & Bámaca).

## Objectives

The purpose of this article is twofold. The first objective is to present the results of some successful techniques for working with Latino Advisory Councils based on suggestions from the literature. The second objective is to provide a methodology suitable for replication by other Extension personnel in working with underserved populations.

## Method

Due to limited participation by Latino individuals in Extension programs in Cache County, personnel turned to the literature and key Latino community members to inform programming for a proposed personal finance education series for Latinos. After a review of the literature, key concepts were applied and adapted with the major addition being the formation of a Latino Advisory Council (see Delgadillo et al., 2009). Malek (2002) reported that a focus group setting provided a comfortable method for obtaining information directly from Latino members, therefore the authors used a focus group setting to solicit information from the Latino community;

### The Latino Advisory Council

**Recruiting council members.** The purpose of forming a Latino Advisory Council was twofold. The first purpose was to gain the trust of the local Latino community. Next, was to discover how the needs of the local Latino population could be addressed by Extension. Pritchett, Fulton, and Hine (2012) suggested that this method could uncover needs and solutions that may not otherwise have been known. The recruitment process began by identifying key Latino leaders in local agencies, organizations, colleges, churches, businesses, and English as Second Language (ESL) liaisons in the local schools. These individuals were then personally visited and invited by Extension staff to serve on a Latino Advisory Council. The purpose of the Latino Advisory Council was to provide guidance to Extension personnel on Extension programming appropriate for Latino audiences. The in-person visit was to meet the potential council member, to explain the benefit of Extension programs, and to invite leaders to attend the initial focus group dinner for the Latino Advisory Council.

**Facilitating the initial focus group.** The response to the invitation to attend the community focus group and participate on the Latino Advisory Council was outstanding. Twenty-six Latino community leaders attended and shared insights on a variety of specific cultural issues. The initial meeting with the Latino Advisory Council served four functions 1) to form relationships between key Latino leaders and Extension personnel, 2) to outline the potential benefits of Extension programs for Latino audiences, 3) to solicit guidance from the newly formed Latino Advisory Council in offering culturally appropriate programs based on needs and interests of the local Latino community, and 4) to offer culturally appropriate programs. Authors requested names of potential instructors and discussed strategies to implement personal financial education for the Latino population during the meeting.

In order to gain input from all participants, the attendees were divided into small groups to brainstorm ideas. The Latino community leaders were then brought back together where ideas were discussed (e.g., topics, instructors, recruiting strategies) and recorded by Extension personnel. The ideas are outlined in the results section below.

## Results

### Latino Advisory Council Meeting Information

There were many invaluable ideas passed from the Latino Advisory Council to Extension personnel during the initial focus group dinner and suggestions were recorded. The following themes were manifest and implemented into the programming: provide dinner, offer childcare, recruit native Spanish-speaking instructors, limit the length for the program series, do not expect pre-registration, be aware of trust concerns, and choose a neutral location to hold the classes.

**Dinner.** The Latino Advisory Council suggested that providing dinner would incentivize participation in the program, since classes were held during the evening and could interfere with dinner at home. Dinner was provided by a local restaurant for participants and their families, staff, and volunteers before the classes began each night. Time during dinner was used for participants, staff, and volunteers to interact. This time proved to be critical in aiding Latino program participants to develop trust with Extension faculty and staff, as well as program volunteers.

**Child care.** On-site child care was provided during the classes as suggested. Latinos generally attend events as a family; as a result, children were supervised as they participated in various learning situations with program volunteers in a room separate from the parent class. Some of the learning situations included age-specific money learning activities, games incorporating physical activities, crafts, and nutrition education provided by the Expanded Food and Nutrition Education Program (EFNEP). Volunteers were recruited for child care from a variety of sources including faith-based organizations, high school and college Spanish classes, and Spanish clubs.

**Program Instructors.** The Latino Advisory Council's advice was to have program instructors be native Spanish speakers, meaning Spanish was the first language of the instructor. Previously, instructors that were bilingual taught the Extension classes so this was a helpful change. They strongly advised against having classes taught in English and translated into Spanish for the Latino program participants. This advice was implemented and native Spanish-speaking instructors were well received by participants.

**Length of series.** As suggested by the Latino Advisory Council, we held the Latino financial education class once a week for four weeks. Previously, the length of series was five to six weeks, showing an attendance decline towards the end of the series.

**Pre-registration.** Previous experience was confirmed by the Latino Advisory Council that the Latino culture is often present-time oriented so pre-registering for a class should not be expected. Extension educators therefore prepared for the class the first week not knowing how many would attend. This is in contrast to other audiences where participants typically pre-register by contacting the Extension office.

**Trust concerns.** Due to immigration raids on local businesses, trust concerns were prominent within the local community. Advice from the Latino Advisory Council was to include the phrase "legal status not important" on all advertising fliers. In addition, identifying information such as name, address, and phone number of Latino attendees was not collected.

**Location.** As recommended by the Latino Advisory Council and confirmed in the

literature (see Hobbs, 2007), the Latino personal finance series was held in an elementary school with a high population of Latino students. This was a change from previous classes that were held at the Extension office located at the Cache County government building.

### **Program Results**

The average attendance for both of the Latino personal finance education series held in 2008 was 38 adults and 42 children. Of the attendees, 46 adults successfully qualified for an Individual Development Savings Account (IDA). The IDA program matches participant savings towards the purchase of a home, tuition for higher education, or starting a business. These outcomes indicate great improvement over programs held prior to recruiting a Latino Advisory Councils. Before implementing these suggestions, attendance for Latino programs averaged three to four adults, with the highest attendance being twelve adults and six children. Other classes were canceled altogether due to lack of attendance.

### **Post Program Debriefing**

Upon completing two (four week) series of the personal finance Extension program for the Latino population, program efforts and experiences were reviewed. Debriefing was a critical piece of the programming puzzle, as suggested by Torock (2009,) that proved successful while working with this specific diverse population. Debriefings were held with program volunteers, participants, and Latino Advisory Council members.

**Program volunteers.** Randomly selected child care volunteers were asked for verbal feedback on their volunteer experience and answers were recorded by staff. Participants indicated that they volunteered because they loved working with kids, enjoyed using Spanish (many volunteers were bilingual), and did not need any type of incentive (e.g., movie tickets, etc.) to volunteer.

**Informal participant evaluations.** Informal surveys were distributed at the end of class to collect information on a variety of topics. Questions asked about instructor effectiveness, quality of child care, usefulness of the information, time and location of classes, recruiting strategies, and suggestions for future programs. Of the 40 surveys offered, 21 surveys were completed and returned. Feedback was positive and will be implemented in future programming. To improve recruiting strategies, participants were asked how they heard about the class. Answers included: word of mouth from family (6), the Community Abuse Prevention Services Agency (CAPSA) (3), Utah State University Extension staff (2), friends (2), the local university (1), church (1), and fliers (3).

**Latino Advisory Council debriefing.** Many members of the Latino Advisory Council attended the education series and gave additional feedback at the conclusion. Suggestions included topic ideas for future classes, ratings of current instructors, and references for other Spanish-speaking instructors. Further, they helped to spread the word about future personal finance classes to family and friends.

### **Discussion**

Forming and working with a volunteer Latino Advisory Council was an effective way to increase participation in Extension programming for our local Latino community. The use of a Latino Advisory Council as a focus group provided critical information for planning a Latino education series and recruiting trusted instructors and program volunteers. The advice received

was mostly congruent with the literature on Latino programming and proved effective when implemented in Cache County. The focus group advised the authors to utilize only individuals whose first language was Spanish as instructors, to avoid intimidation or trust issues. This was similar to findings cited by Olsen and Skogrand (2009), but in contrast to findings from Hobbs (2007) that reported that a bilingual/bicultural teacher was sufficient. This discrepancy may be due to our specific geographical area, educational topics, or the occupations of our instructors, thus reinforcing the need to become familiar with local clientele (Olsen & Skogrand).

This article further expands the literature through specific suggestions for working with Latino audiences. First, the Latino Advisory Council advised not to expect Latino participants to pre-register for classes. Second, they advised to avoid more than four classes for each education series. These suggestions worked well for our subsequent program. Lastly, this article points program planners to consider community situations such as immigration raids in local communities when interacting with minority groups.

### **Implications for Extension**

To successfully develop programming for Latino families, Extension personnel must provide culturally appropriate programming. Simple translation of current curriculum is not sufficient. Latino Advisory Councils can be applied to any existing Extension program to inform adaptation to local underserved Latino audiences. It is important to communicate specific benefits with Latino community leaders when soliciting participation in the initial Latino Advisory Council focus group. In addition, Latino communities are made up of different countries of origin, each with unique characteristics. As a result, Extension faculty are advised to examine the individual features of local communities (see Delgadillo et al., 2009; Olsen & Skogrand, 2009). In addition, the Advisory Council model may be applied to other underserved populations by recruiting members of that population to serve on the Council.

---

Dr. Stacey MacArthur, Ph.D.  
Extension Assistant Professor  
Department of 4-H and Youth Programs  
Utah State University  
4900 Old Main Hill  
Logan, UT 84322  
(435) 797-2202  
[stacey.macarthur@usu.edu](mailto:stacey.macarthur@usu.edu)

---

### **References**

- Buck, S. (1997). Valuing differences. *Journal of Extension* [On-line], 35(1) Article 11AW2. Retrieved from <http://www.joe.org/joe/1997february/iw2.php>
- Delgadillo, L., Ralph, L., Horrocks, A., Roberts, A., & Skogrand, L. (2009). Making learning a family affair: Principles for attracting Latinos to Extension finance classes. *The Forum for Family and Consumer Issues*, 14(2). Retrieved from <http://ncsu.edu/ffci/publications/2009/v14-n2-2009-summer-fall/Delgadillo-Ralph-Horrocks-Roberts-Skogrand.php>
- Ennis, S. R., Rios-Vargas, M., & Albert, N. G. (2011). The Hispanic population: 2010. U. S.

- Census Bureau, 2010 Census Briefs. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
- Farner, S., Rhoads, M. E., Cutz, G., & Farner, B. (2005). Assessing the educational needs and interests of the Hispanic population: The role of Extension. *Journal of Extension* [On-line], 43(4) Article 4RIB2. Retrieved from <http://www.joe.org/joe/2005august/rb2.php>
- Hobbs, B. B. (2004). Latino outreach programs: Why they need to be different. *Journal of Extension* [On-line], 42(4) Article 4COM1. Retrieved from <http://www.joe.org/joe/2004august/comm1.php>
- Hobbs, B. B. (2007). Culturally responsive practice: The key to engaging Latinos as adult volunteers. *The International Journal of Volunteer Administration*, [On-line], 24(6). Retrieved from [http://www.ijova.org/PDF/VOL24\\_NO6/IJOVA\\_VOL24\\_NO6\\_Hobbs.pdf](http://www.ijova.org/PDF/VOL24_NO6/IJOVA_VOL24_NO6_Hobbs.pdf)
- Lopez-Soto, E. & Cebula, R. (2006). The importance of outreach to underserved populations (March). *Promising Practices: Cornell University ILR School Employment and Disability Institute*. Retrieved from <http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1212&context=edicollect>
- Malek, F. (2002). Using the focus group process to assess the needs of a growing Latino population. *Journal of Extension* [On-line], 40(1) Article 1TOT2. Retrieved from <http://www.joe.org/joe/2002february/tt2.php>
- Olsen, C. S. & Skogrand, L. (2009). Cultural implications and guidelines for Extension and family life programming with Latino/Hispanic audiences. *The Forum for Family and Consumer Issues* [On-line], 14(1). Retrieved from <http://ncsu.edu/ffci/publications/2009/v14-n1-2009-spring/olsen-skogrand.php>
- Pritchett, J., Fulton, J., & Hine, S. (2012). Keys to successful programming: Incentives in multi-institutional partnerships. *Journal of Extension* [On-line], 50(1) Article 1COM2. Retrieved from <http://www.joe.org/joe/2012february/comm2.php>
- Sousa, C. M., Gregory, P., Campbell, D. C., Dasher, S., & Snell, D. (2007). Recommendations for working in partnership with Latino communities: A guide for public agencies and other social service practitioners. *University of California Davis, Division of Agriculture and Natural Resources (publication 8206)*. Retrieved from <http://anrcatalog.ucdavis.edu>
- Thering, S. (2009). A methodology for evaluating transdisciplinary collaborations with diversity in mind: An example from the green community development in Indian country initiative. *Journal of Extension* [On-line], 47(3) Article 3FEA2. Retrieved from [www.joe.org/joe/2009june/a2.php](http://www.joe.org/joe/2009june/a2.php).
- Torock, J. (2009). Experiential learning and Cooperative Extension: Partners in non-formal education for a century and beyond. *Journal of Extension* [On-line], 47(6) Article 6TOT2. Retrieved from <http://www.joe.org/joe/2009december/tt2.php>
- U.S. Census (2010). *Resident population by Hispanic origin and state: 2010*. Washington, D.C.: US Census Bureau. Retrieved from <http://www.census.gov/compendia/statab/cats/population.html>
- Umaña-Taylor, A. J., & Bámaca, M. Y. (2004). Conducting focus groups with Latino populations: Lessons from the field. *Family Relations*, 53(3), 261-272.  
doi: 10.1111/j.0022-2445.2004.0002.x

## **Effective Elements for Organizing a Healthy Relationships Teen 4-H Retreat**

Naomi Brower, Stacey MacArthur, Kay Bradford, Clint Albrecht,  
Jolene Bunnell and Lauralee Lyons

State and county personnel collaborated to offer a teen 4-H retreat to help youth develop social competencies and build healthy relationship skills. The event utilized a research-based curriculum, interactive activities, peer teaching and leadership opportunities, and coaching support by extension 4-H faculty. The model of the retreat fostered youth and adult partnerships to create a format that could be applied to any 4-H program—especially day camps and overnight retreats. Successful outcomes of the program structure, planning, and other program elements are discussed and ideas for replication are outlined.

Leaders of community and Extension youth programs across the nation have a great opportunity to help educate youth on how to develop healthy relationships through 4-H, which remains one of the most viable options for successfully reaching youth (Van Horn, Flanagan & Thomson, 1999). 4-H programs have been shown to be an effective way to help youth address and build important skills (Boyd, Herring, & Briers, 1992; Scales, Benson, Leffert, & Blyth, 2000). The mission of 4-H is to empower youth to reach their full potential, working and learning in partnership with caring adults (About 4-H, n.d.). Additionally, one of the 4-H mission mandates is a focus on healthy living, including the social and emotional well-being of our nation's youth (National 4-H Healthy Living Task Force, 2009, n.d.). Therefore, programs addressing healthy relationships are vital in youth development.

Youth today grow up in a very different culture than their parents and often lack correct information about how to build healthy relationships (Whitehead & Pearson, 2006). Unhealthy teen relationships may lead to teen pregnancy and other serious consequences that, without early intervention, could extend into adult years (Whitehead & Pearson, 2006; Wildsmith, Steward-Streng, & Manlove, 2011). To address this issue, state and county 4-H Extension personnel collaborated with teen leaders throughout Utah to provide an opportunity for youth and youth leaders to learn healthy relationship skills through a 4-H teen retreat.

### **Purpose**

The purpose of this article is to 1) outline an effective method for organizing a healthy relationships teen 4-H retreat, and 2) introduce a new method of utilizing 4-H leadership resources including state 4-H faculty, adult volunteers, state 4-H ambassadors, and collegiate 4-H members.

