

## **Secondary Agricultural Educators: How Prepared Are They To Provide An All Inclusive Learning Environment?**

**Antoine J. Alston**, NC A&T State University  
**Chastity Warren English**, NC A&T State University  
**Anthony Graham**, NC A&T State University  
**Dexter Wakefield**, Southern Illinois University  
**Frankie Farbotko**, Lumberton High School

### **Abstract**

*The purpose of this descriptive survey study was to gauge the readiness of secondary agricultural educators throughout the United States to foster inclusive learning environments for all students as perceived by state directors and supervisors. Secondary agricultural education teachers were perceived to be prepared to serve women and socioeconomic diversity, but not ethnic minorities, learning style diversity, diversity of gender identification, religious diversity, and special needs populations. It was found that agricultural education is beneficial for ethnic minorities and women, but still there is a disconnect by secondary agricultural teachers to handle these issues. Barriers to inclusion in secondary agricultural education were found to be guidance counselors, the perception of agriculture itself, the lack of role models, the lack of understanding student styles, and stereotypes. It was recommended that secondary agricultural education professionals receive preservice and inservice training in multicultural education and differentiated instruction, and that relationships be formed with school officials and the community in general in order to foster inclusion efforts.*

## Introduction

The United States has become more culturally and linguistically diverse (Faltis, 2006). Since the 1980s the population has grown at the rate of nine percent per year, creating a significant increase in Hispanic, Asian, Pacific Islander, Native American, and multiracial populations (Files, 2005). These demographic changes have greatly impacted America's public schools, which has grown to an enrollment of over 50 million students and contains multiple races, cultures, and other types of diversity (Feller, 2005). Given this factor, diverse students are likely to experience conflicts if schools are not sensitive to their culture, language, family background, religion, sexual orientation, and learning styles (Short and Echevarria, 2005). When considering the teaching workforce in America, it is comprised of European Americans (86%), female (75%), and middle-aged workers. Many factors can affect the instructional environment, one of which is the communication channels between students and teachers that affect the development of inclusive learning environments (National Education Association, 2003). Given the fact one out of four jobs in America is agricultural related, more emphasis needs to be placed on creating and implementing opportunities for inclusiveness through efforts of agricultural literacy.

One major area of inclusion that affects U.S. public schools is socioeconomic factors such as family type and family income. Over the past two decades the U.S. family structure has greatly changed due to facts such as high divorce rates, economic pressure requiring both parents to work, and welfare reform (Smith, Gartin, Murdick, and Hilton, 2006). Fewer than 50% of children live with both biological parents; furthermore, it is estimated that 59% of all children will live in a single-parent household before they reach the age of 18. With respect to income, according to the National Center for Children in Poverty, in 2006 nearly 13 million children or 17% lived in families with incomes below the federal poverty level. The problem of poverty becomes even more pronounced when analyzing ethnicity (33% African American, 27% Latino, and 40% Native American). Students within the aforementioned categories can experience great academic problems for a variety of reasons (Fass and Cauthen, 2007).

There are various issues of concern teachers must realize when working with students from different social, cultural, and ethnic backgrounds. When teaching students with a background other than their own, it is recommended that teachers make every effort to learn each student's unique background being conscious that a student's cognitive development is based on his or her learned experiences. Many secondary agricultural educators' social and academic expectations are greatly based on mainstream and middle-class culture to which they are experienced (Alston, English, Faulkner, Johnson, and Hilton, 2008). In relation to learning styles, culture greatly impacts the way individuals process, organize, and learn material. Students from polychromic cultures may engage in many different activities, including talking all at one time, in contrast to monochromic cultures which may prefer working without talking. Another area of inclusion that more emphasis should be applied toward is students with disabilities. Mainstreaming and inclusionary practices have increased the number of students with disabilities in agricultural education programs (Cotton, 2000; Gagnon and Keith, 1988; Kessell, 2005; Schwager and White, 1994).

