# Transforming the Curriculum: Using Hunger Issues to Enhance Teaching and Learning<sup>1</sup>

### Maria Navarro<sup>2</sup> University of Georgia Athens, GA 30602



#### **Abstract**

The author analyzes the transformation of the higher education curriculum, and discusses barriers to overcome to prepare graduates that have a global mindset, are able to evaluate knowledge across disciplines, and are socially responsible. The author presents Hunger issues as a contextual teaching and learning tool to 1) increase students' global and social responsibility; 2) increase students' interest and active participation in the learning experience; 3) facilitate contextual and meaningful teaching and learning; 4) foster learning in (and integration of) multiple disciplines; 5) promote development of higher order thinking skills; 6) promote team learning and team work; 7) help students with a wide range of learning styles; and 8) enhance the college experience. To illustrate the argument, the author uses several examples from a program at the University of Georgia, including the case of a class assignment: the organization of a modified Hunger Banquet.

#### Introduction

In 1999, the president of Princeton University stated that "in an environment that is changing, the process of transforming and re-transforming the university can never end if the institution is to meet its responsibilities to the society that supports it" (Princeton University, 1999, par. 3). For decades, under the pressure of changing social, economic, cultural, technological, and globalization forces, and in the effort of adapting to their environment, universities have often revisited and changed their education, outreach, and research agendas. Particularly intense has been the debate among higher education scholars regarding the ideal purpose, content, format, methods, process, learner roles, rigor, and learning requirements of the curriculum, to name a few. Rationales behind the diverse proposals for transformation of the curriculum have been rooted in sometimes-opposing education philosophies (e.g., liberal, behavioral, progressive, humanistic, and radical), with 1) purposes varying from the development of the "intellectual powers of the mind" (Spurgeon and Moore, 1997, p. 13) to bringing about "social, cultural, political, and economic changes in society" (Spurgeon and Moore,

1997, p. 13); 2) methods extending from traditional lectures to critical reflection and service learning, and; 3) learner roles ranging from passive actors to active and equal members in the teaching and learning process.

By transformation of the curriculum, educators intend to address problems and criticisms by stakeholders. Today's higher education curriculum is often criticized for concentrating solely on easily-measurable content knowledge and understanding (lower-order thinking skills) of isolated courses. Some assert that, as a result, most students are passive actors in the teaching and learning process, and are not prepared to make connections between disciplines, propose solutions to complex issues, or connect academics with real world problems (Navarro, 2007a). In addition, the college experience does not assist them in becoming aware of their role in society.

Although there is still little agreement among stakeholders regarding the purpose of the higher education curriculum, there seems to be a general trend toward looking for new ways to shape the college experience to prepare graduates that 1) have a global mindset, 2) are able to understand, apply, evaluate, and integrate knowledge of multiple (and across) disciplines, and 3) are socially responsible.

### **Barriers to the Transformation of the Curriculum**

Unfortunately, many argue that "higher education may not be very responsive to the larger society over the next decade" (Yankelovish, 2005, p. B6). The problem is that higher education is "notoriously resistant to change" (Lunde, 1995, p. 1) or "changes very slowly" (Roper and Hirth, 2005, p. 17). Many different factors may hinder curricular change, and they have been classified as behavior of individuals, environmental and organizational factors, and the effect of constituencies (Singha et al., 1996). Regarding individual behavior factors, four issues stand out as important impediments to curricular reform even when individuals choose to support change: Organizational insecurity affecting individuals (Allen, 2003), staff overload (Koper, 2004), disciplinary influences (Lattuca and Stark, 1994), and lack of knowledge of faculty regarding the best

<sup>&</sup>lt;sup>1</sup>This work was initiated with funding from an IDEAS grant from the Office of the Vice President for Public Service and Outreach of the University of Georgia (UGA). Efforts continue in 2009 with funding from a STEM (Science, Technology, Engineering, and Mathematics) Learning Community grant from the UGA Office of STEM education.

<sup>&</sup>lt;sup>2</sup>Assistant Professor; Email: mnavarro@uga.edu

#### **Transforming**

strategies by which to transform the curriculum (Clark, 2002).