### **Method**

An overnight 4-H teen retreat was offered at a centrally located facility beginning on a Friday evening and ending on a Saturday afternoon. The retreat was advertised to 4-H youth and other youth statewide. Components of the retreat included 1) workshop sessions based on a research-based curriculum, 2) interactive activities to promote learning by doing, 3) peer-teaching and leadership opportunities for state 4-H ambassadors and collegiate 4-H members, and 4) coaching and support by extension faculty and staff.

The event was marketed through e-mails, flyers, and at county and state events. Registration costs were kept to \$50 per person to promote attendance. Peer-teaching has been demonstrated as an effective method of providing growth opportunities for youth (Karcher, n.d.; Wong & Keller, 2010). Therefore, state ambassadors and collegiate 4-H members were recruited as peer presenters to teach a majority of workshops (Karcher, n.d., National 4-H Healthy Living Task Force, 2009).

## **Curriculum**

Workshop sessions featured a nationally recognized, research-based curriculum titled, *How to Avoid Falling for a Jerk or Jerk-ette*, also known as the *P.I.C.K. (Premarital Interpersonal Choices & Knowledge)* program developed by Dr. John Van Epp (Van Epp, 2007; Van Epp, 2010; Van Epp, Futris, Van Epp & Campbell, 2008). Peer presenters were trained and provided with lesson materials, and a 4-H faculty coach helped them plan and teach different workshops and topics, such as, how to recognize unhealthy partners, steps to building healthy and safe relationships, and communication skills. Supplemental activities, such as speed dating and dating scenario role plays, were included throughout the retreat to encourage the 4-H approach of “learning by doing” (Diem, 2001). Youth also experienced social interactions during activities that included snowshoeing, cross country skiing, and a dance.

## **Planning and Organizing**

Collaborative partners were recruited including state 4-H ambassadors, county-based extension faculty and volunteers from across the state, collegiate 4-H members, and state 4-H faculty. State ambassadors are outstanding high school-aged youth selected annually from across the state for their overall achievements in the 4-H program. State ambassadors are charged with the responsibility of organizing, conducting, and promoting 4-H activities statewide, so they were a perfect fit. Eight state ambassadors helped in planning and implementing the retreat. All stakeholders were involved in selecting the theme for the retreat, planning the get-acquainted activities, developing the memorabilia each attendee received, and teaching three of the six curriculum workshops. Ambassadors were also involved in promoting the retreat throughout the state.

Because of their maturity level, collegiate 4-H members, who are college students involved with 4-H service projects and activities at Utah State University, Utah’s land grant university taught workshops focused on more sensitive topics such as intimacy and commitment. They also organized and led a speed dating activity to help youth get acquainted, conducted an open panel discussion on dating, and developed and taught a workshop on body language.

## **Training and Coaching**

Peer presenters received training and coaching from 4-H faculty and staff as they planned and taught workshops. Coaches met during the planning phase of the retreat and were assigned workshop sessions and curriculum sections that would be covered by each peer presenter. Coaches also reviewed the curriculum and wrote suggested lesson outlines and options for hands-on activities. Coaches were in contact with peer presenters via e-mail and phone before the retreat to discuss ideas the presenters had about their topics. Prior to the retreat, presenters were able to practice presenting their workshop to adult volunteers and 4-H faculty. During the retreat, coaches attended the workshop(s) of their presenters to give support and to help answer questions from participants.

## Evaluation

At the end of the retreat, youth participants completed an IRB-approved evaluation which contained questions about healthy relationship skills gained and program satisfaction. Of 86 participants, 58% were female, 42% were male. The mean age was 16.6 years and 97% were Caucasian. Because most youth were under the age of 18, parents signed a consent form during registration to allowing them to be surveyed. A pen and paper, posttest-then-retrospective-pretest evaluation (Marshall, Higginbotham, Harris, & Lee, 2007) was completed by 74% of participants. The evaluation consisted of questions regarding their opinions about the value of the retreat, and knowledge of relationship skills gained. Participants were also asked to provide an open-ended response to the question, "What are the most important things that you learned?"

## Results

Evaluations indicated that youth participating in the 4-H teen retreat gained significant knowledge about healthy relationships. As previously reported, participants increased knowledge in the areas of "listening effectively, handling disagreements, solving problems, relationship depth and friendship, and the importance of spending time with a significant other. These findings applied regardless of gender, showing no significant differences when comparing the gains made by males with those made by females" (Brower, MacArthur, Bradford, Albrecht & Bunnell, 2012, p.122). Most responses to the open ended question, "What are the most important things you learned?" referred to a healthy attachment model from the *How to Avoid Falling for a Jerk or Jerk-ette* curriculum. (For an in depth report of evaluation outcomes, see Brower, et al., 2012) There was no formal evaluation for peer leaders and coaches; however, informal feedback indicated that leaders and coaches found the 4-H teen retreat format to be very effective.

## Discussion

The purpose of this paper was to 1) outline an effective method for organizing a healthy relationships teen 4-H retreat, and 2) introduce a new method of utilizing 4-H leadership resources including 4-H faculty, adult volunteers, state 4-H ambassadors, and collegiate 4-H members. Previously Utah had not utilized collegiate 4-H to deliver this type of program, nor had they spearheaded a statewide retreat organized by county-based extension faculty and volunteers working with state-level 4-H personnel. In addition, the healthy relationships focus was unique for a 4-H event in the state. Limitations of this study included a relatively small sample size, homogeneity of the sample in terms of ethnicity, and the absence of an evaluation tool for leaders and coaches.

The success of this healthy relationships 4-H teen retreat was attributed to several factors. First, collaboration between county and state 4-H staff, adult volunteers, and help from state 4-H ambassadors and collegiate 4-H members proved to ensure blending of viewpoints and sharing of the workload. Because collaborations on this level had not been previously utilized statewide, this event was viewed as a great success. Second, peer-to-peer teaching by the state 4-H ambassadors, and role model teaching with collegiate 4-H members, kept the youth attentive and intrigued. This peer-to-peer teaching was made possible by the support of 4-H faculty and adult volunteers who acted as coaches for peer presenters. Third, a research-based curriculum coupled with fun social activities ensured that youth not only had fun, but also learned proven life skills. Fourth, retreat costs for participants, totaling 68% of total cost, were minimized thanks to shared costs from counties (15%), state offices (3%), and grant funding (14%). Lastly, the retreat was filled to capacity, signifying that youth appreciate and need

healthy relationships programming. Peer presenters, supported by adult coaches, learned effective teaching methods and leadership skills, while collegiate 4-H members mentored and stayed connected with state 4-H.

### **Ideas for Replication**

Without deference to topics or themes, we believe our 4-H teen retreat model can be applied to any 4-H program, especially day camps and overnight retreats. While it may be easier to access coaches and peer leaders on a statewide level, this format can be utilized in any county where there are willing teen leaders (e.g., 4-H teen councils or youth mentoring programs), as well as supportive volunteers and youth leaders to coach and assist in organizing events. Consider the following ideas for replication:

- Brainstorm with county and state staff and faculty, current 4-H youth, and other stakeholders to determine a life skill that youth need and are interested in.
- Consider existing research-based curriculum resources to teach the life skill.
- Solicit state 4-H ambassadors, youth leaders, and collegiate 4-H for buy-in and participation in curriculum training.
- Plan the event with all stakeholders, including youth and collegiate 4-H.
- Team up staff coaches with youth leaders and collegiate 4-H members who will teach during segments of the event.
- Consider providing teaching outlines and ideas in addition to training on curricula to help youth plan and prepare.
- Apply for grant funding and contributions to offset costs of the retreat.
- Look for state or local government funding from groups that support the topic being taught (e.g., for a healthy relationships retreat it may be helpful to seek out support from marriage or family coalitions and domestic violence coalitions).
- Measure success by evaluating the program.

With the success of our healthy relationships teen 4-H retreat, the Utah 4-H office is working to develop a three to four-year theme rotation for similar retreats, and an emphasis on different topics for each year. Some themes currently being discussed are money management, communication, and preparation for life after high school.

---

Naomi Brower, MFHD  
Extension Assistant Professor  
Family and Consumer Sciences Agent  
Weber County  
1181 North Fairgrounds Drive  
Ogden, UT 84404-3100  
(801) 399-8206  
[naomi.brower@usu.edu](mailto:naomi.brower@usu.edu)

---

### **References**

About 4-H, (n.d.). Retrieved from <http://www.4-h.org/about/>

- Boyd, B. L., Herring, D. R., & Briers, G. E. (1992). Developing life skills in youth. *Journal of Extension* [On-line], 30(4). Article 4FEA4. Available at <http://www.joe.org/joe/1992winter/a4.html>
- Brower, N., MacArthur, S., Bradford, K., Albrecht, C., & Bunnell, J. (2012). Got dating: Outcomes of a 4-H teen retreat. *Journal of Youth Development: Bridging Research & Practice* 7(1), 118-124.
- Diem, K. G., (2001). *New Jersey 4-H Leader Training Series: Learn by doing the 4-H way*. Retrieved from <http://njaes.rutgers.edu/pubs/pdfs/4h/e148/447-454.pdf>
- Karcher, M. (n.d.). Cross-age peer mentoring. *Research in Action*, Issue 7. Retrieved from [http://www.mentoring.org/downloads/mentoring\\_388.pdf](http://www.mentoring.org/downloads/mentoring_388.pdf)
- Lerner, R. M., Lerner, J. V., and Colleagues (2011). *Waves of the future 2009: Report of the findings of the first six years of the 4-H study of positive youth development*. Chevy Chase, MD: National 4-H Council. Retrieved from [http://www.4-h.org/uploadedFiles/About\\_Folder/Research/Tufts\\_Data/4-H-Positive-Youth-Development-Study-Wave-6.pdf](http://www.4-h.org/uploadedFiles/About_Folder/Research/Tufts_Data/4-H-Positive-Youth-Development-Study-Wave-6.pdf)
- Marshall, J. P., Higginbotham, B. J., Harris, V. W., & Lee, T. R. (2007). Assessing program outcomes: Rationale and benefits of posttest-then-retrospective-pretest designs. *Journal of Youth Development: Bridging Research and Practice [on-line]*, 2(1). Article 0701RS001. Retrieved from [http://data.memberclicks.com/site/nae4a/JYD\\_070201\\_final.pdf](http://data.memberclicks.com/site/nae4a/JYD_070201_final.pdf)
- National 4-H Healthy Living Task Force (2009, February). *4-H healthy living strategic framework for program planning and evaluation*. Retrieved from <http://www.4-h.org/youth-development-programs/kids-health/framework-evaluation/>
- National 4-H Healthy Living Task Force (n.d.) *Healthy living resource guide*. Retrieved from [http://www.4-h.org/uploadedFiles/Programs/Healthy\\_Living/programming\\_resources/Healthy\\_Living\\_Resource\\_Guide.pdf](http://www.4-h.org/uploadedFiles/Programs/Healthy_Living/programming_resources/Healthy_Living_Resource_Guide.pdf)
- Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2000). Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science*, 4(1), 27-46.
- Van Epp, J. (2007). *How to avoid falling for a jerk: The foolproof way to follow your heart without losing your mind*. New York: McGraw Hill.
- Van Epp, J. (2010). *How to avoid falling for a jerk (or jerk-ette)*, (5th ed.). Ohio: Author.
- Van Epp, M.C., Futris, T.G., Van Epp, J.C., & Campbell, K. (2008). The impact of the PICK a partner relationship education program on single army soldiers. *Family and Consumer Sciences Research Journal*, 36(4), 328-349.
- Van Horn, B. E., Flanagan, C. A., Thomson, J. S. (1999). Changes and challenges in 4-H (part 2). *Journal of Extension*, 37(1). Article 1COM1. Retrieved from <http://www.joe.org/joe/1999february/comm1.php>
- Whitehead, B. D., & Pearson, M. (2006). *Making a love connection: Teen relationships, pregnancy and marriage*. The National Campaign to Prevent Teen and Unplanned Pregnancy, Washington, DC. Retrieved from [http://www.thenationalcampaign.org/resources/pdf/pubs/MALC\\_FINAL.pdf](http://www.thenationalcampaign.org/resources/pdf/pubs/MALC_FINAL.pdf)
- Wildsmith, E., Steward-Streng, M. A., & Manlove, J. (2011, November). *Childbearing outside of marriage estimates and trends in the United States* (Publication No. 2011-29). Retrieved from [http://www.childtrends.org/Files//Child\\_Trends-2011\\_11\\_01\\_RB\\_NonmaritalCB.pdf](http://www.childtrends.org/Files//Child_Trends-2011_11_01_RB_NonmaritalCB.pdf)
- Wong, S. S. & Keller, S. (2010). Validation of a teen paraprofessional peer-teaching model in teen parenting nutrition education. *The Forum for Family and Consumer Issues (FFCI)* 15(2). Retrieved from <http://ncsu.edu/ffci/publications/2010/v15-n2-2010-summer-fall/wong-keller.php>

## **Making Sense of Money Management: Addressing Bogus Check Writing In Partnership with Regional District Attorneys**

Eileen St. Pierre, Susan Routh, Brenda Gandy,  
Lisa Taylor and Ranel Lasley

This article describes a financial management program developed by Oklahoma Cooperative Extension educators from four counties, in partnership with the Region 6 District Attorney's Office, to reduce bogus check writing. Selected enrollment data from over 260 participants is analyzed. The number of bogus checks in Region 6 declined 40% during the first three years of this program. Readers can benefit from lessons learned regarding evaluation and issues concerning the future direction of this program.

Merchants lose millions of dollars every year because of bogus checks. These costs are passed on to consumers through higher prices. A bogus check is defined as a check returned for insufficient funds, closed accounts, or no account found. In Oklahoma, the District Attorney (D.A.) staff is charged with tracking down writers of bad checks and returning money to the merchants, while providing offenders a way to avoid criminal charges, deterring future offenses, and alleviating already crowded court dockets.

In 2007, in an effort to decrease bogus check writing and increase responsible money management practices, the Region 6 District Attorney's Bogus Check Division Coordinator approached the Oklahoma Cooperative Extension Service (OCES) Family and a Consumer Sciences educator in Grady County about the possibility of a partnership to offer financial management classes to bogus check offenders in Region 6 counties (i.e., Caddo, Grady, Jefferson and Stephens). Since early 2008, Making Sense of Money Management programs have been provided at least 28 times in Region 6 to over 260 participants. The D.A.'s office waives the bogus check writer's fine of \$198 for completing the Making Sense of Money Management class.

### **The Role of Extension in Delivering Financial Education**

The role of Extension in delivering personal financial education has been strongly established (O'Neill, 2009; Osteen, Muske, & Jones, 2007; Wilde, 2011). More than five decades ago, Hansen (1965) noted that even though Extension has been teaching in this area for a long time, more attention should be focused on teaching money management to low socio-economic families at a level they could understand. This role of Extension has continued to evolve. The creation of eXtension Communities of Practice such as Financial Security for All and Financial Security in Later Life make financial education resources immediately available online to Extension educators, partner organizations, and clients (O'Neill et al., 2007). Extension has also created effective tools to assess client learning needs (O'Neill, 2008) and measure program impact (Lyons, Jayaratne, & Palmer, 2008; Nielsen, 2011). County Extension offices serve as a strong local presence, offering unbiased research-based education, thus making them natural partners with community organizations with the shared goal of changing personal behavior.