For teachers to be able to effectively instruct special needs students they should have a working knowledge of how to identify intervention methods and instructional methods. Prior studies by (Baggett, Scanlon, and Curtis, 1985; Baggett and Chinoda, 1994) indicated that agricultural teachers were deficient in the proper pre-service knowledge of how to teach special needs students. Consequent studies by Dormody and Torres (2002); Elbert and Baggett (2003); and Sorenson, Tarpley, and Warnick (2005) concluded that agricultural teachers are not competent in either how to effectively instruct special needs students nor possess an understanding of the Individuals with Disabilities Education Act (IDEA). By changing the educators' attitudes toward working with special needs students, this attitude shift will assist in the endeavor of creating collaboration between all students thus decreasing classroom discipline (Cooper, Bocksnick, and Frick, 2002).

So the question is posed, how can secondary agricultural educators address the needs of all of the aforementioned populations in order to create inclusive learning environments? Is agricultural education prepared for the great demographic changes that are impacting American public schools?

### Conceptual Framework

Inclusion is a philosophy that brings students, families, educators, and community members together to create schools and other social institutions based on acceptance, belonging, and community (Sapon-Shervin, 2003). Inclusion is based upon four major principles: (1) All Learners and Equal Access, (2) Individual Strengths and Challenges and Diversity, (3) Reflective Practices and Differentiated Instruction, and (4) Community and Collaboration.

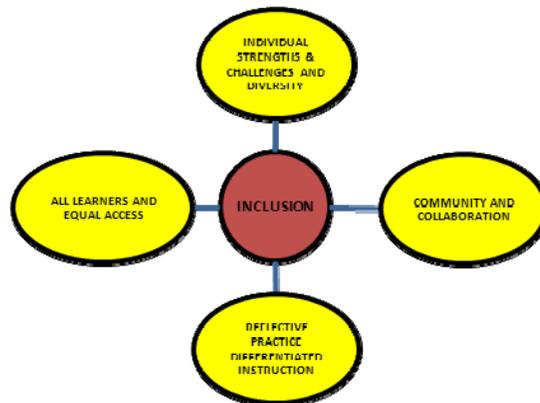


Figure 1. Inclusion Conceptual Framework

Each of the four principles can be defined as follows:

1. ***All Learners and Equal Access*** emphasizes that effective inclusion improves the educational environment for all learners by placing them together in general education classrooms, regardless of their race, linguistic ability, economic status, sexual orientation, family structure, cultural and religious background, and learning ability (Roach, Salisbury, and McGregor, 2002).

2. ***Individual Strengths and Challenges and Diversity*** emphasizes sensitivity and acceptance of individual strengths and challenges and diversity. Diversity improves the educational systems for all students by placing them in general education environments regardless of race, ability, gender, economic status, gender, learning styles, ethnicity, cultural background, religion, family structure, linguistic ability, and sexual orientation.

3. ***Reflective Practice and Differentiated Instruction*** requires educators to examine their attitudes, teaching and classroom management practices, and curricula to accommodate individual needs. Educators must constantly evaluate their daily professional practice in order to optimize the educational learning environment for all of student clientele, regardless of their respective differences (Banks, 1994).

4. ***Community and Collaboration*** involves groups of professional educators, parents, students, families, and community agencies working together to build effective learning environments (Salend, 2008). Optimal educational environments involve collaborative efforts among all educational stakeholders in order to ensure that the greatest amount of learning can take place for all students (Banks, 1994).

### **Purpose and Objectives**

The purpose of this descriptive survey study was to gauge the readiness of secondary agricultural educators throughout the United States to foster inclusive learning environments for all students. To guide this study the following research questions were developed:

1. What is the perceived level of preparation of secondary agricultural educators to foster an inclusive learning environment for various types of diversity?
2. What are the perceived benefits of inclusion in secondary agricultural education programs as viewed by state directors/supervisors of agricultural education?
3. What are the perceived barriers to inclusion in secondary agricultural education programs as viewed by state directors/supervisors of agricultural education?
4. What are the perceived solutions to facilitating inclusive learning environments in secondary agricultural education programs as viewed by state directors/supervisors of agricultural education?
5. What are the demographic characteristics of state directors/supervisors of agricultural education?
6. What are the demographic characteristics of agricultural education programming in the states under study?

