

CULTIVATING CULTURAL COMPETENCE IN AGRICULTURAL EDUCATION THROUGH COMMUNITY-BASED SERVICE-LEARNING

Michael D. Woods, Assistant Professor
Michigan State University

Abstract

As we press forward into the new millennium, agricultural educators across the country are continuing their quest to reshape agricultural education, to develop new approaches to teaching and learning that are more appropriate and effective for the 21st century. Our rapidly changing world demands an agricultural education system that equips children with the tools and skills they will need to succeed in a multicultural democracy. While many initiatives within agricultural education (e.g., National Research Council, 1988; National Council for Agricultural Education, 2000) have addressed the need to advance agricultural education in public schools, much work is still needed. Community-based service-learning may hold the key to connecting future generations with their diverse communities and democratic society at large. The purpose of this article was to outline the extent to which service-learning can advance cultural competence within agricultural education.

Introduction

On December 28, 2000, the Census Bureau released the first results of the census completed a few months earlier, announcing, “never have we been so diverse; never have we been so many; never have we been so carefully measured” (U.S. Census Bureau, 2000). The “never so many” and “never so carefully measured” were front-page news immediately across the country (e.g., “Census shows record growth,” 2000; “Explosive Growth,” 2000; “Minorities Become Majority,” 2000). The national count of 281.4 million persons was the first big story. The total national population had grown more rapidly than expected, and the numerical growth—32.7 million since the 1990 census—was the largest recorded in any census (U.S. Census Bureau, 2000).

In the months that followed, with the release of detailed census data, a story implicit in those early numbers steadily grew more prominent (e.g., “New picture,” 2001). “Never have we been so diverse” became the big story, and it has showed every sign of staying on page one for some time to come.

As the media has showcased, the 2000

Census has documented a dramatic diversification of United States population.

As a result, the U.S. classroom – in primary and secondary schools – is more diverse than at any time in the nation’s history, with more issues needing to be explored, more challenges needing to be met, and more attention needing to be paid. Orfield (2001) recently summarized in regard to K-12 public education, “there is strong evidence that instructional techniques that increase both the academic and human relations benefits of interracial schooling is needed more than ever” (p. 9). A similar call by Sheppard (1983) noted that vocational teachers need training in multicultural education because America is a culturally pluralist society, and cultural and ethnic diversity in the United States is a fact of life. Luft (1996) declared “secondary agricultural education teachers can do much better in serving the needs of culturally diverse students in their programs” (p. 74). Likewise, Dr. Blannie Bowen, the 2001 American Association for Agricultural Education (AAAE) Distinguished Lecturer, called for agricultural educators to create curricular and co-curricular opportunities for students to experience genuine racial integration — to interact in meaningful ways

and to learn from each other — if diversity is to have a positive impact on agricultural education. Yet, as Woods and Moore's (2003) review of diversity research in agricultural education pointed out, the presence of a diverse student body in a program is a necessary but certainly not a sufficient condition for advancing the attitudes, policies, and practices of cultural competence among agricultural education students and FFA members.

Purpose/Objectives

The purpose of this article is to judiciously examine the importance of authentic learning experiences addressing diversity through cross-cultural interaction in classrooms, inter-group dialogues that bring people from diverse backgrounds together to solve community needs, and participation in multicultural community events. Specifically, while many different outcomes of the integration of diversity into the education system have been studied (Gergen, Gulerce, Lock, & Misra, 1996; Highlen, & Sudarsky-Gleiser, 1994; Markus & Kitayama, 1991; Myers et al. 1991) the focus of this article was on the preparation for citizenship in a multicultural society. It has been argued that engaged citizenship is an important outcome of experience with racial and ethnic diversity just as it was seen as an important aspect of personal development at the time of *Brown v. Board of Education* (Deutscher & Chein, 1948). In particular it has been argued that authentic learning experiences with diverse populations through the integration of service-learning activities into agricultural education informs and prepares students for a multicultural democracy.