## Objective

The objective of the Making Sense of Money Management program was to improve financial management skills and increase participant confidence in managing finances for families and themselves.

## Method

### Enrollment Survey Data

The Making Sense of Money Management class was divided into five parts normally taught over a four-hour period 1) managing your checking account, 2) understanding credit; 3) strategies for saving; 4) building a financial plan; and 5) financial goal setting. Classroom lectures, interactive lessons, video clips and guest speakers were featured in the seminar and a certificate was issued to each participant upon completion of the course. At the start of each class, participants were asked to complete an enrollment survey developed by Oklahoma State University Extension specialists. The purpose of the survey was to gather information about participants and assess how participants viewed their financial management skills and situation prior to the training. Participant demographics were not surprising. Most were White (77%) or Native American (14%), with about half (52%) living in small or large towns. Only 8% had a bachelor or graduate degree. The majority of participants (61%) had a yearly household income of less than \$25,000. The age range of participants was from 16 to 79 years old. The majority (66%) of enrollees were female. Almost half (45%) were married, 31% were single, and the rest were divorced.

Selected enrollment survey data summarized in Table 1 displays participants' assessment of their financial behaviors. With regard to positive financial behaviors, participants were more likely to pay bills on time and regularly track their income and spending. They needed the most help with saving for long-term goals at least two to five years away. The two most identified goals were establishing an emergency savings fund (38%) and saving for a home (23%). Participants rarely ever carried a credit card balance. However, this result is not necessarily good news. Although this data is not reported in Table 1, most participants (76%) did not have a credit card, indicating that it is vital for this population to be able to manage a checking account if they ever expect to build a credit history.

The next section provides a picture of the level of financial stress participants felt at the start of the program. They appeared to be under some financial stress with many living from paycheck to paycheck on a regular basis (although the term "regular basis" was not defined for them). Participants lacked confidence that they could pay for a financial emergency. In the past year only 4% of participants had accumulated an emergency savings fund equal to three month's pay. One quarter of participants had received a tax refund in excess of \$1,000. This tax refund could be used as a starting point in establishing an emergency savings fund.

When asked to identify all the ways they had received previous money management training, the most common answers were, in high school (44%), and from family and friends (38%); while 30% of participants indicated they had received no prior financial management training. In the year prior to attending the Making Sense of Money Management program, 48% of participants had been denied credit, 38% had used a small loan company, 29% had taken out a payday loan, and only 22% had ordered a copy of their own credit report. Clearly, this audience needed financial education, particularly the lesson on understanding credit.

Interestingly, only 54% of participants indicated they had written a bogus check, despite the fact that this was why most were attending the class. This finding suggested that results of the enrollment survey may be biased, with participants probably exhibiting poorer financial behaviors than those expressed in the survey.

## **Program Impact**

Table 2 contains a comparison of Region 6 bogus check data from 2007 and 2010. The number of bogus checks received by the D.A.'s office fell by over 40% over this three-year period. The number of deferred prosecutions fell by 85%, along with the number of felonies and misdemeanors filed. While this data shows that reported bogus check writing has diminished over the first three years of the Making Sense of Money Management program, it is not possible to state at this time what role this program played. Data is not available on the number of repeat bogus check writers. In the future, Extension educators may work with the D.A.'s office in setting up a system to track repeat offenders.

## **Discussion**

### **Lessons Learned**

When participants filled out their enrollment survey, the required Institutional Review Board (IRB) disclosure letter stated follow-up surveys would be sent by OCES state specialists to a randomly-selected sample of participants three and six months after class completion. Unfortunately, this follow-up was never completed. In 2011, an attempt was made to conduct a final wrap-up survey, with new IRB approval, to all class participants since 2008; consent to these future surveys had already been obtained at initial class enrollment. Specifically, participants were asked 1) if they had written any more bogus checks since attending this class; 2) if they currently had a checking account; and 3) how their skills had improved in the areas covered by the class. None of the 59 emailed surveys were filled out. Out of the 130 mailed surveys, only nine were returned for a response rate of 6.9%.

While it is not possible to draw general conclusions about the program's impact with such a low response rate, none of the nine wrap-up survey respondents had written bogus checks since taking the class. Most had taken the class more than a year ago. Seven of the respondents currently had a checking account with a financial institution. Only a few indicated that their financial management skills had improved since taking the class.

Lessons were learned by all Extension personnel involved in this program. In terms of assessing impact, it is important when conducting a long-term program to establish a simple evaluation system that can be easily administered at the county level and managed by state specialists. The experience of those involved with the Making Sense of Money Management program clearly demonstrated that a better follow-up system needed to be developed in order to effectively measure behavior change.

### **Study Limitations**

The lack of evaluation data is clearly a limitation of this study. Even though the general public was invited, the majority of program participants were there because they wanted to avoid the bogus check writer fine. This population tends to be transient, making follow-up contact difficult. Approximately a quarter of the mailed surveys were returned to sender or could not be forwarded. A better approach to assessing future program impact may be to advocate for the D.A.'s office to set up a system to track repeat offenders. Extension educators could then cross-check their class lists with the repeat offender list.

### **Looking Forward**

Making Sense of Money Management remains an integral part of OCES financial

education programming. Efforts are underway to expand this program into other counties. As is the case with many Extension programs, there are forces at work that are beyond the control of Extension educators such as changes in county priorities and local, state, and federal funding levels. The OCES partnership with the Region 6 District Attorney's office is subject to political risk. Turnover in this office requires Extension educators to remain vigilant in maintaining this partnership with each newly elected District Attorney. In addition, there are some that question the constitutionality of the waiver of the bogus check writer fine. Making Sense of Money Management is a strong program that can stand on its own, but it is the partnership that makes this program especially unique.

---

Eileen St. Pierre, Ph.D., CFA, CFP®  
Personal Finance Specialist and Assistant Professor  
Oklahoma State University  
233 Human Sciences  
Stillwater, OK 74078  
(405) 744-8072  
[eileen.stpierre@okstate.edu](mailto:eileen.stpierre@okstate.edu)

---

## References

- Hansen, V. K. (1965). Frontiers in home economics. *Journal of Extension*, 3(1), 27-32. Retrieved from <http://www.joe.org/joe/1965spring/1965-1-a4.pdf>
- Lyons, A. C., Jayaratne, K. S., & Palmer, L. (2008). Financial education and program evaluation for Extension professionals: From research to practical application. *Journal of the National Extension Association of Family and Consumer Sciences*, 3, 29-35. Retrieved from <http://www.neafcs.org/assets/documents/journal/neafcs-2008-journal.pdf>
- Nielsen, R. B. (2011). A retrospective pretest-posttest evaluation of a one-time personal finance training. *Journal of Extension* [Online], 49(1) Article 1FEA4. Retrieved from <http://www.joe.org/joe/2011february/a4.php>
- O'Neill, B. (2008). Online financial self-assessment and research tools: Combining high tech and high touch. *Journal of the National Extension Association of Family and Consumer Sciences*, 4, 15-20. Retrieved from <http://www.neafcs.org/assets/documents/journal/neafcs-2009-journal.pdf>
- O'Neill, B. (2009). Retirement asset withdrawals that last a lifetime: Research and resources for Extension educators. *Journal of the National Extension Association of Family and Consumer Sciences*, 4, 42-45. Retrieved from <http://www.neafcs.org/assets/documents/journal/neafcs-2009-journal.pdf>
- O'Neill, B., Schuchardt, J., Pankow, D., Porter, N., Seiling, S., Branch, J., & Miller, J. (2007). eXtension: A high tech resource for improving financial security. *Journal of the National Extension Association of Family and Consumer Sciences*, 2, 13-18. Retrieved from <http://www.neafcs.org/assets/Journal/NEAFCS-2007-Journal.pdf>
- Osteen, S., Muske, G., & Jones, J. (2007). Financial management education: Its role in changing behavior. *Journal of Extension*, 45(3), Article 3RIB2. Retrieved from <http://www.joe.org/joe/2007june/rb2.php>
- Wilde, T. (2011). ReliaBalance™: A financial management technique designed to encourage more informed daily financial decisions. *Journal of Extension*, 49(4), Article 4TOT6. Retrieved from <http://www.joe.org/joe/2011august/tt6.php>

**Table 1.** Selected Enrollment Survey Data

<u>Financial Behaviors</u>	<u>Avg. Rank<sup>a</sup></u>
I regularly track income and spending	2.4
I regularly make a spending plan	3.0
I regularly set financial goals/objectives	3.1
I regularly save for long-term goals	3.6
I regularly pay bills on time	2.3
I regularly reduce household expenses	2.8
I regularly comparison shop	2.3
I regularly spend more than I would like	2.5
I regularly make impulse purchases	3.1
I regularly have a credit card balance	4.2
<u>Financial Stressors</u>	<u>Avg. Rank</u>
How satisfied are you with your present financial situation?	3.5 <sup>b</sup>
How do you feel about your current financial situation?	3.6 <sup>b</sup>
What do you feel is the level of your financial stress today?	4.4 <sup>c</sup>
How frequently do you find yourself just living paycheck to paycheck?	2.5 <sup>d</sup>
How confident are you that you could pay for an emergency > \$1,000?	3.8 <sup>e</sup>
<u>Money Management Training</u>	<u>Percentages (%)</u>
High school	44
College	12
Non-credit classes	7
Magazines and newspapers	17
Websites	10
Family and friends	38
Professionals	5
Other	9
No training	30
<u>In the Past Year</u>	<u>Percentages (%)</u>
Used a small loan company	38
Used a payday loan	29
Written a bogus check	54
Ordered a credit report	22
Been denied credit	48
Used a credit counseling service	4
Used a financial planner	2
Attended a money management class	8
Had an emergency fund = 3 months' pay	4
Received a tax refund > \$1,000	23

<sup>a</sup>Based on a 5-point scale, 1 = Always to 5 = Never. <sup>b</sup>Based on a 10-point scale, 1 = Overwhelmed to 10 = Comfortable. <sup>c</sup>Based on a 10-point scale, 1 = Overwhelming to 10 = No stress. <sup>d</sup>Based on a 10-point scale, 1 = All the time to 10 = Never. <sup>e</sup>Based on a 10-point scale, 1 = No confidence to 10 = High confidence.

**Table 2.** Comparison of Oklahoma Region 6 Bogus Check Data, 2010 and 2007

---

	<u>2010</u>	<u>2007</u>
Bogus Checks Received	5,693	9,643
Deferred Prosecution Agreements	365	2,456
Collected for Merchants	\$547,235	\$679,339
Felonies Filed	18	38
Misdemeanors Filed	125	282

---

## **Training Childcare Providers on the Topic of ADHD in Young Children**

Heidi Liss Radunovich, Stephanie Toelle,  
Monica Brinkley and Maisie Ross

Given the increasing diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD), childcare providers need to obtain knowledge and expertise on what ADHD means for the young child in a childcare setting. A curriculum was developed to meet the training needs of childcare providers on the topic of ADHD in young children. This three-hour curriculum was presented to 102 participants in one urban and two rural counties by Cooperative Extension faculty. An evaluation of knowledge gained indicated that class participants significantly increased their knowledge about ADHD after participating in this training.

Attention-Deficit/Hyperactivity Disorder (ADHD) is one of the most commonly diagnosed child mental health disorders; an estimated 3 to 9.5% of school-aged children in the U.S. have this disorder (McDonnell & Glod, 2003; Center for Disease Control and Prevention, 2010). While the exact cause of ADHD is not yet certain, the research literature has established that the disorder has a neurological basis (Lambeck, et al., 2010; Mackie, et al., 2007). Symptoms of ADHD may include: losing materials, being disorganized, fidgeting, having difficulty remaining seated, having difficulty paying attention, and engaging in impulsive behaviors such as speaking out of turn (American Psychiatric Association, 2000). The child may also exhibit inappropriate or excessive activity that is atypical for a child's developmental level (American Psychiatric Association, 2000).

It is important to note that expected symptoms and treatment protocols vary with age (LaForett, Murray, & Kollins, 2008; Vaughan, Wetzel, & Kratochvil, 2008). The American Psychiatric Association suggests that a full diagnosis of ADHD not be given until a child is approximately 4 to 5 years of age, due to some potential overlap between ADHD symptoms and common developmental delays (American Psychiatric Association, 2000). However, research suggests that symptoms of ADHD will appear earlier in many children (Loe, et al., 2008; Smith, 2011), and in order to get a diagnosis of ADHD, the symptoms must be present no later than the age of six (American Psychiatric Association, 2000). Therefore, some young children will display symptoms of ADHD before a diagnosis has been provided.

Recommended treatment is also different for young children. Based on longitudinal research on the impact of medication on young children with the ADHD diagnosis, it is now recommended that young children should receive changes to their environment in order to manage their symptoms, rather than medication, unless symptoms are very severe (Daley, Jones, Hutchings & Thompson, 2009; LaForett, Murray, & Kollins, 2008; Smith, 2011; Vaughan, Wetzel, & Kratochvil, 2008; Young & Amarasinghe, 2010).

According to the American Community Survey, approximately 34.5% of children under the age of five regularly have childcare arrangements with non-relatives, and another 53.8% have several different types of childcare arrangements, or report inconsistent types of childcare arrangements (Laughlin, 2010). Given the large number of children who potentially attend non-relative childcare, and given the frequency of the ADHD diagnosis, it is important to raise

awareness of the disorder amongst childcare providers. While many childcare providers receive initial training on child development and best practices for managing the childcare setting, few receive information about mental health issues and the impact on young children (e.g., Child Development Associate Competency Standards). In fact, even within the research literature the recognition of mental health issues among infants and very young children is a fairly recent phenomenon (Zeanah & Zeanah, 2009).

Children who have symptoms of ADHD may exhibit behavioral disruption in the childcare setting (Young & Amarasinghe, 2010). A lack of understanding of child mental health issues could lead to inappropriate handling of these symptoms in the childcare setting, such as blaming children for behaviors they cannot control. Childcare providers need an understanding of how to best manage these behaviors and special needs, and how to work cooperatively with parents of children who have ADHD. Providing education to childcare providers regarding ADHD could help improve management of symptoms in the childcare setting, and also improve the likelihood that young children with ADHD can remain in childcare, rather than being dismissed for seemingly unmanageable behaviors (Harpin, 2005; Young & Amarasinghe, 2010).

An important contributor to quality childcare is ensuring that childcare providers have the skills and knowledge needed to provide appropriate experiences for children, as well as skills to facilitate classroom management (Belsky, et al., 2007). Research on the impact of childcare suggests that quality childcare can provide many benefits to both children and working families (Belsky, et al., 2007; Mulligan, Brimhall & Chapman, 2006; NICHD Early Childcare Research Network, 2005). Quality childcare is especially important when considering the increasing need for families to have two working parents in order to manage finances, as well as single parents working to support the family (Chaudry, 2004). Families may suffer financially if they are unable to obtain appropriate care for their children (Chaudry, 2004). Well trained childcare providers provide many benefits for children in a childcare setting (Belsky, et al., 2007; Mulligan, Brimhall & Chapman, 2006; NICHD Early Childcare Research Network, 2005), including social and cognitive benefits, as well as increased readiness for school. These benefits are particularly critical for children diagnosed with ADHD, known to be a risk factor for lower school performance and diminished social functioning (Harpin, 2005). Ironically, while children with ADHD may benefit most from quality childcare, behaviors associated with ADHD (e.g., impulsivity, difficulty following directions, etc.) may put them at greater risk for dismissal (Young & Amarasinghe, 2010).

