

7-2011

Rock On! Band Together to Fight Hunger: Results from a Food Insecurity Awareness Project

April Tallant

Western Carolina University, atallant@email.wcu.edu

Recommended Citation

Tallant, April (2011) "Rock On! Band Together to Fight Hunger: Results from a Food Insecurity Awareness Project," *International Journal for the Scholarship of Teaching and Learning*: Vol. 5: No. 2, Article 12.

Available at: <https://doi.org/10.20429/ijstl.2011.050212>

Rock On! Band Together to Fight Hunger: Results from a Food Insecurity Awareness Project

Abstract

The purpose of this research was to evaluate a service-learning project conducted at a public university in the southern United States of America. A sample of 46 undergraduates enrolled in two sections of a liberal studies personal nutrition seminar course participated in a food insecurity awareness project. The service-learning component entailed volunteering at a community kitchen. In addition, students planned, organized and implemented a band concert fundraiser for a regional food bank. Students designed tee-shirts, fliers, and concert tickets. Classroom components of the project included assigned readings, seminar questions, quiz and discussion, and a guest speaker. Students completed a survey at the conclusion of the project. Results showed that volunteering and fundraising, as ranked by students, seemed to be among the most important components to help students understand food insecurity. The findings suggest that students increased their awareness of food insecurity through the mix of pedagogical approaches used.

Keywords

Service-learning, Food insecurity, Volunteering, Fundraising

Rock On! Band Together to Fight Hunger: Results from a Food Insecurity Awareness Project

April Tallant Western Carolina
University Cullowhee, North
Carolina, USA
atallant@email.wcu.edu

Abstract

The purpose of this research was to evaluate a service-learning project conducted at a public university in the southern United States of America. A sample of 46 undergraduates enrolled in two sections of a liberal studies personal nutrition seminar course participated in a food insecurity awareness project. The service-learning component entailed volunteering at a community kitchen. In addition, students planned, organized and implemented a band concert fundraiser for a regional food bank. Students designed tee-shirts, fliers, and concert tickets. Classroom components of the project included assigned readings, seminar questions, quiz and discussion, and a guest speaker. Students completed a survey at the conclusion of the project. Results showed that volunteering and fundraising, as ranked by students, seemed to be among the most important components to help students understand food insecurity. The findings suggest that students increased their awareness of food insecurity through the mix of pedagogical approaches used.

Key words: Service-learning, food insecurity, volunteering, fundraising

Introduction

General education and liberal studies programs in universities across the United States (U.S.) have student learning outcomes that involve producing well-rounded, informed humanitarian citizens. Service-learning is a likely means of meeting many of these related general education and liberal studies objectives outlined by institutions of higher education. Service-learning, "...a credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility," (Bingle & Hatcher, 1996, p. 222) is regarded as one of five high impact activities in higher education that correlates with better student learning (Brownell & Swanner, 2009). Improving student learning through awareness, providing life experience outside students' comfort zones and emphasizing humanitarianism are among the reasons that service-learning is appealing to professors who teach general education courses. Teaching nutrition courses, in a field that is service-oriented and has a strong humanitarian core, simplifies the alignment of general education and courses objectives with meaningful service-learning experiences. The purpose of this research was to evaluate the impact a service-learning project conducted at a public university had on student understanding of food insecurity in a first-year personal nutrition seminar course.

Review of Literature

The field of nutrition and dietetics is service-oriented and humanitarian by nature. Nutrition professionals strive to help people improve their nutrition in efforts to prevent or treat lifestyle diseases with diverse and often underserved audiences, including low literacy, indigent, elderly and minority groups. Service-learning can provide students with an opportunity to impact the lives of such populations that they may otherwise not experience until they move into the workforce. Ozier, Henry, and Chilton (2010) reported that students from a community nutrition course engaged in service-learning in a Special Supplemental Nutrition Program for Women, Infants and Children's (WIC) clinic by conducting focus groups with WIC staff and creating a theory-based nutrition education handout to educate WIC enrollees. Students gained experience in a public health setting, played a role in educating low income WIC participants, and learned the importance of theory in creating materials to be used to educate audiences. Poehlitz, Pierce, and Ferris (2006) reported that their students integrated literacy and nutrition education activities in inner-city pediatric clinic waiting rooms in Hartford, Connecticut. The experiences exposed students to "...economic and ethnic diversity that students could not experience on campus or in nearby communities" (p. 388). Such experiences underscore the reciprocal value of service-learning pedagogy in higher education settings.