Specifically, the objectives of this paper are threefold: 1) explore connections between multiculturalism, service-learning, and agricultural education as a means of providing an authentic learning experience for students; 2) discuss the educational implications of building bridges between agricultural education, FFA programming, and the community to more effectively prepare students for the diverse society in which they will live and work; and 3) outline specific recommendations for

achieving the broad goal of making service-learning a universal experience in agricultural education.

Conceptual Framework

As the 2000 Census pointed out, the society that students need to prepare for is changing. Moore (1994) maintained

considering changes in demographics, industry needs, and general societal needs, supporting diversity in agricultural education should be a high priority. The focus of diversity should be on people, programs, and the institutions/systems that are responsible for various programs in the state. (p. 4)

Baker and Magill (1994) further declared

If schools are to equip students with the skills necessary to actualize their potential, as well as to succeed as citizens and workers, students must be aware of the diversity of that larger context in which they will find themselves. (p. 21)

In response to the extent to which cultural diversity has been addressed in secondary agricultural education, Luft (1996) contended that given that the nature and degree of diversity is changing as well as our understanding of what diversity even is, the need for cross-cultural education is very important in agricultural education.

What exactly is cross-cultural education and how can its principles be incorporated into the authentic learning of agricultural education? Bensimon (1994) noted that cross-cultural education is about transforming curricula to more fully reflect the world in which students live. Yet, Wilson (1996) noted, this is not just a matter of adding cultural diversity to an existing course or two; it means “challenging the conceptual paradigms of education, the fundamental base from which students gain knowledge” (p. 35). As several authors and reports (Banks, 1990, 1993; Spindler, 1987; Bennett, 1990; Delpit, 1992; Flannery &

Ward, 1999; U.S. Department of Education, 1992) pointed out, true cultural competence requires transformation of content and methodology in addition to organizational structures.

According to Haley (1999), cultural competence is a set of congruent behaviors, attitudes and policies that come together in a system, and enables that system to work effectively in cross-cultural situations. The word *culture* is used because it implies the integrated pattern of human behavior that includes thought, communication, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious, or social group (Lynch & Hanson, 1998). The word *competence* is used because it implies having the capacity to function effectively. A culturally competent system within agricultural education should incorporate – at all levels – the importance of culture, the assessment of cross-cultural relations, vigilance towards the dynamics that result from cultural differences, the expansion of cultural knowledge and the adaptation of services to meet culturally unique needs (Moore, 1994; Bowen, 1994, 2001; Whent, 1994; Luft, 1996).

Certainly the description of cultural competence seems idealistic. How can a system accomplish all of these things? How can it achieve this set of behaviors, attitudes and policies? Cultural competence may be viewed as a goal toward which agricultural education can strive. Accordingly, Haley (1999) insisted that becoming culturally competent is a developmental process. No matter how proficient agricultural education may become, there will always be room for growth. Or as Bowen (1994) contended, cross-cultural competence is a process in which the system of agricultural education can measure its progress according to the achievement of specific developmental tasks. As the tasks are defined, the system will be guided toward progressively more culturally competent services (Bowen, 1994). First, however, Whent (1994) reminded the profession that “agricultural educators need to make greater strides toward acknowledging their unconscious biases toward people of diverse populations and move forward to accept the changes and challenges of the future” (p. 11). Baker and

Magill (1994) even further noted that “while it is necessary to create and nurture a school-wide climate of acceptance and awareness, it is essential that diversity also be an integrated part of the curriculum in individual classrooms” (p 22).

The underlying premise of cross-cultural education is that teaching and learning are cultural processes that take place in a social context and should affect social change (U.S. Department of Education, 1992). According to Spindler (1987) “cross-cultural education acknowledges that schools are essential to laying the foundation for the transformation of society and the elimination of oppression and injustice” (p. 49). LaBelle (1976) maintained that this underlying premise can be achieved by “advancing learning opportunities that take into account multiple cultural perspectives and thereby removing the blindness imposed on education by the dominant cultural experience” (p. 72). Haley (1999) contended that “the journey toward cultural competence requires the willingness to experience, learn from those experiences, and act” (p. 12).