### **Methods**

The population for this study consisted of all state directors/supervisors of agricultural education (N = 52, including Puerto Rico and the Virgin Islands) as provided by the National Association of Supervisors of Agricultural Education. A review of the sampling frame revealed at the time of data collection that three states did not have a director currently employed, thus reducing the sampling frame to n = 49. The survey utilized for this descriptive census study was adapted from a previous study conducted by Warren and Alston (2007). Modifications were made to specific sections of the survey in order to accommodate the research focus of this particular study, with one section being added in order to gauge agricultural teacher's level of preparation for fostering inclusive learning environments. The revised survey instrument for this study consisted of five sections: Part I. Benefits Of Inclusion, Part II. Barriers To Inclusion, Part III. Proposed Solutions To Foster Inclusion In Secondary Agricultural Education, Part IV. Level of Preparation To Foster Inclusion In Secondary Agricultural Education, and Part V. Demographic and Program Characteristics. Parts I - IV consisted of Likert-type items; Part V consisted of a series of open-ended and multiple-choice items. Sections I - III consisted of 10 questions each and utilized a five-point Likert-type scale with the following responses: 1=Strongly Disagree, 2=Disagree, 3=Uncertain, 4=Agree, and 5=Strongly Agree. Section four utilized the following Likert-type scale: 1 = Not Prepared, 2 = Somewhat Prepared, 3 = Undecided, 4 = Prepared, 5 = Very Prepared.

The validity of the instrument was originally established by means of content validity. Brown (1983) defined content validity as "the degree to which items on a test representatively sample the underlying content domain" (p. 487). Brown recommended using expert judges as one means of establishing content validity. A panel of experts at North Carolina Agricultural and Technical State University consisting of researchers with experience in the area of inclusion reviewed the original instrument for content validity. The same panel of experts were asked to review the revised instrument for content validity. The instrument was judged to be valid in order to accomplish the specific purpose of this study. In order to establish the reliability of the revised instrument a pilot test was conducted upon randomly selected county level directors of career and technical education in North Carolina. The Cronbach's alpha reliability coefficients for the sections of the survey were Part I: .88; Part II: .91, Part III: .85, and Part IV: .84, thus the instrument was deemed to be reliable. In relation to data collection a one week-interval, three-round data collection method was utilized following conventions established by Dillman (2009) for email surveys. The final response rate was 85% (n = 42). In order to control for non-response error, Miller and Smith (1983) recommended comparing early to late respondents. Upon completion of the study, an evaluation of the data showed that there were no significant differences found among the early respondents (respondents during the first round) and the late respondents (respondents after the first round).

## Findings

### *Research Question One Findings*

In Table 1 with respect to working with women and socioeconomic diversity it was perceived that agricultural educators are prepared. In contrast it was found that secondary agricultural educators were somewhat prepared to work with English As a Second Language (ESL) students. Moreover, respondents were undecided if secondary agricultural educators were

prepared to work with individuals with learning disabilities, learning style diversity, special needs populations, diversity of gender identification, and ethnic minorities.

Table 1

*Teacher Inclusion Preparation*

<b>Level of Preparation</b>	<b>Mean</b>	<b>SD</b>
Women	4.20	1.03
Socioeconomic Diversity	3.59	1.22
Individuals With A Learning Disability	3.46	1.12
Learning Style Diversity	3.32	1.03
Special Needs Populations (Physical and Mental Disability)	3.10	1.09
Diversity of Gender Identification	2.90	1.42
Ethnic Minorities	2.83	1.18
Religious Diversity	2.66	1.13
English As A Second Language (ESL)	2.27	1.14

*Note.* Scale: 1 = Not Prepared, 2 = Somewhat Prepared, 3 = Undecided, 4 = Prepared, 5 = Very Prepared

***Research Question Two Findings***

Table 2 displays the findings in relation to the perceived benefits of inclusion in secondary agricultural education. It was agreed upon by respondents that secondary agricultural education is beneficial for women and minority students in relation to their leadership and character development. Moreover, it was found that inclusion is beneficial for secondary agricultural education and FFA programs overall.