Many of the underserved populations that nutrition professionals work with experience disproportionate food insecurity and hunger as compared to other populations. Food insecurity is defined as "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" and hunger is defined as, "the uneasy or painful sensation caused by a lack of food..." (Anderson, 1990, p. 1598). Healthy People 2020, the health nation's health objectives, outline specific objectives related to food insecurity including, "Eliminate very low food insecurity among children," and "Reduce household food insecurity and in so doing reduce hunger" (United States Department of Health and Human Services, n.d.). Yet 2008 estimates show that 17 million (14.6%) households in the United States experienced food insecurity during the year because they lacked resources such as money (Nord, Andrews, & Carlson, 2008). It is important for young adults to understand complex societal problems such as food insecurity and hunger, and where better to do that than a university. The current research suggests that instruction and service-learning addressing themes of social justice and humanitarianism that are germane to both liberal studies and principles of the nutrition profession in a liberal studies personal nutrition seminar course appeared to facilitate an understanding about food security and hunger in the U.S.

Purpose

Teaching a personal nutrition first year seminar course provides a tremendous opportunity to teach students the social science behind nutrition. Service-learning was used as a pedagogical method to enhance student learning by creating awareness and allowing students to generate solutions toward making people more food secure, and to make the solution real by implementing one of the solutions. The food insecurity awareness project was implemented in two sections of a personal nutrition seminar course. The food insecurity awareness project allowed students to explore the prevalence and root causes of domestic hunger and food insecurity; formulate solutions to address the problems; and play a role in part of the solution to food insecurity and hunger in the U.S. The hope being that in understanding a problem and being directly involved in a solution might form positive

attitudes and intentions among the students so that they address the problems beyond graduation.

The theory of planned behavior posits that behaviors are guided by behavioral beliefs as influenced by attitudes and beliefs (Ajzen, 2002) and intentions are the "...primary motivational determinant of individual behavior" (Lemmons, Abraham, Ruiters, De Kort, Brug, & Schaalma, 2005, p. 946). The theory of planned behavior has been applied to understand volunteer behaviors such as blood donation among young people (Lemmons et al., 2005) but there is a paucity of research using the theory to measure intentions to volunteer with food insecure populations.

The purpose of this research was to evaluate the impact a service-learning project conducted at a public university had on students in a first-year personal nutrition seminar course. The research questions devised to meet the purpose of the pilot project were:

1. How well do students perceive themselves as understanding of food insecurity after taking the course?
2. What instructional methods do students attribute to helping them understand food insecurity?
3. To what degree do students see themselves helping food insecure people in the future as measured by attitudes, outcome expectations and behavioral intentions?

Methodology

A sample of 46 undergraduates enrolled in two sections of a Liberal Studies personal nutrition seminar course at a midsize comprehensive university volunteered to participate in the food insecurity awareness project.

Instructional Components

The food insecurity awareness project consisted of instruction and service components. As part of the class, an in depth unit of study about domestic and global food insecurity was implemented. Instructional components included textbook and supplemental readings, a food insecurity and hunger solution homework assignment, and a guest speaker. Class reading topics included the root causes of hunger locally and globally, and health outcomes associated with hunger, food insecurity, and malnutrition. A class lecture and discussion focused on the assigned reading. Supplemental readings included the World Health Organization's Millennium Development Goals. Students were given a quiz on the supplemental reading and then divided into small groups to discuss the role that individuals, communities and government currently play and the roles that they should play in addressing hunger and food insecurity. Finally, the entire class engaged in a discussion about solutions to regional hunger. A guest speaker from a regional food bank spoke to the classes about local food insecurity. The guest speaker discussed the prevalence of food insecurity and hunger in the region, including anecdotes from hungry people she had interacted with over the years.

After the class discussions and guest speakers, students were asked to research ways to address regional food insecurity and hunger. The professor took up the homework and compiled the ideas from the assignment. Themes that were generated included holding fundraisers, food collection, and volunteering our services. The ideas were presented and discussed with both classes. The instructor held a vote and the majority of students in both

classes voted to volunteer and to conduct a fundraiser activity. The top ideas for fundraisers included selling food, having a carnival, or holding a band concert. Class discussions revealed that a few students had contact with local bands that might be interested in doing a concert to raise money. Given the bands as resources, class votes resulted in a majority indicating a band concert fundraiser would be the most enjoyable and feasible option. Students agreed to donate the money collected to a regional food bank.