According to Piaget and other psychologists, for educational experiences to be relevant the student must be active to be engaged in real learning (Piaget, 1954). Learning becomes active when students are able to connect new knowledge with their prior understanding. Constructivists take this notion a bit further stating that a meaningful context that brings the real world into the classroom learning environment is key to promoting learning (Brown, Collins, & Duguid, 1989). Learning is a process of interacting with the outside world, and continually reanalyzing and reinterpreting new information and its relation to the real world (Brown et al.). Traditional learning situations in which students are passive recipients of knowledge are inconsistent with the learning situations of real-life (Lave & Wenger, 1990). In order to make learning relevant to real life experiences, learning environments must be authentic.

Authentic learning is a pedagogical approach that allows students to explore, discuss and meaningfully construct concepts and relationships in contexts that involve

real-world problems and projects that are relevant to the learner (Donovan, Bransford, & Pellegrino, 1999). The term authentic is defined as genuine, true and real (*Webster's Revised Unabridged Dictionary*, 1998). If learning is authentic, then students should be engaged in genuine learning problems that foster the opportunity for them to make direct connections between the new material that is being learned and their prior knowledge. These kinds of experiences will increase student motivation. In fact, Newmann, Secada, and Wehlage (1995) contended "an absence of meaning breeds low engagement in schoolwork and inhibits [learning] transfer" (p. 5). Students must be able to realize that their achievements stretch beyond the walls of the classroom. They bring to the classroom experiences, knowledge, beliefs, and curiosities and an authentic learning opportunity provides a means of bridging those cultural elements with classroom learning.

The true power of authentic learning is the ability to actively involve students and touch their intrinsic motivation (Mehlinger, 1995). Literature suggests that authentic learning has several key characteristics (a) learning is centered on authentic tasks that are of interest to the learners; (b) students are engaged in exploration and inquiry; (c) learning is closely connected to the world beyond the walls of the classroom; (d) students become engaged in complex tasks and higher-order thinking skills, such as analyzing, synthesizing, designing, manipulating, and evaluating information; and (e) students have opportunities for social discourse (Donovan et al., 1999; Newman & Associates, 1996; Newmann et al., 1995; Nolan & Francis, 1992).

Proponents tout service-learning as an effective authentic learning method for providing cross-cultural education and to transform the traditional classroom (Boyle-Baise & Kilbane, 2000; Flannery & Ward, 1999; Rockquemore & Schaffer, 2000; Skilton-Silvester & Erwin, 2000). The National and Community Service Trust Act of 1993, through the Learn and Serve America program, provided support for service-learning activities in elementary and secondary schools and defines service-learning as "(a) a (teaching) method

whereby students or participants learn and develop through active participation in thoughtfully organized service that is conducted in and meets the needs of a community; (b) coordinated with an elementary school, secondary school, institution of higher education, or community service programs, and with the community; (c) helps foster civic responsibility; (d) integrated into and enhances the academic curriculum of the students, or the educational components of the community service program in which the participants are enrolled; and (e) provides structured time for students or participants to reflect on the service experience" (Corporation for National Service, 1999).

The National Commission on Service-Learning (2001) declared, "service-learning, is a teaching and learning approach that integrates community service with academic study to enrich learning, teach civic responsibility, and strengthen communities and moves students beyond the confines of the school walls into culturally diverse local communities as a means to develop cultural and professional competence." According to Bowen (1994, 2001), Moore, (1994), Whent (1994), Baker and Magill (1994), Luft (1996), and Woods and Moore (2003), this need to interact with a culturally diverse community is especially important in agricultural education as society continues to change.