To overcome the barriers and achieve true curricular revitalization, some scholars advocate a radical transformation of the curriculum (Kunstler, 2006) while others argue that, given limited resources, incremental changes may be best (Faustman et al., 1996). In systems that opt for radical transformation the administration has a central role in the process, while in those that opt for incremental changes, faculty are "the major agents of change in reforming curricula, renewing themselves, and improving instruction" (Lunde, 1995, p. 2), and anyone has the opportunity to champion changes (Klasek, 1992).

When choosing incremental changes, a threat is that the repercussion to the university student body as a whole will be rather limited. For example, if internationalization of the curriculum is focused solely on mobility programs, the danger is to only affect a small percentage of economically advantaged or "mobile" students (Bremer and van der Wende, 1995, p. 35); when interdisciplinarity is just the

domain of designated courses or majors, the risk is that only a self-selected number of students will choose that route: and when social responsibility is only addressed through classes with service learning components, the problem is that only students already socially responsible will choose to participate in these programs. Even incremental change proponents intend that every student be exposed meaningfully to the international, interdisciplinary, and outreach components of the curriculum (American Council on Education, 2005; Texas Special Committee on Globalization and Higher Education, 2001).

#### Purpose

The purpose of this paper is to present Hunger Issues as a valuable teaching and learning tool to motivate students, foster global and social responsibility, and help students make connections between disciplines at higher-order thinking levels.

### **Discussion: The Benefits of Teaching through Hunger Issues**

To help students become active partners in the teaching and learning process, educators need to find appropriate contexts and approaches to motivate students, and demonstrate relevance of the curriculum to the students' environment, prior knowledge, and interests. Hunger issues provide an appropriate context, for they are often present in the news, and they are easily connected to students' interests. An activity that helps students to realize these connections is to ask them to create a 'mind map' illustrating how they could use their skills or apply their passions in the fight against hunger. It is often useful to give a wide range of examples, including agricultural field work in developing countries, policy analysis and advocacy, and awareness-raising activities at home.

Discussing hunger issues in the classroom encourages global and social responsibility, since hunger is a global, local, individual, and social problem in which everyone can have a role. Through consideration of the hunger problem, educators can encourage reflection about how decisions in the U.S.

Processes/benefits	Explanation
Increases students' global and social responsibility	Initiates student reflection regarding individual and public responsibility;
	Increases student involvement with organizations to fight hunger;
	Encourages student action for social change.
Provides an interest approach	The topic itself is a good, contextual interest approach;
	Intersections between student interests and the topics surrounding hunger;
Increases students' interest and active participation in the learning experience	Hunger issues are increasingly present in the world surrounding movies, actors (Weisz Jolie, Pitt, Hounsou, Connelly) and athletes (McNabb, Ronalinho, Adu, Kaka);
	Often present in the news, providing numerous teachable moments.
Facilitates contextual and meaningful teaching and learning	Contextual: Puts a link to reality, helps connect to, and builds upon, students' prior knowledge and interests;
	Meaningful: Humanizes, internationalizes, and diversifies education;
	Can be set in different contexts, connected to extracurricular activities;
	Activities may be focused so students can create programs, projects, products, and results.
Fosters learning in (and integration of) multiple disciplines	The topic is multifaceted, has multiple causes, multiple effects, and multiple solutions Promotes interdisciplinary, global, and holistic thinking;
	Helps students make connections between classes, subjects, and ideas; integrate and extract meaning from several topics at the same time.
Promotes development of higher order thinking skills	Promotes both lower order and high order thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation);
	Discussion and reflection are natural mind exercises with this topic.
Promotes team learning and team work	Students see the advantages of working as a team rather than a group, with division or concentration of labor, and all students have the possibility to contribute something to enrich the team process (positive interdependence);
	Promotes reflection, discussion, and group brainstorming;
	Allows for diverse groups and multiple perspectives complementing each other;
	If a product is necessary, it can have many forms.
Provides multiple teaching strategies and adapts to many learning styles	Opens door to multiple teaching strategies, including non-traditional teaching and activities (facilitates team work, case studies, service learning, games, reacting activities, discussions, simulations, product development, evaluations), and adapts to a wide diversity of student learning styles.
Enhances the college experience and offers many resources and possibilities	Allows for student involvement in the community and for the community involvement in the learning process;
	Many organizations and websites offer materials and fully developed lesson plans;
	Engages and involves students in both for-credit and not-for-credit activities.

can affect people in other parts of the planet, how global issues are interrelated (e.g., hunger, climate change, trade), or about individual and public responsibility. Through hunger issues, educators can also encourage action, with options of all forms and shapes available to a wide variety of student backgrounds and preferences.