In summary, current training requirements for most childcare providers do not include information about ADHD or other mental health issues (e.g., Child Development Associate Competency Standards). The field of early childhood mental health is fairly new, so it is only recently that research has been done to increase understanding of how mental health issues appear in early childhood (Zeanah & Zeanah, 2009). Given that ADHD is one of the most common mental health issues affecting children (McDonnell & Glod, 2003; Center for Disease Control and Prevention, 2010), and the symptoms can cause significant impact on behavior (American Psychiatric Association, 2000), it is important for childcare providers to have accurate information about ADHD and an understanding of best practices for the childcare setting.

### **Objective**

The goal of this program was to develop a curriculum designed to meet the continuing education needs of childcare providers on the topic of ADHD in young children, and best practices for working with affected children in the childcare setting.

## Method

A curriculum was developed by a Cooperative Extension specialist, with input from Cooperative Extension county faculty members, in order to meet the continuing education needs of childcare providers. This three-hour curriculum was designed to be presented to groups in a face-to-face setting. The curriculum was taught by Cooperative Extension faculty after they received phone-based, in-service training on the topic of ADHD in young children, and information about how to use the curriculum. A benefit and possible incentive for childcare providers to attend the training was the option of obtaining CEU credits for participation.

Topic areas covered in the curriculum are as follows:

- Prevalence and potential reasons for prevalence of ADHD.
- What is known regarding research on ADHD.
- How ADHD is similar to other disorders.
- How ADHD is diagnosed and its symptoms.
- Difficulties with diagnosing ADHD in young children.
- The course of ADHD.
- Co-morbid conditions.
- How it feels to have ADHD.
- What is known about treatment options for ADHD?
- Potential problems with ADHD treatments.
- Recommended treatment options for young children with ADHD.
- How to work with parents of those diagnosed, as well as suspected of having ADHD.
- Tips for environmental changes that would help those with ADHD in the childcare setting.

In addition to didactic information presented via PowerPoint, the curriculum includes video simulation of what it feels like to experience ADHD, as well as a video of parents describing their experiences of having young children who have symptoms of ADHD. There is also guided discussion regarding how behaviors associated with ADHD have been handled in the participants' childcare settings, with associated group problem-solving.

The curriculum provides much-needed information to childcare providers with potential to 1) impact providers' ability to appropriately care for young children with ADHD in the childcare setting, 2) keep "at risk" children from being dismissed from childcare (Young & Amarasinghe, 2010), and 3) increase important benefits they may garner in the childcare setting (Belsky, et al., 2007; Mulligan, Brimhall & Chapman, 2006; NICHD Early Childcare Research Network, 2005). Furthermore, the curriculum has the potential to improve the well-being of childcare providers themselves, as they develop confidence to handle potential difficulties presented by children who have symptoms of ADHD.

To date a total of 102 female childcare providers have completed the curriculum. Three Cooperative Extension county faculty members, in two urban counties and one rural county, have provided the training. One Cooperative Extension faculty member taught the curriculum to two separate groups, while the other two faculty members taught only one group each. All participants were female; other demographic information was not collected. In order to assess the level of existing knowledge regarding ADHD and young children, as well as determine any knowledge gains related to completing the program, a ten item pre- and post-assessment of knowledge on the topic areas covered was devised and administered to participants prior to the training, then after the training was completed (Addendum).

## Results

Overall pre- and post-assessment scores were calculated for each participant by summing up each participant's responses. Results from a paired samples t-test suggested that program participants obtained a significant increase in knowledge from participating in the program ( $t(101) = 27.77, p < .001$ ), with an increase from an average overall pre-score of 3.98 to an overall post-score of 8.71 (of a total possible score of 10). There were no significant differences in outcomes based on which instructor conducted the class. The low pre-test scores suggested that there was a need for this information among childcare providers. Furthermore, the significant increased knowledge gained, as indicated by pre- and post-assessment scores, demonstrated a significant gain in knowledge following completion of the program, regardless of which faculty member administered the program, or where the program was taught (i.e., urban or rural).

## Discussion

The goal of this ADHD education program was twofold 1) to develop a curriculum designed to meet the continuing education needs of childcare providers on the topic of ADHD in young children, and 2) to provide best practices for working with affected children in the childcare setting. The curriculum consisted of a single training designed to meet the needs of childcare providers on the topic of early childhood ADHD, and was administered to childcare providers in a three-hour class, face-to-face setting by three appropriately trained educators.

An examination of pre-training knowledge on the topic of ADHD in young children demonstrated that, while there was some variance of knowledge among childcare providers, childcare providers overall had limited knowledge of ADHD in the young child. Post-test assessments suggested that this training provided significant knowledge gains for participants. Gains were fairly consistent for all three childcare trainers, and across urban and rural settings.

There were some limitations to the examination of the curriculum. First, the curriculum was administered to a relatively small sample of childcare providers ( $n = 102$ ), in three counties in a single state, and demographic information was unavailable. Second, results were limited to an assessment of knowledge gained. While knowledge gained is important, there was no follow-up to determine whether knowledge gained resulted in meaningful changes in the childcare setting. However, this was not a research experiment, nor was the goal to provide evidence of a change in behaviors in the childcare setting. Future research could be conducted to assess outcomes of knowledge gained (e.g., how changes made in the childcare setting affected the well-being of providers, identified children, their parents, and their classmates). These are difficult issues to examine and would require 1) Institutional Review Board guidance; 2) a large investment of time, money, and other resources; as well as 3) a significant amount of cooperation from parents, providers, and other personnel.

## Implications for Extension

Overall, the curriculum for this ADHD education program was developed in order to inform childcare providers. While the only measure of this pilot study was "knowledge gained," the hope was that by increasing childcare providers' understanding of what is known about ADHD in young children, that childcare providers would gain not only knowledge, but also confidence to appropriately handle difficulties associated with ADHD children in the childcare setting. An experimental study was beyond the scope of this unfunded project. The goal of this project was to let others within Extension (or others who train childcare providers) know that such a curriculum exists. This curriculum is free to any who have an interest in receiving it.

---

Heidi Liss Radunovich, Ph.D.  
Assistant Professor  
Department of Family, Youth & Community Sciences  
University of Florida/IFAS Cooperative Extension Service  
Box 110310  
Gainesville, FL 32611-0310  
(352) 273-3534  
[hliss@ufl.edu](mailto:hliss@ufl.edu)

---

## References

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (Fourth Ed., Text Revision). Washington, D.C.: American Psychiatric Association.
- Belsky, J., Vandell, D.L., Burchinal, M., Clarke-Stewart, K.A., McCartney, K., & Owen, M.T. (2007). Are there long-term effects of early child care? *Child Development, 78*(2), 681-701.
- Center for Disease Control and Prevention (November, 2010). Increasing prevalence of parent-reported Attention-Deficit/Hyperactivity Disorder among children – United States, 2003-2007. *Morbidity and Mortality Weekly Report, 59*(44), 1439-1443. Retrieved from <http://www.cdc.gov/mmwr/PDF/wk/mm5944.pdf>
- Chaudry, A. (2004). *Putting children first: How low-wage working mothers manage child care*. New York, NY: Russell Sage Foundation.
- Child Development Associate Competency Standards. Retrieved September 6, 2012 from <http://www.cdacouncil.org/the-cda-credential/about-the-cda/cda-competency-standards>
- Daley, D., Jones, K., Hutchings, J., & Thompson, M. (2009). Attention deficit hyperactivity disorder in pre-school children: Current findings, recommended interventions and future directions. *Child: Care, Health and Development, 35*(6) 754-766.
- Harpin, V. A. (2005). The effect of ADHD on the life of an individual, their family, and community from preschool to adult life. *Archives of Disease in Childhood, 90*(Supplemental 1), i2-i7.
- LaForett, D.R., Murray, D.W., & Kollins, S.H. (2008). Psychological treatments for preschool-aged children with Attention-Deficit Hyperactivity Disorder. *Developmental Disabilities Research Reviews, 14*(4), 300-310.
- Lambeck, R., Tannock, R., Dalsgaard, S., Trillingsgaard, A., Damm, D., & Thomsen, P.H. (2010). Executive dysfunction in school-age children with ADHD. *Journal of Attention Disorders, 15* (8), 646-655.
- Laughlin, L. (2010). *Who's minding the kids? Child care arrangements: Spring 2005 and Summer 2006*. Current Population Reports, P70-121. Washington, D.C.: U.S. Census Bureau. Retrieved from <http://www.census.gov/prod/2010pubs/p70-121.pdf>
- Loe, I., Balestrino, M., Phelps, R., Kurs-Lasky, M., Chaves-Gnecco, D., Paradise, J., & Feldman, H. (2008). Early histories of school-aged children with attention-deficit/hyperactivity disorder. *Child Development, 79*(6), 1853-1868.
- Mackie, S., Shaw, P., Lenroot, R., Pierson, R., Greenstein, D., Nugent, T., Sharp, W., Giedd, J., & Rapoport, J. (2007). Cerebellar Development and Clinical Outcome in Attention Deficit Hyperactivity Disorder. *American Journal of Psychiatry, 164*(16), 647-655.

- McDonnell, M.A., & Glod, C. (2003). Prevalence of psychopathology in preschool-age children. *Journal of Child and Adolescent Psychiatric Nursing, 16*(4), 141-152.
- Mulligan, G. M., Brimhall, D. & Chapman, C. (2006). *Child care and early education arrangements of infants, toddlers, and preschoolers: 2001*. Washington, D.C.: U.S. Department of Education, Institute of Education Sciences (NCES 2007-039).
- NICHD Early Child Care Research Network (2005). *Child care and child development: Results of the NICHD Study of early child care and youth development*. New York, NY: Guilford Press.
- Smith, B.L. (2011). ADHD among preschoolers. *Monitor on Psychology, 42*(7), 50.
- Vaughan, B., Wetzel, M., & Kratochvil, C. (2008). Beyond the 'typical' patient: Treating attention-deficit/hyperactivity disorder in preschoolers and adults. *International Review of Psychology, 20*(2), 143-149.
- Young, S., & Amarasinghe, J.M. (2010). Practitioner review: Non-pharmacological treatments for ADHD: A lifespan approach. *Journal of Child Psychology and Psychiatry, 51*(2), 116-133.
- Zeanah, C.H. & Zeanah, P.D. (2009). The scope of infant mental health. In C.H. Zeanah (Ed.) *Handbook of infant mental health, Third Edition* (pp. 5-21). New York, NY: Guilford Press.

## Addendum

### ADHD in the Child Care Setting Pre-test\*

1. MRI studies have shown that the brains of children with ADHD are different, and the parts most affected are:

- Pre-frontal Cortex and the Cerebrum
- Pre-frontal Cortex and the Cerebellum
- Cerebrum and Cerebellum
- Corpus Callosum and Cerebellum

2. According to the DSM-IV TR, symptoms of ADHD must be present before \_\_\_\_\_.

- Age 1
- Age 3
- Age 5
- Age 7

3. According to the DSM-IV TR, symptoms of ADHD must be present in \_\_\_\_\_.

- The home setting
- The school/day care setting
- At least two settings
- At least three settings

4. Which state has the highest incidence of ADHD diagnoses?

- Nevada
- North Carolina
- New York
- North Dakota

5. ADHD is more common in \_\_\_\_\_ children than it is in \_\_\_\_\_ children.

- non-Hispanic white; African American and Hispanic
- African American; non-Hispanic white and Asian
- Asian American; non-Hispanic white and African American
- Hispanic; non-Hispanic white and African American

6. Hyperactivity and impulsivity are more common than inattention in preschool children diagnosed with ADHD.

- True
- False

7. Each of the following is a common potential side effect of ADHD medication **EXCEPT:**
- Sleep problems
  - Intestinal problems
  - Emotional problems
  - Balance problems
8. Which of the following is **NOT** something that makes it hard to indentify ADHD
- Symptoms are usually only present in one location
  - Symptoms could be similar to other disorders
  - There are no standardized assessment batteries
  - There are no age specific criteria
9. The **recommended** treatment approach for preschoolers diagnosed with ADHD includes:
- Medication and parent training
  - Parent training, behavioral intervention and school intervention
  - School intervention, medication and behavioral intervention
  - Behavioral intervention, parent training and medication
10. Which of the following interventions for ADHD should parents definitely **AVOID** trying with their child?
- Neurofeedback
  - Interactive Metronome
  - Chelation
  - Compound Herbal Preparation
- 

\*Pre- and Post-test are the same.

## **Play Without Ceasing: Mother's Involvement in Traditional Play Activities with Their Children in Ghana**

**Vivian Tackie-Oforu**

Using a phenomenological approach, this study explored parents' involvement in the play activities their children engaged in. The aim was to investigate how and why mothers supported their children ages three to six years with play activities outside the school environment. Data was derived from observation and in-depth interviews with 12 mothers from Teiman, Ghana. Major themes included 1) play as daily activity, 2) how much play is enough, 3) adults as playmates, and 4) play as house chores. Results revealed an association between participants' perceptions of play and the amount of playtime activities they engaged in with their children. Most mothers reported hardly paying attention to traditional play because they perceived it as a waste of time.

The sight and sound of children's imaginative and improvised play is gradually phasing out from many societies. Play has long been considered as activity that children engage in for the sake of pleasure without considering the end result. Children see their world as an environment that provides opportunity for exploration, discovery, and entertainment. The importance of play for the overall development and learning of a child is well documented (Palmer, 2006; Morrison, 2009; Kim Sook-Yi, 1999; Spiegel, 2008). Nevertheless, the way people perceive children's play and the attention they pay to it differ from culture to culture (Taylor, Samuelson & Rogers, 2010).

In Ghana, traditional childhood play seems unstructured, free, and may involve parents. Children use natural materials such as water, sand, natural clay, plants, leaves, sticks, stones and empty cans. One activity parents do with their children is *Oware*, a game of counting pebbles into carved wooden holes. Children also engage in the games *Tumatu* (you jump so I jump), and *Ampe* (jump and thrust one foot forward). Studies demonstrate that play contributes to the optimal development of children (Morrison, 2009) and the United Nations has gone so far as to pronounce that children have a right to play (United Nations, 2006).

### **Play and its Contribution to Child Development**

Garvey (1990) defined play as an activity which is 1) positively valued by the player, 2) self-motivated, 3) freely chosen, and 4) engaging. Play provides the opportunity for children to use their creative abilities while developing their imagination. It allows children to develop physically, cognitively, and to build emotional skills (Ginsburg, 2007). Play contributes significantly to brain development (Hurwitz, 2002). Through play, children are able to engage and interact with their environment. They learn about cultural values and expectations—play allows children to learn about themselves, about others, rules, consequences and how things work all together (Isenberg & Quisenberry, 1988). Research shows that children about the same age are not only best playmates, but they also practice social skills during play (Sutton-Smith, 1997). Sutton-Smith (1997) explained that it is typical of children between 5-6 years to

select and keep playmates and to develop social skills by managing conflicts during play activities. Children develop social skills through play with close partners.

Through pretending during play, children begin to practice adult roles (Palmer, 2006). As children play, they discover how the world works; they are able to develop new competencies that build their confidence; children learn to share, respect, tolerate, and negotiate and to resolve conflicts through play activities (Sutton-Smith, 1997). Interestingly, through initiating play, children are able to learn to make decisions and develop interests and passions (Isenberg & Quisenberry, 1988). Generally, play serves as a great source of amusement, joy, and satisfaction for children.