Campus Compact (2000) stated that a service-learning experience can be conducted as a whole class, in small-group project teams, as well as through individual projects or self-directed learning. The service component can take place in the classroom, on school grounds, in surrounding neighborhoods, or at community agency sites. Similar to other forms of experiential education, such as project-based instruction, service-learning engages the student in a meaningful context for learning. The community service experience provides an opportunity for students to explore and apply curricular content and concepts within the context of real world experiences (Eyler, Giles & Schmiede, 1996). When service-learning activities are well-planned and executed, transformation occurs within students,

schools and communities (Campus Compact, 2000). Students become significant contributors and stakeholders in their communities and within their own educational experience (Eyler et al.). Educational institutions engaged in service-learning benefit from stronger, more effective partnerships with the community (Kellogg Commission, 1998). This increases the availability of valuable learning opportunities and resources both inside and outside the classroom.

Kuh, Douglas, Lund, and Ramin-Gyurnek (1994), pointed out that the benefits of service-learning as an authentic learning experience includes moral, cognitive and psychosocial development. Equally important to underscore is that service-learning also helps students participate in learning environments that contribute to greater diversity of experience and socialization than if they simply congregate in traditional classrooms with others much like themselves.

The quality of agricultural education, in particular, can benefit from student participation in both service-learning (Stafford, Boyd, & Lindner, 2003) and cross-cultural education (Woods & Moore, 2003). The continuing demographic changes in the United States require those who work in the agricultural industry to recognize that they must become not only more culturally sensitive but also culturally competent (Luft, 1996; Bowen, 2001). Effective agricultural education requires the incorporation of the needs of the cultures within any give community (Phipps & Osborne, 1988; Baker & Magill, 1994; Moore, 1994; Luft, 1996) and must include the involvement of ethnic committees in all levels of planning and implementation (National Council for Agricultural Education, 2000). Service-learning in a cross-cultural context simultaneously enhances understanding of content knowledge and the context in which this knowledge is applied (Flannery & Ward, 1999).

Equally important, service-learning is one method available to help agricultural educators achieve defined goals and actions outlined in *Reinventing Agricultural Education for the Year 2020* (National

Council for Agricultural Education, 2000) and *Understanding agriculture new directions for education* (National Research Council, 1988). Specifically, several of the goals and objectives align with the underlying principles of service-learning and multicultural education (a) provide opportunities for experiential learning and leadership development; (b) provide instructional systems and materials for diverse learning styles; (c) collaborate with other groups to bring factual information about agriculture, food, fiber and natural resources systems to all students; (d) establish a positive working relationship with multiple stakeholders that builds lines of communication and provides a diverse work force for the agriculture, food, fiber and natural resources industry; (e) create broad-based coalitions of groups and organizations that collaborate to develop and disseminate contemporary agriculture curricula for all students; and (f) ensure that numerous and varied stakeholders, inside and outside the school system, engage in a continuing effort to strengthen and refine the shared vision, mission and goals.

While many of the goals and objectives can be met via traditional classroom instruction, service-learning allows agricultural instructors to more fully develop linkages with the community to provide an authentic learning environment that simultaneously strengthens their agricultural curriculum and FFA programming. Moreover, service-learning challenges students to apply classroom knowledge to authentic community problem solving which allows for continued development of partnerships and strategic alliances that provide strong support for agricultural education. Most importantly, agricultural education curricula must be student-centered, encourage authentic learning, and be culturally relevant in order to reinvent agricultural education for the year 2020.

Theoretical Promise of Service-Learning

Effective service-learning has been found to be an authentic learning method that makes content and context more academically relevant to the student while meeting the needs of a particular community

group. Recent studies of service-learning found that service-learning has a positive influence on (a) student personal development such as sense of personal efficacy, personal identity, spiritual growth, and moral development (Astin & Sax, 1998); (b) interpersonal development and the ability to work well with others, leadership and communication skills (Eyler & Giles, 1999); (c) reducing stereotypes and facilitating cultural and racial understanding (Boyle-Baise & Kilbane, 2000); (d) sense of social responsibility and citizenship skills (Astin & Sax; Eyler & Giles); (e) involvement in community service after graduation (Astin, Sax, & Avalos, 1999; Smedick, 1996); (f) students' academic learning (Astin & Sax); and 7) academic outcomes as demonstrated complexity of understanding, problem analysis, critical thinking, and cognitive development (Eyler & Giles; Eyler, Root, & Giles, 1998).