Hunger is an interdisciplinary real-world problem ideal for fostering higher-order and interdisciplinary thinking, "for which all areas of study can claim to be fundamental ingredients toward finding a solution, but not a single one offer a valid solution in isolation" (Navarro, 2007b, p. 435; see also Berns and Erikson, 2001). An activity that demonstrates to the students the interdisciplinary nature of the hunger problem involves asking the students to discuss how each of the Millennium Development Goals (MDGs) can help eliminate world hunger, and how reducing world hunger helps achieve the other MDGs (MDGs: Eradicate extreme poverty and hunger; Achieve universal primary education; Promote gender equality and empower women; Reduce child mortality; Improve maternal health; Combat HIV/AIDS, malaria, and other diseases; Ensure environmental sustainability; Develop a global partnership for development) (Food and Agriculture Organization, 2005). For further interdisciplinary analysis, once the students are familiar with the MDGs, it is useful to ask them how work in other disciplines (or other topics of the class) can help to achieve the MDGs.

In summary, educators using hunger issues for disciplinary and interdisciplinary teaching have experienced a range of processes by which hunger issues have enhanced their teaching endeavors, including 1) increasing students' global and social responsibility; 2) increasing students' interest and active participation in the learning experience; 3) facilitating contextual and meaningful teaching and learning; 4) fostering learning in (and integration of) multiple disciplines; 5) promoting development of higher order thinking skills; 6) promoting team learning and team work; 7) helping students with a wide range of learning styles; and 8) enhancing the college experience. Table 1 summarizes how these processes can be achieved and why they benefit teaching and learning.

## **Engaging Students in the Fight against Hunger: An Example**

To encourage, challenge, and prepare students to participate in activities dealing with the reduction of hunger and extreme poverty, faculty in a College of Agriculture of the University of Georgia engaged students in an interdisciplinary and collaborative process addressing a broad range of student needs (cognitive and affective) and interests, backgrounds and experiences, developmental stages, comfort zones, learning styles, and availability. To do that, the faculty provided several opportunities for students to choose the time, speed, and level of education and

involvement with which to explore hunger and extreme poverty issues.

For students wanting to explore opportunities with minimal initial risk, they organized on campus the broadcast of the World Food Day Teleconference and discussion group. For students wanting to get involved socially in the fight against hunger, they promoted, supported, and advised several student organizations focused on hunger and poverty issues (CARE-UGA, OXFAM at UGA, ONE-UGA, Invisible Children, Inc. at UGA), and financially supported student participation in the Universities Fighting World Hunger national conference. For students wanting to explore hunger issues from an academic perspective, they offered for-credit formal courses and directed projects (World Hunger and Extreme Poverty: How can you make a difference, Reflections on Fighting Hunger, Special Topics in Leadership and Service, and Directed Projects in Agricultural Leadership). To reach students not choosing to take these courses, they transformed existing agriculture courses by adding hunger and poverty case-studies and service-learning projects (International Agriculture, International Agricultural Development, Agricultural Science for Teachers, and Program Development for Agricultural Leaders). In addition, they developed a database with information about organizations offering international development internships and volunteer programs for students looking for specific high-involvement and long-term opportunities.