Service Components

The food insecurity awareness project also included a service component. Students agreed to volunteer three hours at Community Table, a local community kitchen that serves food insecure people in the area (three hours was selected because that is the typical length of set up, serving and clean up in one evening at the community kitchen). Students were also given the option to volunteer at similar organizations in their hometowns.

In addition, students planned, organized and implemented a band concert fundraiser for a regional food bank. The professor made a list of duties that needed to be executed to organize and implement the concert. Class time was set aside each class period to discuss the project and report progress. Students formed small groups and volunteered for duties of interest with regard to planning and implementing the concert. Examples of duties included: Designing concert tickets; finding sponsors to pay for tee-shirts; designing and ordering tee-shirts; emceeing the event; creating a PowerPoint about hunger and food insecurity in the region (that was played during the concert); designing and hanging fliers around campus; and recruiting bands to play in the concert. See Figures 1 and 2 for student products designed for the event. Students were required to purchase one ticket (\$5.00) and attend and required to sell one ticket. The concert was held at the university center. Forty-three out of 46 students attended the event.



Figure 1. Student-designed tee-shirt.



Figure 2. Student-designed concert ticket.

Assessment

The Institutional Review Board approved this study. An instructor-developed survey was used to assess the results of the food insecurity awareness project. The survey was based on select constructs of the theory of planned behavior, including attitudes, outcome expectations and behavioral intentions. Two professors who had experience in conducting successful service-learning projects in their courses were asked to serve as an expert panel to review the survey for content, question formatting, and overall readability. Revisions were made based on expert panel feedback. The final survey contained 29 items. A likert scale of 1 (strongly disagree) to 4 (strongly agree) was used for most items.

At the end of a class session, students were told about the survey. Informed consent forms were distributed and explained. Students were told that participation was voluntary and that there were neither benefits for participation nor penalties for non-participation. Forty-six students completed the survey. Descriptive data analysis of the survey was conducted using SPSS software.

Results

In total, all 46 students completed 124 volunteer hours for food insecurity organizations as part of the class. More than \$1,500 was raised at the Band Together to Fight Hunger concert in ticket and tee-shirt sales. Due to incomplete data from 16 surveys, data was analyzed from only 30 surveys. Descriptive statistics including a measure of central tendency (mean) and measure of deviation (standard deviation) are used to describe the results.

The majority of the survey addressed constructs from the theory of planned behavior, including attitudes, expectations and future intentions (see Table 1 for descriptive statistics of select questions and mean responses). In general, students reported that they agreed that course content inspired them to want to help food insecure people, that activities of the

project helped them feel that they could volunteer and fundraise to solve other problems, that volunteering and fundraising allowed them to help meet community needs and makes them a responsible citizen. In addition, students reported that they agreed that they would probably fundraise and volunteer to help both food insecure and other populations in the future. Overall, students reported that they disagreed that participating in volunteer work and fundraising for the food insecure helped develop career-related skills.

Table 1

Theory of Planned Behavior Constructs, Related Survey Questions and Mean Responses

Construct	Question	Mean	SD
Attitudes	Course content related to food insecurity inspired me to want to help food insecure people	3.17	.592
Outcome Expectations	Participating in volunteer work and fundraising for the food insecure and the course content related to food insecurity has shown me I can volunteer and fundraise to solve problems other than food insecurity.	3.30	.535
	Participating in volunteer work and fundraising for the food insecure helped me meet community needs.	3.30	.596
	Participating in volunteer work and fundraising for the food insecure helped me to develop career-related skills.	2.83	.747
	Participating in volunteer work and fundraising for the food insecure makes me a responsible citizen.	3.27	.740
Behavioral intentions	I will probably volunteer to help the food insecure in the future.	3.23	.728
	I will probably fundraise/donate money or food to help the food insecure in the future.	3.23	.626
	I will probably volunteer with other populations in the future.	3.17	.592
	I will probably fundraise/donate money to other populations in need in the future.	3.27	.583

With regard to the research question, "How well do students perceive themselves as understanding of food insecurity after taking the course," twelve students reported

agreement or strong agreement with the statement, "I knew what food insecurity was before taking this class" (see Figure 3). Just over half of the students said that they did not understand food insecurity before taking the class. Ninety-seven percent reported that they understood food insecurity at the conclusion of the class and all students said they agreed or strongly agreed to the statement, "If asked, I could explain food insecurity to friends and family."