Likewise, research has found that the effects of particular service-learning program characteristics: placement quality, reflection, application of service, duration and intensity of service, exposure to diversity, community voice, and feedback had impacted student development. Specifically, Eyler and Giles (1999) found that service-learning placement quality has a positive impact on student personal and interpersonal outcomes. Eyler and Giles (1999) concluded that the quality and quantity of reflective activities within a service-learning project have an impact on student learning. As for the application of service to academic content and vice versa, McElhaney (1999) found a positive impact of a service-learning experience on students, particularly learning outcomes of course content. Astin and Sax (1998) and Parker-Gwin and Mabry (1998) concluded that the duration and intensity of a service project has an impact on student outcomes as well. Eyler and Giles declared that the exposure to diverse populations as part of a service-learning project has an impact on students, particularly personal outcomes, such as identity development and cultural understanding. Moreover, Eyler and Giles also found that the community voice in a service-learning project has an impact on student cultural understanding. Finally,

Greene (1996) and Subramony (2000) all concluded that receiving quality feedback from instructors or community clients has an impact on student's self reported learning, use of skills taught in courses and commitment to service.

Conclusions and Recommendations

In conclusion, the degree of cultural competence agricultural education and FFA achieves is not dependent on any one factor. Rather, as Moore (1994) and Haley (1999) outlined, attitudes, policies and practice are three major arenas where development can and must occur if agricultural education and FFA is to move toward advancing cultural competence. Attitude must change to become less ethnocentric and biased. Policy must change to become more flexible and culturally impartial. Practices must become more congruent with the diverse culture of the society from initial contact through termination.

As research shows, service-learning is a tested authentic learning method of instruction that can aid in advancing the attitudes, policies and practices around cultural competencies (Flannery & Ward, 1999). Service-learning is an often practiced method that teachers in thousands of schools across the country have successfully employed to increase student motivation for learning and to promote traditional academic goals. At the same time, service-learning promotes the broader goals of schooling, such as the teaching of citizenship and cross-cultural appreciation. By providing opportunities for students to become active, positive contributors to society, service-learning helps them to develop a sense of civic and social responsibility. At the same time, they are able to acquire an ethic of caring and community connectedness in an ever-growing cross-cultural society.

The time is now appropriate for agricultural education to embrace service-learning as a means of overcoming widespread academic and civic disengagement among students. Only then can educators be assured of preparing future agriculturalists that are both world-class learners and world-class citizens.

It is hoped that this article and the

following recommendations will help make cross-cultural education through service learning available to all agriculture students and FFA members. Three specific recommendations are made to achieve the broad goal of making cross-cultural education through service-learning a universal experience in agricultural education:

1. Reclaim the public purpose of agricultural education.

Americans support a system of public education that will render children the knowledge and skills they will need to succeed in life and in work, as well as to become responsible citizens of our democratic society. Service-learning is uniquely poised to teach these civic and multicultural virtues. Nevertheless for service-learning to capture the hearts and minds of Americans, agricultural educators first must reaffirm their commitment to education's public purpose and showcase how service is woven into the fabric of agricultural education programs. The following steps are essential to achieve this goal:

- Foster dialogue about service-learning as a strategy to promote the public purpose of agricultural education.
- Expand the definition of student success through FFA to include community contribution.
- Coordinate with other school reform efforts, like the "No-Child Left Behind" initiative, to align multicultural education and service-learning efforts through agricultural education objectives.

2. Develop a comprehensive system of professional development opportunities for agricultural educators regarding multicultural education and service-learning.