# Organizing a Modified Hunger Banquet as a Class Assignment

Among the many strategies used in this effort to enhance teaching and learning through hunger issues, a modified Hunger Banquet was particularly valuable for the students in the class because having to organize the materials, presentations, and activities for the banquet forced them to analyze, expand, evaluate, and apply the "academic" knowledge gained in the class. It also helped reach, in a short period of time, a large number of people not involved in the class (about 100 each time) including faculty, staff, students, and numerous student and community organizations invited to the banquet to inform participants about their programs. Indirectly, it also helped enhance the fight against hunger, for many of the students responsible for organizing the banquet are today informed and active participants in several efforts and organizations focused on the fight against hunger, both worldwide and at home.

The traditional Hunger Banquet: The Hunger Banquet is a role-play simulation that serves as a controlled representation of reality that helps participants experience problems (Linser and Ip, 2006). Guests at an OXFAM Hunger Banquet find themselves randomly assigned to feast or famine, mirroring what is happening in the world, where more than 850 million people are undernourished

### **Transforming**

and nearly three billion people live on less than two U.S. dollars per day. Poverty and hunger simulations such as the Hunger Banquet (OXFAM America, 2007) and the Welcome to the State of Poverty simulation have "proven useful in increasing awareness of poverty and providing a common experience from which participants can initiate discussions regarding action" (Chapman and Gibson, 2006, p. 59; see also Shirer et al., 1998). The OXFAM Hunger Banquet has been used successfully in many different environments to raise funds and awareness, and to help fight hunger and poverty around the world. Most hunger banquets follow the guidelines provided by OXFAM (2007), which include a well-developed script, and role-playing banquet cards. Students organizing the "modified Hunger Banquet" endeavor, however, designed their event from the onset, and were responsible for creating and evaluating the content, solutions, and activities of their event.

Preparing a modified Hunger Banquet: Contextual and interdisciplinary learning. With several modifications, the responsibility of creating a hunger banquet simulation became a powerful active-learning tool that helped students better understand hunger issues (Krain and Shadle, 2006). First, to start analyzing the issue of hunger and meet the members of the class, students initially prepared a class hunger problem tree to visualize hunger from an interdisciplinary perspective, analyze causes and effects, investigate relationships between them, and search for solutions (Anyaegbunam et al., 2004). Second, students chose the topics that they wanted to further investigate to present to the banquet audience, and grouped themselves into teams according to their topic choices. By giving the students the responsibility to organize and deliver the hunger banquet, the product pride and ownership they felt for the banquet enhanced their participation in the process, as well as developed their decision making and organizational skills. During the weeks when students were preparing the banquet, they worked in teams that grew stronger as the students experienced the critical elements to cooperation and realized the importance of positive interdependence (Johnson et al., 1998). As a result, the students had the opportunity to further develop their communication, leadership, and interpersonal skills. The charge of creating their own script, role play, activities, and materials for their banquet further challenged students and compelled them to analyze, evaluate, and synthesize, further developing their higher-order thinking skills. Presenting their product in public on the day of the banquet reinforced their presentation and public speaking skills.

During the Hunger Banquet: Increasing awareness, knowledge, and action. The hunger banquet, intentionally free of charge (funds came from donations and a silent auction), helped reach unaware and uninterested students that were invited

to the banquet by friends, or were attracted by the possibility of a free meal. Student organizers were also asked to invite a professor and a university staff member, further encouraging interactions and exchange of ideas among groups. During the banquet, all guests listened to presentations, viewed a studentdeveloped video, and participated in role-playing activities designed to provide background information to increase knowledge and awareness regarding hunger and poverty issues, globally and locally. In addition, banquet participants were given the opportunity to interact with representatives from community and on-campus organizations dealing with hunger and poverty issues, thus developing a personal connection, critical for further and future involvement with these organizations.

After the banquet: Sustaining action, and changing student perceptions regarding the relationship between academic and personal development. Students organizing the banquet increased participation in clubs dealing with the fight against hunger and poverty and many participated in several community development projects organized after the banquet. In addition, simulations like the Hunger Banquet have the potential to help students understand the connection between academics and real life, and become more aware of their role in society.

### **Summary**

"There is no single silver bullet cure" (Brock, 1993, p. 1) for the transformation of the curriculum. In incremental efforts, faculty are often the champions of change, overcoming institutional barriers, overload, and lack of knowledge. This paper analyzes factors affecting the transformation of the curriculum, and presents (and explains from a pedagogical perspective), methods that faculty can use to revitalize their teaching endeavors to prepare graduates that 1) have a global mindset, 2) are able to understand, apply, evaluate, and integrate knowledge of multiple (and across) disciplines, and 3) are socially responsible.