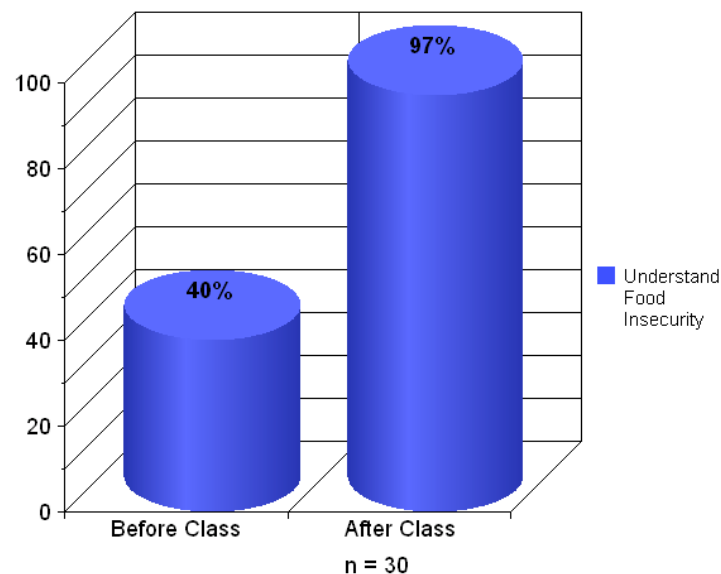


Figure 3. Post-assessment student reports of understanding food insecurity before and after the class.

Results of the research question, "What instructional methods do students attribute to helping them understand food insecurity?" were as follows.

Students were asked to rank the effectiveness of volunteering, fundraising, class discussions and assigned readings in helping them to understand food insecurity (See Figure 4). Just over half of participants reported that volunteering was the most effective component to help them understand food insecurity, followed by class discussions, fundraising, and assigned reading. Almost a third of students reported that fundraising was the second most effective component, followed by volunteering, assigned reading, class discussion, and other. Ninety percent reported that they agreed or strongly agreed that volunteering and fundraising helped them to better understand course content.

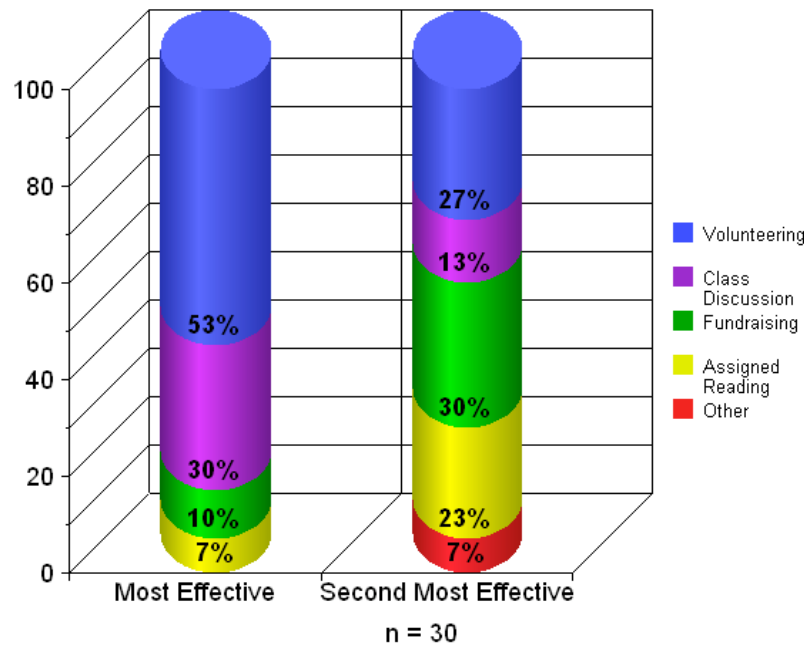


Figure 4. Student ranking of effectiveness of pedagogical methods that helped them understand food insecurity.

The last research question of the study, “To what degree do students see themselves helping food insecure people in the future?” produced the following results (see Figure 5).

Almost all students said they would *like* to volunteer to help food insecure people in the future and about 25 students reported that they would *probably* volunteer to help the food insecure in the future. Most students said they would *like* to fundraise/donate money or food to help food insecure in the future and slightly less said they would *probably* fundraise or donate money or food to help food insecure people in the future. About three-fourths of participants reported that volunteering was fun. Ninety-three percent said that *volunteer work* helped them feel like they can make a difference and all students said that *fundraising* for food insecure people helped them feel like they can make a difference. Twenty-eight students reported that participating in volunteer work, fundraising, and course content gave them a better understanding of our world.