Institutions involved in educator professional development – including agricultural education teacher preparation programs, the National FFA Organization, and governmental agencies interested in advancing agricultural education – should

create a comprehensive and integrated system of ongoing professional development opportunities. This system should help agricultural educators forge stronger linkages between multicultural education, service-learning and curriculum. Specific objectives should be to:

- Make multicultural education and service-learning part of all pre-service preparation and accreditation programs for agricultural educators.
- Provide ongoing in-service professional development on multicultural education and service-learning for agricultural educators at all levels, from novice to veteran.
- Create multi-media and professional development resources, including more web-based resources and multicultural education through service-learning how-to guides for teachers.

3. Increase policy, program and financial support for multicultural education and service-learning in agricultural education programs and FFA activities.

Policy at all levels must support high-quality multicultural education and service-learning experiences in agricultural education and FFA activities. It must be aligned with the various cultures, conditions and structures of agricultural education. National and local agricultural education and FFA organizations should develop policy, programs and financial support that work best in local situations to achieve this goal. This means that they must:

- Expand and leverage existing programs and funding streams.
- Build multicultural education and service-learning into all agricultural education courses.
- Fund and expand research to document multicultural education and service-learning outcomes and improve practice.
- Make multicultural education and service-learning research more accessible and useful to practitioners so that it informs practice.

Summary

There is a vast difference between a group that merely preaches cross-cultural appreciation and a group that lives it. The demographic changes addressing the United States and the agricultural industry have recognized the importance of cultural issues. Secondary agricultural education can lead the way in creating more culturally competent citizens prepared to work in an ever changing global society.

This article highlights service-learning as an authentic learning methodology that can be cultivated to advance cross-cultural education. While many resources are available to guide the process, developing cultural competence continues to challenge secondary agricultural education.

The roads that lead to the development of educational programs that foster culturally competent practices are wide, and there is much room for agricultural education to contribute to its creativity and accomplishments. However, the dire situation facing our youth today, and therefore our nation tomorrow, demands that we embrace this challenge.

References

Astin, A. W., & Sax, L. J. (1998). How undergraduates are affected by service participation. *Journal of College Student Development*, 39(3), 251-263.

Astin, A.W., Sax, L.J., & Avalos, J. (1999). Long-term effects of volunteerism during the undergraduate years. *Review of Higher Education*, 22(2), 187-202.

Baker, M., & Magill, M. (1994). Supporting diversity at the local level: A perspective from teachers. *The Agricultural Education Magazine*, 66(12), 21-23.

Banks, J. (1990). Citizenship education for a pluralistic democratic society. *Social Studies*, 81, 210-214.

Banks, J. (1993). Approaches to multicultural curriculum reform. In J. Banks and C. Banks (Eds.), *Multicultural education: Issues and perspectives*. Boston: Allyn & Bacon.

Bennett, C. I. (1990). *Comprehensive multicultural education: Theory and practice* (2nd ed.). Boston: Allyn and Bacon.

Bensimon, E. M. (1994). *Multicultural teaching and learning: Strategies for change in higher education*. National Center on Postsecondary Teaching, Learning, and Assessment.

Bowen, B. (2001). Advancing agricultural education within the context of an increasingly diverse society. *Journal of Agricultural Education*, 43(1), 1-11.

Bowen, B. E. (1994). Reflections on the need for diversity: Desegregation vs. integration. *The Agricultural Education Magazine*, 66(12), 6-8.

Boyle-Baise, M., & Kilbane, J. (2000). What really happens? A look inside a community service learning field experience for multicultural teacher education. *Michigan Journal of Community Service Learning*, 7(Fall), 54-64.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.

Campus Compact (2000). *Introduction to service-learning toolkit: Readings and Resources for faculty*. Providence, RI: Campus Compact.

Census shows record growth population passes bureau predictions (2000, Dec 29). *USA Today* Retrieved March 29, 2003, from <http://www.usatoday.com>

Corporation for National Service. (1999). *Research: History of National*

Service. Available from <http://www.national-service.org/research/history.html>

Delpit, L. (1992). Education in a multicultural society: Our future's greatest challenge. *Journal of Negro Education*, 61(3), 237-261.