Studies show that play fosters language skills. For example, pretend play encourages language development as children interact in their respective roles and can use reinforcing language, for example “I see you are making nice shapes with the sand” or “I like the colours in your painting ” Garvey, 1990, p. 11). Comments as these help a child build language skills and reinforce the learning of concepts. Language is further linked with emotional development through pretend play (Morrison, 2009) as children use their imaginations to express their fears, anxieties, frustrations and other feelings. According to Ginsburg (2007), play fosters a sense of comprehension, control, and mastery. These feelings enhance a child’s sense of security.

### **Role of Parents in Children’s Play Activities**

Through play, adults are able to see inside the child’s world and to appreciate how impacts on development and learning. Parents play a significant role by encouraging children to engage in play activities. When parents engage with their children in play activities, they develop stronger relationships with each child. Although an adult’s presence may be important, it is suggested that adults encourage child-driven play, rather than impose their own input, so that they see from the child’s worldview of needs and expectations (Ginsburg, 2007). Additionally, the adult’s presence in the child’s life during play sends signals to the child that the child is important and that parents value the activities that the child is engaging in. Parents get the opportunity to understand their children better and to learn to communicate with them in ways that enhance their development, and can ultimately help them address some of their frustrations (Palmer, 2006).

Research has shown that parental involvement in learning activities, such as play in the home, is closely associated with better cognitive attainment in the early years (Desforges & Abouchaar, 2003). Adults facilitate children’s creative play activities when they provide a stimulating environment and materials, give children time to generate new ideas, and encourage children even as they make mistakes (Erickson, 1985). Additionally, McCollum & Ostrosky (2008) provided three pathways by which parents could support children’s development of peer relationships during play 1) positive parent-child interactions during activities, 2) acting as supervisors, coaches, and advisors; and 3) providing social opportunities. Parents play a critical role in expanding and supporting children’s play in terms of making suggestions and providing assistance to children during play activities (Vygotsky, 1962).

### **Parents’ Involvement in Play with Their Children**

A recent survey conducted in the United Kingdom with 2,000 parents and 2,000 children reported that one in ten parents interviewed said they felt that their children perceived traditional playtime as dull and a waste of time (Byron, 2010). One in five parents said they had forgotten how to play with their children because they perceived their jobs as more important than time spent with children. Byron identified four key elements necessary for successful playtime between parents and their children, namely: education, inspiration, integration, and communication. He concluded that play was in danger of becoming a lost art in British families.

Several researchers have found that increasingly hurried and pressured lifestyles result in parents paying less attention to children's play (Ginsburg, 2007; Gauthier, 2004; Fisher, 1992). Desforges & Abouchaar (2003) argued that if children are to maximize their potential for optimal development, they need the full support of parents encouraging play (Desforges & Abouchaar, 2003).

### **Children's Play in Ghana**

The situation of lost traditional playtime is not far from becoming a reality in Ghana. It is generally observed, particularly by Family and Consumer Sciences extension professionals, that children in some communities are receiving less attention from parents, in terms of play activities. Traditionally Ghanaian women worked at home and engaged with their young children spontaneously. However, mothers now spend more time working outside the home and spend less quality time with their children. The concern of Family and Consumer Sciences professionals is the tendency of these children to spend more and more time in front of televisions, videos, and computer games—and for the most part, parents are not at home to supervise. Children are losing their connections with the natural environment because they are engaging less and less with outdoor activities which enhance physical development and learning. Ghanaian children are losing their relationship with the environment and nature—their sense of identity with their environment. The concerns are congruent with those Sue Palmer identified in her book, *Toxic Childhood*, in which she comments that loss of opportunities for outdoor play has a long term effect on children's physical, emotional and social development (Palmer, 2006).

### **Objectives**

The objectives of this study were to 1) assess parents' understanding of play, 2) determine how children engaged in traditional play, and 3) identify activities parents did with the children during play.

### **Method**

The objectives of the study informed the research design—a phenomenological, explorative, and descriptive design allowing for participants to share experiences and feelings regarding their perceptions and involvement in their children's play activities (Giorgi & Giorgi, 2003; Mile & Huberman, 1994). The study took place in Teiman, Ghana, a rural community near the University of Ghana, Legon, located in Accra, Ghana through the Family and Consumer Sciences Extension program. Participants were drawn from a purposive sample, based on the following set criteria: first, parents must have young children ages three to six years; second, both mother and father must work outside the home and have lived in the community for at least one year; and third, children must live with their biological mother and not extended family members or house-helpers. (In a cultural setting like Ghana it is common for children to live with other relatives to attend school.)

The population for the study consisted of 12 mothers of young children ages three to six years. The study originally targeted both mother and fathers, but when the interviews were conducted, fathers did not make themselves available, so the study focus was reframed. In order to address the issue of validity and trustworthiness, Trochim (2007)'s model was applied. The importance of the model lies in its description of truth value for qualitative research as a way of ensuring trustworthiness and rigor. Trochim (2007) used four criteria for addressing truth value, namely, internal validity (credibility), applicability (transferability), consistency (dependability), and objectivity (conformability). To enhance triangulation of the data, verbatim

responses from the interview were used and literature was also used to discuss the results. A detailed description of method was provided to ensure transferability. Also, reflective field notes were taken as part of the data collection.

### **Data Collection**

In-depth interviews were conducted with 12 mothers who shared their experiences of involvement with their children during play. The sample selected was based on Guest, Bunce & Johnson's (2006) research on "saturation point" which suggests that in qualitative research, by the time 12 participants have been interviewed, it is not likely that any new or fresh ideas will come up. The interviews were conducted using participant's own language, Ga, the local dialect spoken in the Teiman, Ghana.

### **Analysis of Data**

To analyze the data, a content analysis approach was adopted. Interview notes were read literally, interpretively, and reflexively several times to obtain a sense of the whole—words, language, and sequence of interaction notes. A list of topics was made, and similar topics were grouped together and codes were assigned. Emerging themes were identified, their inter-relationships noted, and the most descriptive wording for the topic was used for the grouping.

## **Results**

Results of the study revealed four main themes 1) play as daily activity, 2) how much play time is enough, 3) adult play as coaching, and 4) play as house chores. Results are summarized within these constructs (Figure 1).

### **Play as Daily Activity**

Study participants indicated that children engaging in daily play activities turned everything they did into fun. Children created fun with every opportunity they had. Their responses suggested that children explored their environments and derived meaning and interest in what they did as play. One mother remarked:

Ama makes soapy water when taking her bath in the morning. She blows bubbles from the water, forgetting that she has to hurry to school.

Another mother said:

Aku is playing all the time. She would turn her banku (maize meal) into human shape and stick the tiny fish on the finger before she dips it into the pepper sauce. She wastes a lot of time during meal time.

These results suggest that children enjoy, have fun, and value ordinary activities they engage in. Children demonstrated their creative ability with every little opportunity they got. This result was consistent with the observation of Garvey (1990) that play is spontaneous and voluntary, or in other words, no one forces a child to play—play is freely chosen.

### **How Much Play Time Is Enough?**

The results of the study suggest that mothers were not certain as to the duration of time

their children should play at any given time or period. This was evident in the way the mothers were concerned about their children playing all the time, instead of engaging in so-called “important” activities such as learning to read and write. The results indicated that some mothers did not appreciate play as a means through which children learned. This result was unfortunate as play is such a useful means of learning and overall development for young children.

Adults, particularly parents, have a responsibility to foster children’s play and to help children develop their potentials by providing stimulation and support without placing a time limitation during play (it is important, however to help children understand other daily routines such as getting ready for school). A mother demonstrated her concern in the following response:

Kwaley likes playing too much. You’d never see her take a book and read it after school. She doesn’t know when to stop playing; she sits in the sand playing entokruku (pretend cooking) all day.

Another mother expressed her frustration regarding how the child’s life was characterized with play activities:

I don’t know what to do with Shormey. Her life is filled with play all day—morning, afternoon, evening! I’m concerned because this would affect her school work. I want my children to do well in school. She is going to start class one (1<sup>st</sup> grade) so tell me, when will she know that “shwemo fa” (translated as play) is enough?

### **Adults as Playmates**

Results revealed that participants had mixed concerns regarding play activities with their children. Most of the responses suggested that mothers had concerns about providing basic needs such food and for that reason had to leave home to secure what the family would eat. Thus, playing with their children was considered as an issue that their children could handle themselves, by playing with their peers. During play activities, children practiced culturally appropriate skills and also gained perspectives of their world as children. Some mothers in the study, however, did not perceive themselves as playmates because of their responsibility to stay away from home to provide material support for their children. One woman said:

I leave the house early in the morning to fend for the family. I have to provide food. When I return in the evening, it’s not time to play. My child has his playmate. He doesn’t wait for me to play. Look, you play when you’ve solved your house problem [e.g., family issues, providing for the family, etc.].

A similar view was captured as:

When I return from the market, I am too tired to play. Moreover, what my children like to do for play, they don’t need adults as partners. Mothers have a lot on their minds. I hear that play is good so children can watch what adults do, so they can do the same on their own.

## Play As House Chores

Most participants were of the view that culturally, one way children learn and gain useful skills is through coaching or mentoring when they help with household chores. Mothers, therefore, engaged their children in chores as a way of mentoring them. That way, the children naturally acquired these skills. According to the mothers in the study, doing chores with their child was considered as doing activities with them, which implied playing with the child. This view was expressed as follows:

Whenever I'm sweeping the house, she sweeps with me, helps in the kitchen, goes with me to fetch water. She is always happy doing these things with me. I think it is better than playing with friends when I am not there to see what they do.

Results suggest that some mothers understand that children learn through imitation. The responses fall in line with what Taylor et al. (2010) found about how different cultures view play differently. Most mothers in this study seemed to be limiting their children to activities relating to coaching during household chores. This may be useful but restrictive in the sense that it provides parent-child interaction in relation to house work that usually involves mentoring, but does not directly address play. McCollum & Ostrosky (2008) suggested that parents can act as supervisors when their children play with their peers. That way parents understand and value play as they pay attention to play activities their children engage in. It is also likely that parents who perceive play as critical to the developmental needs of children may offer play varied opportunities to support their children.

**Figure 1.** Summary of Play-related Results

Themes	Number of References	Examples
Play as a Daily Activity	10	"Ama makes soapy water...and blows bubbles from the water."
How Much Play is Enough?	9	"Kwaley doesn't know when to stop playing."
Adults as Playmates	11	..They don't need adults as play partners.
Play as House Chores	12	"Whenever I am sweeping the house, she sweeps with me."

### Summary

In this study, mothers worked outside the home and had little interaction with their children in terms of play. Results revealed that mothers were concerned that their children played most of the time. Mothers resented the idea that children played at the expense of academic work. They wanted their children to get serious with homework, such as reading and writing, when they returned from school. Responses indicated that mothers were more interested in their child's memorization of facts than their development of creative and problem solving skills. Participants' responses revealed that they were concerned about their children engaging with other children while playing in the community. Mothers seemed uncomfortable with their children participating in outdoor activities at the expense of academic activities. Some mothers, however, appreciated the role of play in the growth of children. They used coaching

as a means to support children and as a means of involvement in the play activities of their children.

For the past 40 years, the University of Ghana Family and Consumer Sciences Extension Program has targeted rural families in communities near the university to share research-based information and improve the well-being of family members. Programming is facilitated by faculty and students as part of their final year Bachelor of Science degree program. Assessment information is used to improve the program content and for future research. Since this study was born as a result of reflection of Family and Consumer Sciences extension activities in the study community, the results are critical for program planning for University of Ghana FCS outreach programs. Although results are not widely generalizable (considering the culture-specific nature of this study), the literature review will inform all audiences of the importance of children's play and suggest similar research on parent's perceptions of children's play among other cultures.

---

Vivian Tackie-Ofosu (BSc, M.Phil, MPA)  
University of Ghana  
Department of Family and Consumer Sciences  
P.O. Box 91  
Legon, Ghana  
244-244-506-908  
[vtackie-ofosu@ug.edu.gh](mailto:vtackie-ofosu@ug.edu.gh)

---

## REFERENCES

- Bryon, T. (2010). Parents have forgotten how to play with their children study, UK. Guardian News and Media. Accessed from <http://www.guardian.co.uk/lifeandstyle/2010/aug/26/parents-children-playtime>
- Desforges, C. & Abouchaar, A. (2003). The impact of parental involvement, parental support and family education on pupil achievements and adjustment: Literature Review *Research Report. School Psychology Review* 33(3). 429-443.
- Erickson, R. J. (1985). Play contributes to the full emotional development of the child. *Education*, 105, 261–263.
- Fisher, E. P. (1992). The impact of play on development: A meta-analysis. *Play and Culture*, 5(2), 159-181.
- Garvey, C. (1990). The modals of necessity and obligation in children's pretend play. *Play and Culture* 3, 206-218.
- Gauthier, A. H., Smeeding, T. M. and Furstenberg, F. F. (2004). Are parents investing less time in children? Trends in selected industrialized countries. *Population and Development Review*, 30(4), 647-671.
- Giorgi, A. & Giorgi, B. (2003). Phenomenology. In J.A.Smith (Ed.), *Quantitative psychology: A practical guide to research methods*. London: Sage.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182–191.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18, 59-80.
- Hurwitz S.C. (2002). To be successful: Let them play! *Child Education*, 79, 101–102.
- Isenberg, J. Quisenberry, N.L. (1988). Play: A necessity for all children. *Child Education*, 64, 138–145.

- Kim, Sook-Yi. (1999). The effects of storytelling and pretend play on cognitive processes, short-term and long-term narrative recall. *Child Study Journal*, 29(3), 175-191.
- McCollum, J. A. and Ostrosky, M. M. (2008). Family roles in young children's emerging peer-related social competence. In William H. Brown, Samuel L. Odom, & Scott R. McConnell (Eds.), *Social competence of young children: Risk, disability, and intervention*, 31-60. Baltimore, MD: Paul H. Brookes.
- Mile, M. & Huberman, A. (1994). *Qualitative Data Analysis: An Expanded Sourcebook of Ethnography*, (2<sup>nd</sup> ed.) London: Sage.
- Morrison, G. S. (2009). *Early childhood education today* (11<sup>th</sup> ed.). Upper Saddle River, NJ: Merrill.
- Palmer, S. (2006) How the Modern world is damaging our children and what can we do about it. UK:Orion Publication.
- Spiegel, A. (2008, February 21). Old-Fashioned play builds serious skills. National Public Radio. Retrieved from <http://www.npr.org/templates/story/story.php?storyId=19212514>
- Sutton-Smith, B. (1997). *The ambiguity of play*. Cambridge M. A: Harvard University Press.
- Taylor, S.I., Samuelson, I.P., and Rogers, C.S. (2010). Perspectives of play in three nations: A comparative study in Japan, the United States, and Sweden. *Early Childhood Research Practice*. Retrieved from <http://ecrp.uiuc.edu/v12n1/izumi.html>
- Trochim, W.M.K. (2007). *Research Methods*, (2<sup>nd</sup> ed.) Briztantra, New Delhi.
- United Nations. (2006). Convention on the Rights of the Child. General Assembly Resolution 44/25 of 20
- Office of the United Nations High Commissioner for Human Rights. (1989, November). Retrieved from [www.unhcr.ch/html/menu3/b/k2crc.htm](http://www.unhcr.ch/html/menu3/b/k2crc.htm)
- Vygotsky, L.S. (1962). *Thought and language*. Cambridge, MA: MIT Press.