Table 2

*Benefits of Inclusion*

<b>Benefits To Inclusion</b>	<b>Mean</b>	<b>SD</b>
------------------------------	-------------	-----------

Secondary agricultural education provides women with the opportunity for character development.	4.68	.47
The inclusion of diverse populations in agricultural education is benefit for all agricultural education stakeholders.	4.63	.73
Inclusion broadens the perspectives of agricultural students.	4.59	.54
Inclusive learning environments cans sharpen students' critical thinking skills.	4.56	.59
Inclusive learning environments can broaden the perspectives of secondary agricultural teachers.	4.54	.55
Secondary agricultural education provides minorities with the opportunity for leadership development.	4.54	.59
There are many benefits for FFA programs which foster inclusive learning environments.	4.51	.55
There are many benefits for secondary agricultural education programs which foster inclusive learning environments.	4.49	.55
Secondary agricultural education provides minorities with the opportunity for character development.	4.46	.67

*Note.* Scale: 2 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree, and 5 = Strongly Agree

### ***Research Question Three Findings***

Table 3 provides the findings in relation to the perceived barriers to inclusion in secondary agricultural education programs. It was agreed upon that the lack of role models, the perception of agriculture itself, the lack of understanding a students' learning style, and stereotypes hinder the development of inclusion in secondary agricultural education. It was also agreed upon that guidance counselors are a major barrier to inclusion in secondary agricultural education. In contrast to the aforementioned findings, respondents were undecided if school administrators and the lack of training in special education were barriers to creating inclusive learning environments. Sexual harassment was perceived not to be a barrier to inclusion.

Table 3

#### ***Barriers to Inclusion***

<b>Barriers To Inclusion</b>	<b>Mean</b>	<b>SD</b>
A lack of role models hinders the participation of minorities in agricultural	4.10	.73

education.

The perception of agriculture itself influences the participation of minorities in agricultural education.	4.02	.72
The lack understanding a student's unique learning style can be a barrier in relation to creating an inclusive learning environment in secondary agricultural education.	3.93	.81
Guidance counselors influence the participation of ethnic minorities in agricultural education.	3.88	.90
Guidance counselors are barrier in relation to creating inclusive learning environments in secondary education.	3.66	1.03
The perception of agriculture itself hinders the development of inclusive learning environments within secondary education.	3.59	.92
Stereotypes are a primary reason why minorities do not enroll in secondary agricultural education.	3.51	1.05
A lack of training in special education hinders the participation of special needs populations in secondary agricultural education.	3.20	1.10
School administrators are a barrier in relation to creating inclusive learning environments in secondary education.	3.00	.97
Sexual harassment is a factor as to why women do not enroll in secondary agricultural education courses.	1.80	.90

---

*Note.* Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree

### ***Research Question Four Findings***

Table 4 displays the perceived solutions to fostering inclusion in secondary agricultural education. It was agreed upon that forming relationships within the local community, with advisory groups, and with guidance counselors were inclusion solutions. Furthermore, it was perceived that preservice and inservice training in differentiated instruction and multicultural education were solutions to fostering inclusion. It was also agreed upon that school administrator support and content analysis of curriculum materials were solutions to fostering inclusive learning environments.