Deutscher, M., & Chein, I. (1948). The psychological effects of enforced segregation: A survey of social science opinion. *Journal of Psychology*, 26, 259-287.

Donovan, M.S., Bransford, J.D., & Pellegrino, J.W. (Eds.) (1999). *How people learn: Bridging research and practice*. Washington, DC: National Academy Press.

Explosive Growth is Moving West. (2000, March 16). *Chicago Tribune*. Retrieved March 29, 2003, from <http://www.chicagotribune.com>

Eyler, J., & Giles Jr., D. E. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.

Eyler, J., Giles, D.E. & Schmiede, A. (1996). *A practitioner's guide to reflection in service-learning: Student voices and reflection*. Nashville, TN: Corporation for National Service.

Eyler, J., Root, S., & Giles, D.E. (1998). Service learning and the development of expert citizens: Service learning and cognitive science. In Bringle, R. G., & Duffy, D. K. (Eds.), *With service in mind: Concepts and models of service learning in psychology*, (pp.85-100). Washington, D.C.: AAHE Publications.

Flannery, D., & Ward, K. (1999) Service Learning: A Vehicle for Developing Cultural Competence in Health Education. *American Journal of Health Behavior*, 23(5), 323-331.

Gergen, K.J., Gulerce, A., Lock, A., & Misra, G. (1996). Psychological science in cultural context. *American Psychologist*, 51, 496-503.

Greene, D. P. (1996). Moral reasoning, student development, reciprocity, and quality of life in a service learning experiment. *Unpublished Dissertation*, Colorado State University.

Haley, J. (1999). Beyond the tip of the iceberg: Five stages toward cultural competence. *Reaching Today's Youth Journal*, 3(2), 9-12.

Highlen, P., & Sudarsky-Gleiser, C. (1994). A co-essence model of vocational assessment for racial/ethnic minorities: An existential approach. *Journal of Career Assessment*, 2(3), 304-329.

Kellogg Commission. (1998). *Returning to our roots: Student access*. National Association of State Universities and Land-Grant Colleges. (Reports and Publications). Available on-line at <http://www.intervisage.com/Kellogg/STATEMENTS/student/index.html>.

Kuh, G. D., Douglas, K. B., Lund, J. P., & Ramin-Gyurnek, J. (1994). *Student learning outside the classroom: Transcending artificial boundaries*. ASHE-ERIC Higher Education Report No. 8. Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.

LaBelle, T.J. (1976). An anthropological framework for studying education. In J.I. Roberts & S.K. Akinsanya (Eds), *Educational patterns and cultural configurations: The anthropology of education* (pp. 67-82). New York: David McKay Company.

Lave, J., & Wenger, E. (1990). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Luft, V. D. (1996). Extent to which cultural diversity is addressed in secondary agricultural education. *Journal of Agricultural Education*, 37(3), 67-75.

Lynch, E. W., & Hanson, M. J. (Eds.). (1998). *Developing cross-cultural competence: A guide for working with young children and their families*. Paul H. Brooks Publishing: Baltimore, MD.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.

McElhaney, K.A. (1999). Student outcomes of community service learning: A comparative analysis of curriculum-based and non curriculum-based alternative spring break programs. *Unpublished Dissertation*. University of Michigan.

Mehlinger, H. D. (1995). *School reform in the information age*. Bloomington, IN: Indiana University Press.

Minorities Become Majority in State. (2000, Aug. 30). *The Los Angeles Times*. Retrieved March 29, 2003, from <http://www.latimes.com>

Moore, E. A. (1994). Supporting diversity: A challenge and opportunity for the profession. *The Agricultural Education Magazine*, 66(12), 4-5.

Myers, L. J., Speight, S. L., Highlen, P. S., Cox, C. I., Reynolds, A. L., Adams, E. M., & Hanley, C. P. (1991). Identity development and worldview: Toward an optimal conceptualization. *Journal of Counseling and Development*, 70, 54-63.