## SNAP-Ed Participants Increase Fruit and Vegetable Consumption

Heidi LeBlanc, Susan Haws, Nedra Christensen,  
Darlene Christensen and Debra Christofferson

Benefits of consuming fruits and vegetables are documented, yet more than 75 percent of Americans do not eat the recommended servings advised by the current Dietary Guidelines for Americans and MyPlate. Through a self-reported post/pre behavior checklist, the Utah State University Supplemental Nutrition Assistance Program–Education (SNAP-Ed) demonstrated an increase in fruit and vegetable consumption in low-income individuals through consistent education incorporating four or more lessons over a period of five years.

The 2010 Dietary Guidelines for Americans describe a healthy diet as one that focuses on fruits, vegetables, whole grains, and fat-free, or low-fat milk and milk products. The newly unveiled icon, MyPlate, ([www.choosemyplate.gov](http://www.choosemyplate.gov)), recommends to “make half your plate fruits and vegetables” (U.S. Department of Agriculture, 2011). According to these guidelines, there are three main reasons for the recommendation of increased intake of fruits and vegetables:

- 1) Most fruits and vegetables provide a high amount of several of the nutrients Americans do not consume in a sufficient amount. These nutrients include folate, magnesium, potassium, dietary fiber, and vitamins A, C, and K.
- 2) The reduced risk of many chronic diseases is linked to consumption of the recommended amount of fruits and vegetables. By eating at least two cups of fruits and/or vegetables a day, participants reduce the risk of heart disease, stroke, and cancer.
- 3) A majority of fruits and vegetables are naturally low in calories. Eating them without the addition of fats and sugars, instead of calorie rich foods, will assist in achieving and maintaining a healthy weight for both adults and children.

Despite well-known health benefits of fruits and vegetables, the average American does not consume the recommended amount (U.S. Department of Health and Human Services, U.S. Department of Agriculture, 2010). According to the Behavioral Risk Factor Surveillance System, only 23% of Americans eat five or more servings of fruits or vegetables a day (U.S. Center for Disease and Control). Many low-income individuals understand that eating healthy is important, but mistakenly believe that it is cost prohibitive (Wenrich, 2010). A barrier to low-income participants purchasing and consuming fruits and vegetables is their perceived high cost (Blisard and Stewart 2006; Frazao, Andrews, Smallwood, Prell. 2007; Guthrie et al. 2007).

The Supplemental Nutrition Assistance Program–Education (SNAP-Ed) focuses on four elements of the 2010 Child Nutrition Reauthorization Act, signed by President Obama in December 2010. These are 1) provide education to low-income populations, 2) focus on the issue of obesity, 3) promote healthy food choices consistent with the Dietary Guidelines for Americans, and 4) provide evidence-based and outcome driven activities. The Utah State

University (USU) SNAP-Ed program goal is to increase the likelihood that low income individuals, or eligibles, who qualify for the Supplemental Nutrition Assistance Program (SNAP, also known as Food Stamps) will make healthy food choices within a limited budget and choose physically active lifestyles consistent with the current Dietary Guidelines for Americans and MyPlate.

### **Purpose**

The objective of this study was to increase consumption patterns of fruits and vegetables in low-income participants through teaching participants menu planning, selection, purchasing, and preparation of fruit and vegetables.

### **Methods**

Participants in Utah SNAP-Ed study were recruited by word of mouth, agency referrals, and local advertisements. In addition, the Department of Workforce Services provides an Extension Nutrition Letter which lists those eligible to participate. This list is used by Nutrition Education Assistants (NEAs) to recruit SNAP participants.

SNAP-Ed participants were taught to improve their overall health by increasing fruit and vegetable consumption. The skills taught included how to purchase and prepare fruits and vegetables consistent with the food budget of a low-income family. A behavior checklist was created to collect data on fruit and vegetable consumption and 778 eligible adults participated. Over a five-year period. After they completed lessons, the participants completed a post/pre behavior checklist. Behavior checklists have been validated through the National Expanded Food and Nutrition Education Program (EFNEP), and adopted by Utah State University's SNAP-Ed program.

The behavior checklist compared respondent's perceived behaviors before and after participating in SNAP-Ed. This study focused on fruit and vegetable data pulled from the behavior checklist. Questions analyzed on a five point likert scale were 1) Prior to Food \$ense, I ate at least 2 cups of fruits a day; 2) Prior to Food \$ense, I ate at least 2 ½ cups of vegetables a day; 3) Now I will eat at least 2 ½ cups of vegetables a day; and 4) Now I will eat at least 2 cups of fruits a day. The Remark Scanning Program reduced the time spent entering data and improved the accuracy of data input. Using Excel Spreadsheet, the means and standard deviations were calculated for participant's daily consumption of fruits and vegetables before and after they had completed at least four SNAP-Ed lessons. Differences between pre- and post- consumption were analyzed using Excel.

Nutrition education lessons focused on the current dietary guidelines and incorporated practical experiential learning activities that reinforced nutrition education concepts and taught skills that enabled participants to eat healthy within a limited budget. Lessons were taught in English, face-to-face, and in individual or group settings. Although there were a variety of curricula that could have been selected, each curriculum taught basic nutrition education following the current Dietary Guidelines for Americans. Nutrition Education Assistants collected interest surveys which were used to determine which curricula were best suited for each participant or group. The curricula were designed to provide a consistent message to improve health through increased consumption of fruits and vegetables. Figure 1 shows the delivery method for Nutrition Education Assistants. Figure 2 shows the curricula that were implemented.

### **Results**

Participants in the Utah SNAP-Ed program reported an increased daily consumption of fruits (Table 3) and vegetables (Table 4) following the completion of at least four lessons from

the Utah SNAP-Ed curricula. This increase in intake was significant, nearly doubling the amount of fruit and vegetable consumption across all five years (2007-2011) of behavioral data. For the five-year time span, the average daily fruit intake for Utah SNAP-Ed participants was 2.018 servings of vegetables per day at pre-program, whereas, by the completion of the SNAP-Ed curricula, the average intake of fruit was 2.964. Also, average intake of vegetable intake for Utah SNAP-Ed participants was 1.874 servings of vegetables per day at pre-program, whereas, by the completion of the SNAP-Ed curricula the average intake of vegetables was 2.922. Each year reflected consistent data which emphasized that fruit and vegetable consumption increased after participation in the Utah SNAP-Ed program.

## Discussion

Participants who received four or more educational Utah SNAP-Ed lessons from the selected curricula reported incorporating more fruits and vegetables into their diets over a five year period. The authors found that consistent education available through SNAP-Ed programs influenced the behavior of participants in making healthy food choices—findings that correlate with previous studies (Produce for Better Health Foundation, 2011). The behavior checklist helped indicate what behaviors could be improved through Utah SNAP-Ed nutrition education. Limitations of this study included 1) possible self-reporter bias, 2) multiple variables due to various curricula, 2) not tracking specific lessons completed by individuals, and 3) lack of a control group.

The authors focused on fruit and vegetable education through select curricula to remind and teach participants how they could eat fruits and vegetables on a limited budget. This educational focus demonstrated that low-income individuals who participated in the Utah SNAP-Ed program improved fruit and vegetable consumption.

---

Heidi LeBlanc, MS, CFCS  
Extension Associate Professor  
Food \$ense Director  
Utah State University  
Nutrition Dietetics, and Food Science and Extension  
SNAP-Ed  
8749 Old Main Hill  
Logan, UT 84322-8749  
(435) 797-3923  
[heidi.leblanc@usu.edu](mailto:heidi.leblanc@usu.edu)

---

## References

- Blisard, N., Stewart, H. (2006, August). *How low-income households allocate their food budget relative to the cost of a thrifty food plan*. USDA Economic Research Report Number (ERR-20), 29. Retrieved from <http://www.ers.usda.gov/publications/err20/err20.pdf>
- CDC (2011). Behavioral risk factor surveillance system. U.S. Centers for Disease Control and Prevention. Retrieved from

- <http://apps.nccd.cdc.gov/BRFSS/display.asp?cat=FV&yr=2009&qkey=4415&state=UB>
- Conway, C., Kennel, J., & Zubieta, A. (2010). *Assessing optimal nutrition education dosage and long-term behavior change retention in SNAP-Ed participants*. Ohio State University, Department of Human Nutrition & Ohio State University Extension. Retrieved from [http://192.73.224.129/nea/food/fsne/pdfs/ohio\\_improv\\_SnapEd\\_ACZ\\_Fin.pdf](http://192.73.224.129/nea/food/fsne/pdfs/ohio_improv_SnapEd_ACZ_Fin.pdf)
- Frazao, E., Andrews, M., Smallwood D., & Prell, M. (2007). Food spending patterns of low-income households: Will increasing purchasing power result in healthier food choices? *U.S. Department of Agriculture Economic Information Bulletin Number 29-4*. Retrieved from <http://ageconsearch.umn.edu/bitstream/59430/2/eib29-4.pdf>
- Guthrie, N., Lin, B., Ver Ploeg, M., Frazao, E., & et al. (2007, September). Can SNAP do more to improve food choices? An Economic Perspective. *U.S. Department of Agriculture, Economic Information Bulletin No. 29*. Retrieved from <http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib29.aspx>
- Produce for Better Health Foundation. (2011). Fruits, vegetables, and behavior change: A scientific overview, 2011. *Produce for Better Health Foundation*. Retrieved from [http://www.pbhfoundation.org/pdfs/about/res/pbh\\_res/PBH\\_Behavior\\_Change\\_Review.pdf](http://www.pbhfoundation.org/pdfs/about/res/pbh_res/PBH_Behavior_Change_Review.pdf)
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2010). *Dietary Guidelines for Americans*. (2010). Retrieved from <http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf>
- U.S. Department of Agriculture, (2011). Center for Nutrition Policy and Promotion. (2011). Choose my plate. Retrieved from [www.choosemyplate.gov](http://www.choosemyplate.gov)
- Wenrich, T., Brown, J., Miller-Day, M., Kelley, K., & Lengerich, E. (2010). Family member's influence on family meal vegetable choices. *Journal of Nutrition Education Behavior*, 42(4), 225-234.

**Table 1.** Self-Reported Daily Fruit Servings by Utah SNAP-Ed Participants

Year	No.	Pre- program Mean and Standard Deviation	Post-program Mean and Standard Deviation	P-value
2007	93	1.95 ± 1.57	3.0 ± 0.96	≤0.00
2008	109	1.97 ± 1.32	2.81 ± 0.70	≤0.00
2009	183	2.05 ± 1.53	3.03 ± 0.75	≤0.00
2010	180	2.01 ± 1.39	2.94 ± 0.82	≤0.00
2011	217	2.11 ± 1.29	3.04 ± 5.44	≤0.00

**Table 2.** Self-Reported Daily Vegetable Servings by Utah SNAP-Ed Participants

Year	No.	Pre- program Mean and Standard Deviation	Post-program Mean and Standard Deviation	P-value
2007	88	1.71± 1.47	3.09 ± 1.34	≤0.00
2008	110	1.81 ± 1.09	3.0 1 ± 0.53	≤0.00
2009	179	1.91 ± 1.18	2.84 ± 0.83	≤0.00
2010	180	1.83 ± 1.29	2.88 ± 0.95	≤0.00
2011	221	2.11 ± 1.29	2.79 ± 1.07	≤0.00

**Figure 1.** Utah SNAP-Ed Curricula Delivered by Nutrition Education Assistants (NEAs)

Curricula Format	Description
How delivered	The program may be delivered in individual or group lesson format by NEA through face-to-face instruction. Each lesson provides interactive communication with hands-on learning objectives.
Where delivered	Location of lessons may include adult education and learning centers, rehabilitation centers, churches, community centers, elderly service sites, emergency food assistance sites, county extension offices, farmer’s markets, SNAP offices, food stores, Head Start Programs, homes, libraries, public/community health centers, public housing, schools, shelters, WIC offices, worksites, and other locations where the target audience may congregate.
Duration	Participants may sign up to take between 1- 10 lessons, depending on need and interest. Each lesson takes between 30 minutes to one hour to complete and includes a hands-on activity or demonstration. Data is only collected on those taking 4 or more lessons.
Projected no. of participants	A subsample of approximately 10% of the participants completed the behavior checklist and were included in the results for the fruit and vegetable section.
Frequency of contact	SNAP-Ed requires a Education and Administrative Reporting System (EARS) emphasizing lessons over 4 as a ideal frequency for a completed program. Research indicates this timeframe gives the participant time to concentrate on behavior change without losing interest in the message or NEA. However, contact may be quite involved if the participant chooses to receive more than 4 lessons in a one-on-one teaching format or it could be minimal if the participant only chooses to attend one group lesson. (Conway, 2010)
Key educational messages	Cook and eat more whole grains, fruits, and vegetables; choose lean proteins, low-fat dairy products, and heart-healthy fats; be physically active; make wise food choices with available resources.

**Figure 2.** SNAP-Ed Curricula for Increasing Fruit and Vegetable Consumption

Curricula	Age/ Grade	Description	Lessons
Food \$ense Basics	Adults	Curriculum comprised of 9 lessons based on the 2010 Dietary Guidelines and MyPlate.	Dietary Guidelines and MyPlate Menu Planning and Shopping Food Safety Grains Fruits and Vegetables Milk and Dairy Foods Protein Foods Feeding Infants and Preschool Children Gardening Basics
Food \$ense Vegetables, Food \$ense Fruits, and Food \$ense Grains	Adults	Curriculum based on one in-season vegetable, fruit, and/or grain per month.	All lessons are available online at <a href="http://www.extension.usu.edu/fsne">www.extension.usu.edu/fsne</a>
Loving Your Family, Feeding Their Future (LYF)	Adults	Curriculum that supports the following behaviors; Eat fruits and vegetables, whole grains, and fat-free or low-fat milk and milk products every day; be physically active every day as part of healthy lifestyle; balance calorie intake with calories expended.	Family Meals Fruits and vegetables How Much: Food and Physical Activity Family Time: Active and Fun
Eat Smart Live Strong	Older Adults	Curriculum developed for able-bodied, independent, older adults, designed to improve fruit and vegetable consumption and physical activity among 60-74 year olds who are SNAP eligible.	Reach Your Goals, Step by Step Challenged and Solutions Colorful and Classic Favorites Eat Smart, Spend Less

## SNAP-Ed Improves Food Safety Practices through Nutrition Education

Debra Christofferson, Karin Allen,  
Janet Smith and Heidi LeBlanc

Snap-Ed nutrition education classes and food demonstrations allow for observation and modeling of correct food safety practices. Through the Utah State University's Supplemental Nutrition Assistance Program-Education (SNAP-Ed), low-income participants completing four or more nutrition education lessons completed a retrospective post/pre behavior questionnaire. Results demonstrated increased intent to follow food safety practices by properly cooking, chilling, and separating food items, as well as properly cleaning food preparation surfaces.

The Centers for Disease Control and Prevention (CDC) estimates that 47.8 million cases of foodborne illness occur annually in the United States, with 9.4 million cases caused by known pathogens (Scallan et al., 2011a), and 38.4 million cases from unknown or unidentifiable foodborne sources (Scallan, Griffin, Angulo, Tauxe & Hoekstra, 2011b). According to Shapiro, Porticella, Jiang, & Gravani (2011), 20% of officially reported and traceable cases occurred in the home, but the true impact of home-caused foodborne illness is believed to be much greater, as these cases involve fewer people and are much less likely to be investigated by health officials (Knabel, 1995; Redmond & Griffith, 2003). Only 15% of consumers surveyed considered home kitchens to be the most likely source of food contamination (USDA, 2002). Annual costs associated with foodborne illness are estimated at \$77.7 billion annually in the U.S. alone (Scharff, 2012), due to medical care and time missed at work (Medeiros et al., 2001). For low-income families, the financial burden from lost wages and increased medical costs presents a considerable hardship.