Table 4

*Solutions to Foster Inclusion*

<b>Solutions to Foster Inclusion</b>	<b>Mean</b>	<b>SD</b>
Guidance Counselor/Agricultural Education Teacher Partnerships in Recruiting and Retaining Students Into Secondary Agricultural Education Programs	4.29	.64
Secondary Agricultural Educators Forming Local Community Relationships With Diverse Groups	4.27	.54
Secondary Agricultural Education Program Inclusion Marketing Efforts	4.20	.60
Local Secondary Agricultural Education Advisory Group's Support of Inclusion	4.17	.73
School Administration Support For Agricultural Education Inclusion Efforts	4.15	.76
Inservice Teacher Training In Differentiated Instruction	4.10	.62
Preservice Teacher Training In Differentiated Instruction	4.07	.60
Inservice Teacher Training In Multicultural Education	3.85	.69
Content Analysis of Agricultural Education Curriculum Materials To Ensure An Inclusive Learning Environment	3.83	.77
Preservice Teacher Training In Multicultural Education	3.80	.71

*Note.* Scale: 1 = Not Prepared, 2 = Somewhat Prepared, 3 = Undecided, 4 = Prepared, 5 = Very Prepared

***Research Question Five Findings***

In this study the majority of respondents were 49 years of age and white males who held a graduate degree. Additionally, respondents had taught secondary agricultural education for 12 years, had been a state supervisor for 10 years, and lastly had taken almost 10 hours of training in relation to inclusion within the past five years (see Table 5).

Table 5

*State Supervisor's Demographics*

<b>State Supervisor's Demographics</b>	<b>n</b>	<b>Mean or %</b>
Age		49
Gender:		

Female	9	21.4
Male	33	78.5
Race/Ethnicity:		
Black	1	2.4
White	38	90.4
Hispanic	2	4.9
Native American	0	0
Asian/Pacific Islander	1	2.4
Other	0	0
How many years did you teach secondary agricultural education?		12
Degree:		
Bachelor	4	9.5
Master's	24	57.1
Specialist	6	14.3
Doctorate	8	19.0
How many years have you been a state supervisor of agricultural education?		10
How many hours of training/professional development have you taken in relation to inclusion in the past five years?		9.5

### ***Research Question Six Findings***

Table 6 displays the demographics for state FFA/Agricultural Education programs. The majority of students enrolled in secondary agricultural education programs were white, followed by Hispanic and black students. Additionally males comprised the majority of FFA members. The average FFA state membership was 7,698.

Table 6

*State FFA/Agricultural Education Demographics*

<b>State FFA Demographics</b>	<b>Mean or %</b>
State's current FFA membership	7,698
State Agricultural Education Ethnicity:	
Black	
White	4.6%
Hispanic	78.9%
Native American	8.1%
Asian	2.7%
Other	1.0%
	4.5%
State FFA Ethnic Breakdown:	
Black	3.5%
White	78.6%
Hispanic	7.2%
Native American	2.4%
Asian	.57%
Other	4.2%
FFA Gender Breakdown:	
Female	39.2%
Male	60%

### Conclusions

State directors of agricultural education agreed that secondary agricultural education was overall beneficial for ethnic minorities, but yet were undecided about the level of preparation that

agricultural teachers have in working with this population. This finding can be directly tied to the low percentage of minorities that participate in secondary agricultural education in general. Given the influence that teachers have upon their respective instructional programs, barriers such as the lack of teacher role models, the traditional image of the secondary agricultural education programs, and the understanding of student's learning styles can be changed by proactive and visionary agricultural education teachers. Respondents indicated that secondary agricultural education teachers are prepared to work with female students and that sexual harassment is not a barrier for female agricultural education students, which can be directly related to their perception that secondary agricultural education is overall beneficial for female students. When considering that females currently hold over 50% of state leadership positions in FFA nationally, one could attest to the increasing presence of women, in what has been a traditionally male field.

When taking a student's socioeconomic status into consideration, state directors indicated that secondary agricultural education teachers were prepared to work with this population. Given the fact that a great percentage of students enrolled in career and technical education programs nationally have traditionally come from lower income backgrounds, secondary agricultural education teachers have a long tenure in serving the educational needs of this respective group. In contrast it was found that state directors were undecided about whether teachers are prepared to work with individuals with a learning disability and special needs populations. Respondents were also undecided if a lack of training in this area was a barrier to inclusion in secondary agricultural education; however, it was recognized that not understanding a student's learning style was a barrier and that training in differentiated instruction is needed. Given the aforementioned factors, it is possible that state directors are not fully aware of the impact that properly serving the unique needs of special populations could have upon secondary agricultural education, but yet recognize that something does need to be done to accommodate this sector of the student population.