National Commission on Service-Learning (2001). *Learning in deed: The power of service-learning for American schools*. Retrieved March 29, 2003, from <http://www.learningindeed.org/slcommission/report.html>

National Council for Agricultural Education (2000). *Reinventing agricultural education for the year 2020*. Retrieved April 01, 2003 from <http://www.teamaged.org/2020>

National Research Council (1988). *Understanding agriculture new directions*

for education. Washington, DC: National Academy Press.

New picture of American melting pot emerges. (2001, March 08). *USA Today*. Retrieved March 29, 2003, from <http://www.usatoday.com>

Newman, F., & Associates (Eds.). (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco: Jossey-Bass.

Newmann, F., Secada, W., & Wehlage, G. (1995). *A guide to authentic instruction and assessment: Vision, standards and scoring*. Alexandria, VA: ASCD.

Nolan, J., & Francis, P. (1992). Changing perspectives in curriculum and instruction. In C. Glickman (Ed.), *Supervision in transition* (pp. 44-60). Alexandria, VA: Association for Supervision and Curriculum Development.

Orfield, G. (2001). *Housing segregation: Causes, effects, possible causes*. Presented at meeting of the National Press Club, Washington, DC.

Parker-Gwin, R., & Mabry, J. B. (1998). Service learning as pedagogy and civic education: Comparing outcomes for three models. *Teaching Sociology*, 26, p. 276-291.

Phipps, L. J. & Osborne, E. W. (1988). *Handbook on agricultural education in public schools*. Danville, IL: The Interstate Printers & Publishers, Inc.

Piaget, J. (1954). *The Construction of reality in the child*. New York: Norton.

Rockquomore, K. A. & Schaffer, R. H. (2000). Toward a theory of engagement: A cognitive mapping of service learning experiences. *Michigan Journal of Community Service Learning*, 7, 14-25.

Sheppard, N. A. (1983). *Cultural factors affecting the participation of blacks in vocational education*. Paper presented at the American Education Research Association Convention, Montreal. (ERIC Document

Reproduction Service No. ED 230 752)

Skilton-Silvester, E. & Erwin, E. K. (2000). Creating reciprocal learning relationships across socially constructed borders. *Michigan Journal of Community Service Learning*, 7, 65-75.

Smedick, W.D. (1996). A study of the effect of a volunteer service program at an urban-based Institution of higher education on the current level of service achieved by alumni who had participated in the program. *Unpublished Dissertation*. Morgan State University.

Spindler, G. D. (1987). *Education and cultural process: Anthropological approaches* (2nd ed.). Prospect Heights, IL: Waveland Press.

Stafford, J. R., Boyd, B. L., & Lindner, J. R. (2003). The effects of service learning on leadership life skills of 4-H members. *Journal of Agricultural Education*, 44(1), 10-21.

Subramony, M.V. (2000). The relationship of performance feedback and service-learning. *Michigan Journal of Community Service Learning*, 7, 46-53.

U.S. Census Bureau (2000). Census 2000 shows resident population of 281,421,906; apportionment counts delivered to president. Retrieved March 29, 2003, from <http://www.census.gov/Press-Release/www/2000/cb00cn64.html>

U.S. Department of Education. (1992). *The condition of education, Vol. 1, elementary and secondary*. Washington, D.C.: U.S. Department of Education, Center for Education Statistics, Office of Educational Research and Information.

Webster's Revised Unabridged Dictionary. (1998). MICRA, Inc.

Whent, L. (1994). Understanding impediments to diversity in agricultural education. *The Agricultural Education Magazine*, 66(12), 6-8.

Wilson, R. (1996). Educating for diversity. *About Campus*, 1(2), 4-9, 30.

Woods, M. D. & Moore, E. A. (2003). Diversity in agricultural education: A review of research. *Journal of Agricultural Education* 44(3), 12-22.

MICHAEL D. WOODS is an Assistant Professor in the Department of Community, Agriculture, Recreation and Resource Studies at Michigan State University, 408 Agriculture Hall, East Lansing, MI 48824-1039. Email: mwoods@msu.edu