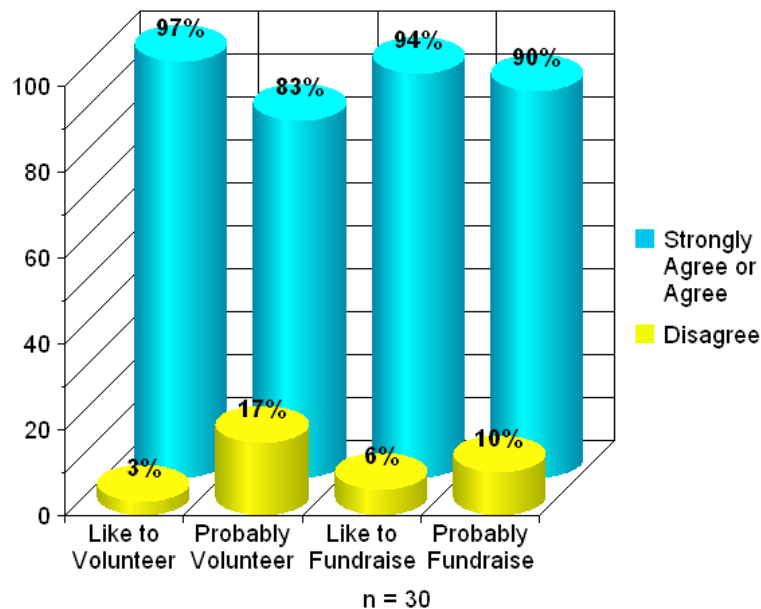


Figure 5. Student reports of desire and probability of volunteering and fundraising for food insecure populations in the future.

Course Conclusion

After the fundraiser, the regional food bank, Manna, was contacted and invited to stop by to speak to the classes and pick up their donation. Their spokesperson was able to speak to one of the two sections. Manna expressed their appreciation and told the students exactly how the money they receive is used to feed hungry people throughout the region. In addition, the director of Manna and Community Table sent a thank you card to the instructor for the money and the service that students provided, noting that more than 4,500 meals could be provided with the monetary donation.

Discussion

This research project was undertaken in order to evaluate how well students perceive themselves as understanding of food insecurity after taking a personal nutrition seminar course that included a unit of study about food insecurity. The researcher also sought to determine what instructional methods students attributed to helping them understand food insecurity. Another purpose was for the researcher to investigate to what degree students intend to help food insecure people in the future. Results from the research showed that students perceived themselves as having a good understanding of food insecurity after taking the course. A large majority reported they would like to volunteer and fundraise for the food insecure in the future. That percentage dropped slightly when asked if they would probably volunteer and fundraise for the food insecure in the future. Results also indicate that volunteering and fundraising seemed to be among the most important components to help students understand food insecurity. These findings support research by Ross (2011) who reported on results of a comprehensive service course, *Hunger at Home*, that included studying hunger, conducting primary and secondary research about hunger, engaging in service, and planning and organizing a fund-raiser. Students rated the course highly on

faculty and course evaluations, and outside evaluations showed that student ratings of the course were outstanding.

Implications

The majority of students indicated that volunteering was the most effective method for helping them understand food insecurity. The implications for pedagogy suggest that using service-learning volunteer opportunities in class in order to facilitate understanding of course content is worthwhile. The results also indicate a strong intention for volunteering in the future. It is notable that fundraising also seemed to impact the students. About a third of students indicated that fundraising was the second most effective method of helping them understand food insecurity. While this was not direct contact with underserved population, slightly more students reported feeling that fundraising helped them make a difference than volunteering and slightly more students indicated that they would fundraise in the future than volunteer in the future.

The food insecurity awareness project allowed the professor to meet university liberal studies objectives in a non-major first year seminar course, while engendering crucial concepts of the nutrition profession. Judith Rodriguez, the president of the American Dietetic Association writes that the nutrition profession "...is based on food, a fundamental element in all humans' lives and a vehicle for improving health and welfare..." (2010, p. 1424). Providing the opportunity for students to study what food insecurity and hunger is, the root causes, and participating in solutions through service, is a viable approach to introducing students to the social science of nutrition and fostering a sense of civic duty and humanitarianism that are central to liberal studies programs.