Contextual teaching and learning is presented as a method that can help encourage students' active participation in the learning process, foster higherorder and interdisciplinary thinking, and support development of global and social responsibility among students. Teaching through hunger issues is a model tool for contextual teaching and learning, and enhances the learning process by 1) increasing students' global and social responsibility; 2) providing an interest approach; 3) facilitating contextual and meaningful teaching and learning; 4) fostering learning in (and integration of) multiple disciplines; 5) promoting development of higher order thinking skills; 6) promoting team learning and team work; 7) providing multiple teaching strategies and adapting to a wide range of learning styles; and 8) enhancing the college experience.

To encourage, challenge, and prepare students to participate in activities dealing with the reduction of hunger and extreme poverty, the authors engaged students in an interdisciplinary and collaborative process addressing a broad range of student needs (cognitive and affective) and interests, backgrounds and experiences, developmental stages, comfort zones, learning styles, and availability. To do that, the faculty provided several opportunities for students to choose the time, speed, and level of education and involvement with which to explore hunger and extreme poverty issues. Among the many different strategies used in this effort, the hunger banquet was particularly invaluable, reaching a large number of people in a short period of time, and increasing campus awareness about hunger. The development of a modified hunger banquet provided the opportunity to engage a group of students in an intense interdisciplinary analysis of the causes of hunger, team-work, reflection on personal roles in the fight against hunger, advocacy, and social action.

### **Literature Cited**

- Allen, D.K. 2003. Organizational climate and strategic change in higher education: Organizational insecurity. Higher Education 46: 61-92.
- American Council on Education. 2005. Faculty engagement with internationalization: Strategies from members of the ACE internationalization collaborative. http://www.acenet.edu/AM/Template.cfm?Section=goodPractice&Template=/CM/HTMLDisplay.cfm&ContentID=5936. (Accessed April 12, 2008).
- Anyaegbunam, C., P. Mefalopulos, and T. Moetsabi. 2004. The problem tree: Cause-effect analysis of critical issues. In: Participatory rural communication appraisal: Starting with the people (2nd ed.). http://www.fao.org/docrep/008/y5793e/y5793e00. htm. (Accessed June 17, 2008).
- Berns, R., and P. Erickson. 2001. Contextual teaching and learning: Preparing students for the new economy. The Highlight Zone: Research @ Work 5: 1-8. CTE National Dissemination Center for Career and Technical Education, Columbus, OH. http://nccte.com/publications/infosynthesis/highlightzone/highlight05/highlight05-CTL.pdf. (Accessed June 25, 2008).
- Bremer, L., and M. van der Wende. 1995. Internationalizing the curriculum in higher education. Nuffic paper 3. The Hague, Netherlands: Nuffic.
- Brock, W.E. 1993. An American imperative: Chairman's preface. In: Wingspread group for Higher Education (ed.).
- An American Imperative: Higher Expectations for Higher Education. http://www.johnsonfdn.org//AmericanImperative/chairman.html. (Accessed April 23, 2008).
- Chapman, S.W. and S.M.S. Gibson. 2006. Poverty Simulation: A Useful Tool for Creating a Common Understanding of the Obstacles Facing