The United States Department of Agriculture (USDA, 2002) reported that despite improvements in basic food handling practices over a five year period, consumers continued to rely on media outlets, including cooking programs, for their food safety information. Many consumers tended to be wary of information from "official" sources, relying on information from cookbooks instead of government publications or food labels (Buzby and Ready, 1996), and television news reports rather than government websites (USDA, 2000). Jacob, Mathiasen and Powell (2010) suggested four main aspects to consider in developing an effective, consumer-oriented food safety program 1) understanding the target audience, 2) creating and repeating a reliable and relevant message, 3) ensuring clarity, and 4) testing and evaluation.

The USDA (2000) study found that 75% of consumers were unfamiliar with the term "cross-contamination." In an observational study of 106 households, these behaviors were identified as the most common "critical violations" (those that could directly result in foodborne illness), with 76% of households failing to prevent the potential for cross-contamination of foods, and 57% failing to practice proper handwashing (Daniels, 1998). After attending SNAP-Ed classes in which these behaviors were modeled, significant increases ( $p < 0.05$ ; Figure 1) were observed for participants' separation and handwashing behaviors across all five years.

A recent study of Women, Infants and Children (WIC) program participants found reliable food safety information could be delivered effectively via computer kiosks, with 95.5% of participants reporting they agreed or strongly agreed with the statement that they, "learned a lot

from the program” (Trepka et al. 2010). Programs such as SNAP-Ed), where participants interact with paraprofessionals who are more likely to be seen as peers, offer a unique opportunity to reinforce food safety practices by direct observation of food preparation and demonstrations during nutrition lessons.

SNAP-Ed employs paraprofessional Nutrition Education Assistants (NEAs) to teach basic nutrition education to low-income consumers, including menu planning, sensible food shopping, and food preparation skills. NEAs are given extensive training to help them become effective educators/teachers, which includes instruction in 1) using proper and acceptable food safety practices; 2) differentiating between food borne infections and intoxications, 3) following the four steps identified in the online program *FightBac!* (i.e., Clean, Separate, Cook, Chill); 4) recognizing and avoiding natural toxicants in foods during food preparation; 5) identifying types and uses of pesticides and how to handle them safely around food; 6) understanding regulations governing additives and the difference between direct (intentional) and indirect food additives; and 7) knowing how to choose and store fresh, frozen, and canned products.

Curriculum used by SNAP-Ed supports the MyPlate 2010 Dietary Guidelines for Americans, and the four *FightBac!* Recommendations mentioned above to keep food safe. Through lessons and demonstrations, SNAP-Ed participants are repeatedly exposed to correct food safety practices. Information on how to prevent cross-contamination and bacterial growth by keeping food preparation and cooking surfaces clean and following proper cooking and chilling recommendations is taught throughout the series. Lessons on Fruit and Vegetables cover storage and safe handling. Meat and Protein lessons focus on proper ways to defrost, handle, and cook meat products safely. The lesson on Menu Planning and Shopping teaches how to prevent cross-contamination during the purchasing process, as well as through proper food storage.

### **Purpose**

This article demonstrates that low-income adults participating in four or more SNAP-Ed lessons show increased intent to follow proper food safety practices for cooking, chilling, separating food items, and cleaning food preparation surfaces.

### **Method**

Trained NEAs used a variety of methods to recruit adult SNAP-Ed participants including word of mouth, agency referral, confidential Utah SNAP participation lists, and local advertisements. Participants were taught up to ten lessons, depending on individual need, desire, and circumstance. After participating in a minimum of four lessons, individuals completed a retrospective post/pre behavior questionnaire consisting of 20 statements. NEAs were instructed to encourage all participants to complete the retrospective post/pre behavior questionnaire; participation was strictly voluntary. Participants who chose to complete the behavior change questionnaire were instructed to reflect back before they participated in the SNAP-Ed lessons and rate their behaviors for each statement as “never, seldom, sometimes, usually, or always.” They then used the same rating scale to indicate behaviors they would implement as a result of what they learned (e.g., refrigerate meat and dairy within two hours of shopping, thaw frozen foods such as meats in the refrigerator, wash hands before food preparation or eating, prepare raw foods separately from other foods). Data collected from questionnaires was processed using the Remark® Scanning System, following a Likert scale (i.e., 1 = never; 2 = seldom; 3 = sometimes; 4 = usually; and 5 = always). Responses were coded numerically. Paired t-test analysis of responses for post- and pre-behaviors was conducted using Systems Analysis Software, SAS version 9.2.

## Results

The sub-sample of participants who chose to complete the retrospective post/pre behavior questionnaire represented a sample of five to ten percent of total participants in the Utah SNAP-Ed program annually. Among those surveyed, there was a significant ( $p < 0.05$ ) increase in the four core food safety practices (i.e., Clean, Separate, Cook, Chill) after completing at least four curriculum lessons in the SNAP-Ed program (Table 1).

This increase in safe food preparation practices was consistent across five years (2007-2011) of behavioral questionnaire data collection (Figure 1). Though the data collection methods used did not allow a determination of whether a given individual had participated in the formal food safety lesson, the likelihood that all respondents received this lesson is small. In 2007, only 668 participants out of 7646 (8.7%) attended the formal food safety lesson, as did 434 out of 8391 (5.2%) in 2008, 524 out of 10,655 (4.9%) in 2009, 365 out of 11,399 (3.2%) in 2010, and 610 out of 13,424 (4.5%) in 2011. Therefore it is assumed that changes in food safety practices were adopted whether respondents attended the formal food safety lesson or not.

## Discussion

Food Safety practices were stressed, observed, modeled, and taught through nutrition lessons and demonstrations. Results of the post/pre behavior questionnaire indicated that SNAP-Ed participants in Utah did not need a formal food safety lesson to improve food safety practices. Participants increased acceptable food safety practices by observing the proper precautions and methods demonstrated by NEA paraprofessionals while delivering nutrition lessons and food demonstrations. These results were consistent with previous research demonstrating that consumers are more likely to adopt safe food practices if the message is delivered in a manner that focuses on practice-specific information, uses non-technical language, and can be reinforced regularly (Jacob, Mathiason & Powell, 2010).

As a result of this study, current data collection methods have been modified so detailed information regarding specific classes attended can be obtained. Additionally, to avoid confounding variables, a more specific, retrospective post/pre behavior questionnaire will be administered after every SNAP-Ed lesson to identify how many total lessons each respondent has participated in.

In conclusion, participants who received four or more educational SNAP-Ed classes, including those without an actual food demonstration, gained the confidence and understanding of basic food safety practices that will help them and their families keep their food supplies safe and help improve health by minimizing the risk of foodborne illnesses resulting from home food preparation. Thus, the consistent education available through SNAP-Ed programs can influence food health through food safety for low-income participants.

---

Debra Christofferson, MDA, RD  
Research Assistant Professor  
Assistant Food Sense (SNAP-Ed) Director  
Utah State University Extension  
8749 Old Main Hill  
Logan, UT 84322-8749  
435-770-8239  
debra.christofferson@usu.edu

---

## References

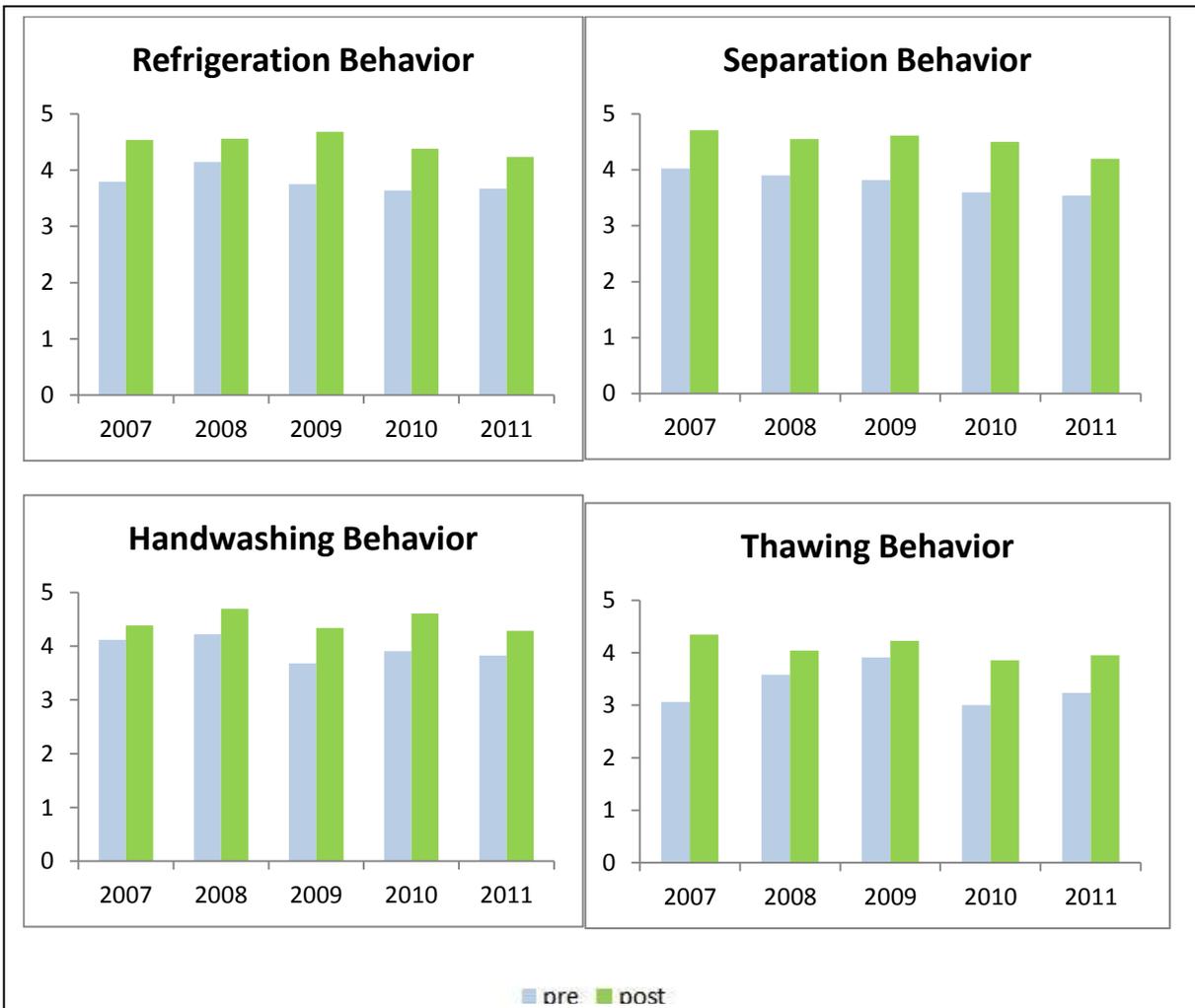
- Daniels, R.W. (1998). Home food safety. *Food Technology*, 52(2), 54-56.
- Jacob, C., Mathiasen, L., & Powell, D. (2010). Designing effective messages for microbial food safety hazards. *Food Control*, 21, 1-6.
- Knabel, S.J. (1995). Foodborne Illness: Role of home food handling practices. A Publication of the Institute of Food Technologists' Expert Panel on Food Safety and Nutrition. *Food Technology*, 49(4), 119-131.
- Medeiros, L.C., Hillers, V.N., Kendall, P.A., Mason, A. (2001). Food safety education: What should we be teaching to consumers? *Journal of Nutrition Education*, 33(2), 108-113.
- Redmond, E.C., Griffith, C.J. (2003). Consumer food handling in the home: A review of food safety studies. *Journal of Food Protection*, 66, 130-161.
- Scallan, E., Hoekstra, R., Angulo, F., Tauxe, R., Widdowson, M., Roy, S. Jones, J.L., Griffin, P.M. (2011a). Foodborne illness acquired in the United States – Major pathogens. *Emerging Infectious Diseases*, 17(1), 7-15.
- Scallan, E., Griffin, P.M., Angulo, F.J., Tauxe, R.V., Hoekstra, R.M. (2011b). Foodborne illness acquired in the United States – Unspecified agents. *Emerging Infectious Diseases*, 17(1), 16-22.
- Scharff, R.L. (2012). Economic burden from health losses due to foodborne illness in the U.S. *Journal of Food Protection*, 75(1), 123-131.
- Shapiro, M.A., Porticella, N., Jiang, L.C., Gravani, R.B. (2011). Predicting intentions to adopt safe home food handling practices. Applying the theory of planned behavior. *Appetite*, 56(1), 96-103.
- Trepka, M.J., Newman, F.L., Huffman, F.G., Dixon, A. (2010). Food safety education using an interactive multimedia kiosk in a WIC setting: Correlates of client satisfaction and practical issues. *Journal of Nutrition Education and Behavior*, 42(3), 202-207.
- USDA (2002). PR/HACCP rule evaluation report: Focus group study on food safety messages and delivery mechanisms.. Final report. U.S. Department of Agriculture, Food Safety and Inspection Service. Washington, DC: Government Printing Office.
- USDA (2002). PR/HACCP rule evaluation report: Changes in consumer knowledge, behavior, and confidence since the 1996 PR/HACCP final rule. Final report. U.S. Department of Agriculture, Food Safety and Inspection Service. Washington, DC: Government Printing Office.

**Table 1.** Changes in Food Safety Behavior as Identified by Retrospective Post/Pre Behavior Questionnaire

<b>Food Safety Behavior</b>	<b>Number of Responses</b>	<b>“Pre” Response</b>	<b>“Post” Response</b>	<b>Difference</b>
<b>Chill (Refrigerate foods properly)</b>	655	3.8 ± 1.3	4.4 ± 0.9	0.6 p < 0.0001
<b>Separate (Separate raw and ready-to-eat foods)</b>	644	3.7 ± 1.2	4.4 ± 0.8	0.7 p < 0.0001
<b>Clean (Wash hands and surfaces)</b>	642	4.0 ± 1.2	4.5 ± 0.9	0.5 p < 0.0001
<b>Thaw (Maintain safe temperature)</b>	656	3.2 ± 1.3	4.0 ± 1.1	0.8 p < 0.0001

*Note.* Values shown are means ± standard deviation for paired t-test analysis.

**Figure 1.** Pre- and Post-Response means by year.



## **Identifying Needs of Couples Attending Marriage Education in Three Utah Counties**

Darlene Christensen, Naomi Brower,  
Carolyn Washburn and Stanley Guy

A needs assessment was completed in three Utah counties to determine what was required to improve and expand current marriage education programs. Findings provided insights on what attracted participants to events, topics of interest specific to relationships, and desired delivery methods. Results indicated that couples wanted educational marriage events, interactive workshops, and educational experiential date nights focused on communication and quality couple time.

Healthy marriages have been associated with many positive outcomes for individuals and families including better physical and emotional health, longer life, increased financial wealth, and positive parenting outcomes (Adam & Sawhill, 2002; Amato, 2001; Halford, 2011; Wilcox, 2011). Conversely, the erosion of marriage creates many struggles for individuals, families, and society (Fagan, Patterson, & Rector, 2002). According to Brotherson and Duncan (2004) and Johnson et al., (2002), the number of couples indicating an interest in attending marriage and family workshops is growing. Relationship education has been shown to play a key role in helping couples sustain healthy and strong marriages (Halford, 2011).