Recommendations

This classroom project was a one-shot pilot study. Adding a pre-test would be optimal. Another area for improvement is to include "guest speaker" as an option for students to rank effectiveness. Survey revisions should include this as an option. In addition, there were 16 surveys that were excluded from analysis for incompleteness. Stronger efforts to ensure that students complete the survey to its entirety will be made. Students were given a reflection assignment, but not until the very end of the semester, and informed consent was not obtained to use the reflections for research. The researcher is mindful that social desirability may have factored in to completing the survey. Having studied food insecurity and knowing the emphasis placed on the subject by the instructor, students may have been biased.

Without including time in the course schedule on a regular basis, this project would probably not have been as successful. It is very important to build course schedules to include service-learning planning, implementation and reflection. There are several recommendations to improve service-learning aspects of first year courses. In the future, it is recommended that a survey be developed and tested for validity to improve the design. It is also recommended that a pre-test be given to strengthen the design. Including a control group would also be ideal. Expanding the survey to include more constructs of the theory of planned behavior and doing a post measure can be useful to examine predictability of volunteering in the future. A delayed post-test given some time later, perhaps one year, may reveal whether students who participated are acting on intentions as compared to a control group. Another possibility would be to conduct a focus group with students who participated in the study to evaluate whether the food insecurity awareness project experience impacted their volunteer behavior thereafter. Lastly, it is recommended

to include demographic questions on the survey so that comparisons by demographics can be made.

Finally, student understanding of food insecurity was influenced by service-learning. The findings suggest that students increased their awareness of food insecurity through the mix of pedagogical approaches used. It is recommended that to improve teaching and student learning, the survey should include demographic information, include ranking of the guest speaker as a pedagogical method, and to include more structured focus on student reflections of the project. Instead of having students write the reflection at the end, perhaps journaling immediately after their volunteer experience, journaling after a fundraiser event, and then doing final reflections would be more meaningful.

It is recognized that participating in fundraising and volunteering are somewhat temporary solutions to food insecurity and hunger. However, it is only through understanding of such complex problems that long-term solutions can be developed. As professors play a role in fostering understanding and developing informed citizens, it is my hope that our college students of today solve the problems of tomorrow.

References

- Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality & Social Psychology Review (Lawrence Erlbaum Associates)*, 6(2), 107-122. Retrieved from EBSCOhost.
- Bingle, R., & Hatcher, J. (1996). Implementing service-learning in higher education. *Journal of Higher Education*, 67(2), 221-239. Retrieved from Academic Search Premier database.
- Cashman, S., & Seifer, S. (2008). Service-Learning: An integral part of undergraduate public health. *American Journal of Preventive Medicine*, 35(3), 273-278. doi:10.1016/j.amepre.2008.06.012.
- Farnsworth, V. (2010). Conceptualizing identity, learning and social justice in community-based learning. *Teaching & Teacher Education*, 26(7), 1481-1489. doi:10.1016/j.tate.2010.06.006.
- Food and Nutrition Service (n.d.). Women, infants and children. Retrieved October 14, 2010 from <http://www.fns.usda.gov/wic/>
- Lemmens, K. H., Abraham, C. C., Hoekstra, T. T., Ruiter, R. C., De Kort, W. M., Brug, J. J., & Schaalma, H. P. (2005). Why don't young people volunteer to give blood? An investigation of the correlates of donation intentions among young nondonors. *Transfusion*, 45(6), 945-955. doi:10.1111/j.1537-2995.2005.04379.x
- Nord, M., Andrews, M., Carlson, S. Household food security in the United States, 2008. Retrieved November 19 from <http://www.ers.usda.gov/Publications/ERR83/ERR83b.pdf> and <http://www.ers.usda.gov/Publications/ERR83/ERR83fm.pdf>
- Rodriguez, J. (2010). ADA value: Social responsibility. *Journal of the American Dietetic Association*, 110(10), 1424.

Ross, N. J. (2011). Hunger at home: A higher education service-learning course of appraisal and action in community food security. *Journal of Nutrition Education and Behavior*, 43(1), 71-72. Retrieved from EBSCOhost.

Schall, J. (2006). Liberal education and "social justice". *Liberal Education*, 92(4), 44-47. Retrieved from ERIC database.

United States Department of Health and Human Services (n.d.). Healthy People 2020. Retrieved February 3, 2011 from www.healthypeople.gov

Western Carolina University (2007). Western Carolina University liberal studies document (rev.). Available at: <http://www.wcu.edu/10945.asp>