- Low-Income Families in Georgia. In: Proc. of Eastern Family Economics and Resource Management Association, 57-59.
- Clark, C. 2002. Effective multicultural curriculum transformation across disciplines. Multicultural Perspectives 4(3): 37-46.
- Faustman, C., J. Riesen, D. Suter, and D. Vietor. 1996. New forms of higher education in agriculture. In: Kunkel, H.O., I.L. Maw, and C.L. Skaggs (eds.). Revolutionizing Higher Education in Agriculture: Framework for change. Ames, IA: Robson & Associates.
- Food and Agriculture Organization. 2005. The state of food insecurity in the world: Eradicating world hunger key to achieving the Millennium Development Goals. ftp://ftp.fao.org/docrep/fao/008/a0200e/a0200e.pdf. (Accessed March 19, 2009).
- Johnson, D.W., R.T. Johnson, and K.A. Smith. 1998. Cooperative learning returns to college: What evidence is there that it works? Change 30(4): 26-35.
- Klasek, C.B. 1992. University ethos: The spark, the flame, the fire. In C.B. Klasek (ed.). Bridges to the future: Strategies for Internationalizing Higher Education. Carbondale, IL: Association of International Education Administrators.
- Koper, R. 2004. Use of the semantic web to solve some basic problems in education: Increase flexible, distributed lifelong learning, decrease teacher's workload. Jour. of Interactive Media in Education 6: 1-23. Special Issue on the Educational Semantic Web. http://www-jime.open.ac.uk/2004/6/koper-2004-6.pdf (Accessed September 20, 2007).
- Krain, M. and C.J. Shadle. 2006. Starving for knowledge: An active learning approach to teaching about world hunger. International Studies Perspectives 7(1): 51-66.
- Kunstler, B. 2006. The millennial university, then and now: From late medieval origins to radical transformation. On the Horizon 14(2): 62-69.
- Lattuca, L.R. and J.S. Stark. 1994. Will disciplinary perspectives impede curricular reform? Jour. of Higher Education 65(4): 401-426.
- Linser, R. and A. Ip. 2006. Role play simulation for teaching and learning. http://www.roleplaysim.org/demos/(Accessed November 11, 2007).
- Lunde, J.P. 1995. Three programs in curriculum revitalization. In J.P. Lunde, M. Baker, F.H. Buelow, and L.S. Hayes (eds.). Reshaping Curricula: Revitalization Programs at Three Land Grant Universities. Bolton, MA: Anker Publishing Company, Inc.
- Navarro, M. 2007a. Helping Students Analyze Complex and Global Issues. In: Proc. 23rd Annu. Mtg. of the Association for International Agricultural and Extension Education. Polson, Montana, 20-24 May.
- Navarro, M. 2007b. Teaching Agriculture in a

### **Transforming**

- Hunger Issues Course.... Or was it Teaching Hunger Issues in an Agriculture Course? In: Proc. 23rd Annu. Mtg. of the Association for International Agricultural and Extension Education. Polson, Montana, 20-24 May.
- OXFAM America. 2007. Hunger banquet. http://www.hungerbanquet.org/ (Accessed January 21, 2007).
- Princeton University. 1999. The President's page: External factors. Princeton Alumni Weekly 11/3/99. http://www.princeton.edu/ pr/president/99/11-03-99.html (Accessed January 13, 2006).
- Roper, C.D. and M.A. Hirth. 2005. A history of change in the third mission of higher education: The evolution of one-way service to interactive engagement. Jour. of Higher Education Outreach and Engagement 10(3): 3-21.
- Shirer, K., D. Klemme, and D. Broshar. 1998. Exploring the state of poverty. An evaluation report of the ROWEL Poverty Simulation: The Iowa experience with the ROWEL Poverty Simulation. Iowa State University Extension. http://www.extension.iastate.edu/cyfar/simulation/report/Poverty.Report.pdf.(Accessed June 14, 2008).

- Singha, S., C.L. Skaggs, and A.G. Nelson. 1996. Facilitating systemic change. In: Kunkel, H.O., I.L. Maw, and C.L. Skaggs (eds.). Revolutionizing Higher Education in Agriculture: Framework for Change. Ames, IA: Robson and Associates.
- Spurgeon, L.P. and G.E. Moore. 1997. The educational philosophies of training and development professors, leaders, and practitioners. The Journal of Technology Studies 23(2): 11-19.
- Texas Special Committee on Globalization and Higher Education. 2001. Globalizing Texas higher education for the new century: A response to 'closing the gaps.' Texas Higher Education Coordinating Board. http://www.thecb.state.tx.us/reports/pdf/0318.pdf. (Accessed June 18, 2008)
- Yankelovish, D. 2005. Ferment and change: Higher education in 2015. Chronicle of Higher Education 52(14): B6-B9.