A strong marriage education movement has been building in the United States over the last decade designed to help couples build and maintain healthy relationships. While these programs vary greatly in content and structure, researchers have found that relationship education can support couples in developing the knowledge, skills, and attitudes that will foster positive couple interaction, communication skills, relationship quality, and marital strength (Blanchard, Hawkins, Baldwin, & Fawcett, 2009; Fagan, Patterson, & Rector, 2002; Halford, 2011; Hawkins, Blanchard, & Fawcett, 2008).

### **A History of Relationship Education in Utah**

Promoting healthy marriages has been a priority in Utah for several decades. In 1998 the nation's first Governor's Commission on Marriage was developed to strengthening marriages in Utah (Hawkins, 2011). As a result, relationship education achieved a level of importance in the state. Then it became important to prioritize educational needs and identify how relationship education could be offered in the most effective way throughout the state.

In 2003, a survey instrument was developed and approved by an Institutional Review Board (IRB) and the Baseline Statewide Survey on Marriage and Divorce was conducted by the Department of Workforce Services. The purpose was to identify the current attitudes and condition of marriage and family relationships in Utah (Schramm, Marshall, Harris, & George, 2003). The survey provided implications for education, programs, and research efforts. Most Utahans who participated in this study indicated that they were interested in using marriage education to strengthen their relationships. Seventy-five percent of survey respondents who were married and/or involved in a steady relationship reported that they would consider using relationship education (i.e. workshops or classes) to strengthen their relationships (Schramm, et al., 2003).

In 2005, the Utah Healthy Marriage Initiative began piloting a project funded by the Department of Workforce Services and TANF (Temporary Assistance for Needy Families) to

support the Healthy Marriage Initiative in three counties. Utah State University Cooperative Extension provided marriage education to three targeted counties (i.e., Tooele, Weber, and Washington counties), based on high divorce rates and greater need for programming. Marriage education activities and events were offered in all three counties.

### **Objective**

The main objective of this needs assessment was to identify the most effective strategies for expanding and improving a county-based marriage education program.

### **Method**

Extension faculty conducted a needs assessment in 2011 in the three target counties to learn more about the needs and wants of couples participating in marriage education activities and events. Participants attending annual marriage celebration conferences in Tooele, Washington, and Weber counties were invited to complete an IRB approved evaluation containing 13 questions regarding selected aspects of relationship programming. For convenience and accessibility, conference participants in these three counties were selected for the study. Participation in the evaluation was voluntary and anonymous.

The evaluation was measured using a four point, Likert scale measuring participants' attraction to specific relationship/marriage activities. To determine *Attraction to Attend Marriage Education*, respondents ranked their interest by selecting: attracts, tends to attract, tends not to attract, or does not attract (Table 1). To find out participant's *Interest in Relationship Topic*, and *Relationship/Marriage Information Preferred Delivery Methods*, and *Interest in Attending Relationship/Marriage Activities*, participants responded: interested, tend to be interested, tend not to be interested, or uninterested (Table 2, Table 3, and Table 4).

Other closed- and open-ended questions dealt with how much couples would be willing to pay to attend relationship/marriage activities, days and times they would be most likely to attend, learning that took place, and changes that would be made in relationships because of relationship/marriage activities.

### **Results**

Participant demographic measures included age, residence, current relationship status, family income for the past year, and last year or grade in school completed. Participants were not asked to identify their ethnicity. Respondents consisted of 634 adults composed of 49% male and 51% female, with a mean age of 39.88 ( $SD = 10.52$ ). The majority (96%) were married and the mean length of marriage was 15.31 years ( $SD = 10.31$ ). Eighty-five percent had some education beyond high school. Seventy-four percent reported an annual salary of over \$40,000. Compared to state demographics, respondents who participated in this survey were older and had higher incomes than the average married couple in Utah.

Frequencies were tabulated for each survey question and groups of respondents were ranked based on highest to lowest percentages. All data analyses were performed using SPSS version 19.0 (SPSS, Inc, Chicago, IL).

### **Survey Outcomes**

Couples who attended marriage events in 2011 identified factors related to attendance of marriage education (Table 1), interest in specific relationship topics (Table 2), how they wanted to receive relationship/marriage information in the future, (Table 3); and interest in types of relationship/marriage activities and events (Table 4).

**Attraction to Attend Marriage Education.** Survey results indicated that instructors who are licensed therapists attract or tend to attract over 90% of participants (Table 1). Similar findings indicate that take-home activities (88%), door prizes (82%), and programs that included a lunch or a dinner (79%) would also attract or tend to attract participants. Respondents were not asked if they had small children, but 44% of those completing the survey specified that offering activities for children would be attractive.

**Table 1.** *Attraction to Attend Marriage Education*

Activity	N	Rank <sup>a</sup>	Attracts	Tend to Attract	Tend not to attract	Does not attract
Instructors who are licensed therapists	602	1	48%	43%	6%	3%
Take-home materials	606	2	46%	42%	9%	3%
Door prizes	606	3	50%	37%	8%	5%
Incentives (such as grocery cards)	597	4	42%	40%	12%	6%
Provide lunch or dinner	594	5	36%	43%	13%	8%
Activities for your children	571	6	15%	29%	22%	34%

<sup>a</sup>Highest to lowest totaled percent of Attract plus Tend to Attract.

**Interest in Relationship Topic.** Respondents were most interested in the following topics, in rank order: communication, spending quality time with each other, resolving conflicts, increasing fun and play, intimacy, commitment, money management, and balancing parenting with marriage (Table 2). Participants were less interested in challenges of technology, pornography abuse, physical/sexual/mental abuse, blending stepfamilies, and overcoming infidelity.

**Table 2.** *Interest in Relationship Topic*

Relationship topic	N	Rank <sup>a</sup>	Interested	Tend to be interested	Tend to be uninterested	Uninterested
Communications	626	1	76%	23%	1%	-- <sup>b</sup>
Finding quality time for each other	620	2	72%	26%	2%	-- <sup>b</sup>
Resolving conflicts	625	3	69%	26%	4%	1%
Increasing fun and play	620	4	65%	30%	4%	1%
Intimacy	623	5	66%	28%	5%	1%
Commitment	608	6	52%	39%	7%	2%
Money management	616	7	50%	35%	13%	2%
Balancing parenting with marriage	598	8	47%	36%	10%	7%
Challenges of technology (for example: Facebook)	587	9	19%	30%	27%	24%
Pornography abuse	592	10	10%	19%	28%	43%
Physical/sexual/mental abuse	592	11	10%	14%	30%	46%

Blending stepfamilies	586	12	11%	10%	23%	56%
Overcoming infidelity	587	13	10%	11%	27%	52%

<sup>a</sup>Highest to lowest totaled percent of Interested plus Tend to be Interested.

<sup>b</sup>n = 0 for each group.

**Preferred Delivery Methods.** Survey respondents indicated they were most interested in receiving marriage education through workshops, on-line resources, e-mails, and newsletters (Table 3). Respondents were least interested in resources available through a library at local Extension offices. This may indicate a need for great marketing and promotion of Extension resources.

**Table 3.** *Relationship/Marriage Information Preferred Delivery Methods*

Delivery method	N	Rank <sup>a</sup>	Interested	Tend to be interested	Tend to be uninterested	Uninterested
Through workshops	609	1	75%	23%	1%	1%
Through on-line resources	595	2	40%	43%	13%	4%
Through periodic e-mails	593	3	34%	38%	19%	9%
Through newsletter/ mailing	594	4	28%	40%	23%	9%
Through library resources to check out	582	5	18%	33%	36%	13%

<sup>a</sup>Highest to lowest totaled percent of Interested plus Tend to be Interested.

**Attending Relationship/Marriage Activities.** Activities that interested or tended to interest couples included: keynote presentations (98%), group educational date nights (90%), interactive relationship education classes, and overnight retreats (75%).

**Table 4.** *Interest in Attending Relationship/Marriage Activities*

Relationship/marriage activity	N	Rank <sup>a</sup>	Interested	Tend to be interested	Tend to be uninterested	Uninterested
Keynote presentation	610	1	75%	23%	2%	-- <sup>b</sup>
Group educational date night	600	2	60%	30%	8%	2%
Interactive relationship education class	598	3	55%	35%	8%	2%
Overnight retreat	598	4	47%	28%	16%	9%

<sup>a</sup>Highest to lowest totaled percent of Interested plus Tend to be Interested.

<sup>b</sup>n = 0 for group.

**Closed- and open-ended questions.** When asked how much they would be willing to pay to attend relationship/marriage activities, couples responded, \$20 to \$30 per couple. When asked what days and times they would be most likely to attend, couples responded, Friday and Saturday evenings. Participants were asked what learning took place or what changes would they make as a result of what they learned at relationship/marriage activities. Responses included, "Spending more quality time together; finding a few moments each day just for us; communicate, communicate, communicate," and "remember to treat each other nicely."

## Discussion

Learning what participants preferred when seeking relationship/marriage education was valuable information and helped determine what to offer or continue offering in the community. Credibility was critical. Instructors (e.g. licensed therapists) who were most familiar with the issues being taught were considered to be the greatest draw by survey respondents. Research shows that credibility was crucial to gaining the trust and respect of participants, and helping participants believe that instructors relate and understand them (Hawkins et al., 2004).

The survey identified 13 topics related to marriage. Nearly all participants (99%) indicated that communication was the most popular topic of interest. According to Bradbury and Karney (2004), and Holman (2001), positive couple communication is a key predictor of sustained relationship satisfaction and stability. Even a highly functioning couple can benefit from increased knowledge and education in this area. Finding quality time for each other was also popular with couples (98%). With the hectic and busy life of the average American couple, finding time to communicate is a challenge. However, communication is a key issue for a healthy, successful marriage (Bradbury & Karney, 2004).

The majority of couples were not interested in addressing infidelity, abuse (i.e., physical, mental, sexual), and pornography. Although these topics may have been beneficial for some couples, they may have chosen not to indicate an interest due to the personal and private nature of these issues; or couples may have felt these topics should be reserved for less public venues. Future research would be helpful to determine why these topics received such a low response rate.

All delivery methods explored in this survey were utilized previously in all three counties where relationship/marriage education was delivered. Survey results validated these methods and reinforced their continued use. Therefore, emphasis will be placed on 1) workshops and credible keynote speakers, 2) group educational date nights, and 3) interactive relationship education classes. Despite a lower response rate, overnight retreats will still be considered because three out of four couples indicated an interest.

A lack of interest in acquiring marriage/relationship resources through libraries or local Extension offices may indicate a greater need for marketing and promoting these resources. This need may be greater in Utah, where funding has been allocated to develop relationship/marriage education libraries and resources in many local Extension offices.

It should be noted that there were several limitations to this study. First, a convenience sample of participants already attending relationship/marriage activities identified the needs of those who were already highly motivated to participate in similar events. Second, demographic data indicated that the majority of participants had a higher income and greater educational level than the general population; therefore this information may not generalize to participants of lower socioeconomic status. Also, no data was collected on age, number of children, or ethnicity, which would also help define how to meet the needs of specific audiences. Third, while assessments can be helpful in planning relationship activities, it is important to note that interest level does not always correlate with actual attendance (Morris, McMillan, Duncan, & Larsen, 2011).

Other factors that may have affected responses included the influence each venue may have had on respondents. Couples were surveyed at relationship/marriage events with keynote speakers and an emphasis on positive, strengths-based education. These factors may have skewed responses away from certain topics and towards certain delivery methods.

## Conclusion

While there are clear limitations to the generalization of this survey, the information collected has been of benefit to others within the state of Utah with similar audiences, and could potentially be useful to those in other states with similar programs and demographics. Further, the survey confirmed methods of delivery that are useful in reaching Extension audiences; thus, this information may also be helpful for other Extension professionals developing relationship/marriage programs.

---

Darlene Christensen  
Extension Associate Professor  
Utah State University Extension  
Tooele County  
141 North Main  
Tooele, UT 84074  
435-277-2406  
[darlene.christensen@usu.edu](mailto:darlene.christensen@usu.edu)

---

## References

- Adam, T. & Sawhill, I. (2002). For richer or for poorer: Marriage as an antipoverty strategy. *Journal of Policy Analysis and Management*, 21, 587-599.
- Amato, P. R. (2001). Children of divorce in the 1990s: An update of the Amato and Keith (1991) meta-analysis. *Journal of Family Psychology*, 15(3), 355-370.
- Blanchard, V., Hawkins, A., Baldwin, S., & Fawcett, E. (2009). Investigating the effects of marriage and relationship education on couples' communication skills: A meta-analytic study. *Journal of Family Psychology* 23, 203-214.
- Bradbury, T. N. & Karney, B. R. (2004). Understanding and altering the longitudinal course of marriage. *Journal of Marriage and Family*, 66, 862-879.
- Brotherson, S. E., & Duncan, W. C. (2004). Rebinding the ties that bind: Government efforts to preserve and promote marriage. *Family Relations* 53, 459-468.
- Fagan, P., Patterson, R. & Rector, R. (2002). Marriage and welfare reform: The overwhelming evidence that marriage education works. *The Heritage Foundation Background Paper Executive Summary* (No. 1606):1-14. Retrieved from <http://www.heritage.org/research/welfare/bg1606.cfm>
- Halford, W. K. (2011). *Marriage and relationship education: What works and how to provide it*. New York, NY: The Guildford Press.
- Hawkins, A., Blanchard, V., Baldwin, S., & Fawcett, E. (2008). Does marriage and relationship education work? A meta-analytic study. *Journal of Consulting and Clinical Psychology* 76, 723-734.
- Hawkins, A. J., Carroll, J.S., Doherty, W. J., & Willoughby, W. B. (2004). A comprehensive framework for marriage education. *Family Relations* 53, 547-558.
- Hawkins, A. J. (2011, 7). *Government-supported healthy marriage and relationship initiatives and activities: Utah 1993-2010*. Paper presented at a meeting of the Utah Marriage Commission, Salt Lake City, Utah.
- Holman, T. B. (2001). *Premarital prediction of marital quality or breakup: Research, theory and practice*. New York: Kluwer.
- Johnson, C. A., Stanley, S. M., Glenn, N. D., Amato, P. R., Nock, S. L., Markman, H. J., & Dion, M. R. (2001). *Marriage in Oklahoma: Statewide survey on marriage and divorce*.

- Oklahoma: Oklahoma Department of Human Services. Retrieved from [http://www.okmarriage.org/downloads/media/survey\\_report.pdf](http://www.okmarriage.org/downloads/media/survey_report.pdf)
- Morris, M. L., McMillan, H. S. Duncan, S. F., & Larsen. J. H. (2011). Who will attend? Characteristics of couples and individuals in marriage education. *Marriage & Family Review* 47, 1-22.
- Schramm, D., Marshall, J., Harris, V., & George, A. (2003). *Marriage in Utah: 2003 Baseline Statewide Survey on Marriage and Divorce*. Salt Lake City, UT: Utah Department of Workforce Services.
- Wilcox, W. B. (2011). Twenty-six conclusions from the social sciences. In Center for Marriage and Families, *Why marriage matters* (3<sup>rd</sup> ed.). New York, NY: Institute for American Values.