It was also found that respondents were undecided about the preparation of secondary agricultural education teachers to service students with diversity of gender identification and diversity of religion. Perhaps teachers are not receiving enough preservice and inservice training in these areas, especially given the diversity of students in public schools. Lastly, it was perceived that secondary agricultural educators are somewhat prepared to serve English as Second Language (ESL) students. When considering the consistently increasing percentage of immigrants in the United States each year, school systems and teacher education programs nationally will have to reconsider how pre-service and in-service education professionals are being trained in this area. Respondents perceived guidance counselors to be a barrier to inclusion in secondary agricultural education, but not school administration. Perhaps school administrators see the value of inclusion in secondary agricultural education and are more supportive of the programs than guidance counselors.

### **Recommendations**

Given the aforementioned findings, it is recommended that pre-service and in-service agricultural education professionals receive training in differentiated instruction and multicultural education. As the number of culturally and linguistically diverse students increases

and the number of students with disabilities swells, agricultural education professionals must have the ability to transform the classroom into engaging contexts where individual student needs are met. Having the ability to create “different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn effectively” will allow agricultural education professionals to transform teaching and learning in the classroom (Tomlinson, 2001, p.1). With its focus on student centeredness, assessment, and proactive responsive individualized instruction, pre-service and in-service agricultural education professionals will have the skills to shake up what occurs in the classroom to engage all learners. For differentiated instruction to occur, agricultural education professionals must first understand the various cultures, values, and beliefs present within their classrooms which requires intense, focused multicultural education training. Differentiated instruction requires the agricultural education professional to look at a classroom through many eyes which requires understanding various perspectives present within a classroom and understanding how to present information from multiple perspectives. Multicultural education prepares preservice and inservice education professionals to consider these perspectives while attending to issues of equity, prejudice reduction, knowledge construction, content integration, and student empowerment. If pre-service and in-service agricultural education professionals are truly to engage learners so they may make learning meaningful, relevant, and rigorous, enhancing their knowledge of differentiated instruction and multicultural education is a necessity.

To foster support for inclusion efforts, secondary agricultural educators should develop relationships with guidance counselors and school administrators to ensure they understand what agricultural education is and what the profession entails. Expanding their understanding of agricultural education may open the discipline to more students who may have interest in the profession. Secondary agricultural educators also must cultivate relationships with the local community. Pre-service and in-service agricultural education professionals must utilize the resources available to them to make the learning process more engaging to diverse students. Building relationships with local youth councils, specific community groups that focus on select demographics (i.e., 100 Black Men), or community organizations like Boys and Girls Club, YMCA, 4-H, or church groups provides secondary agricultural educators with numerous avenues to educate the community about the profession or real-world sites to engage in agricultural related activities.

### **Implications**

The concept of diversity directly impacts the agricultural industry in the United States because the agricultural industry is not representative of the diverse population present within this country. In order for the United States to sustain its current agricultural rank, recruitment of a more diverse future workforce must be enhanced. The field of education and agribusiness as a whole must acquire an understanding of the motivational factors and rewards that would motivate or encourage diverse groups to pursue an agricultural career.

### **References**

Alston, A., English, C., Faulkner, P., Johnson, S., & Hilton, L., (2008). Cultivating and investing

- in the agricultural education diversity landscape. *The Agricultural Education Magazine*, 80(4), 17-19.
- Baggett, C. D. & Cinoda, M. (1994). Vocational education for special needs learners. *Paper presented at the Pennsylvania Vocational Education Conference*. Lancaster, PA.
- Baggett, C., Scanlon, D. C., & Curtis, S. M. (1985). Status of Pennsylvania special needs students in vocational agriculture. *Teacher Education Research*, 25(1) University Park, PA: The Pennsylvania State University, Department of Agricultural and Extension Education.
- Banks, J.A. (1994). *Multiethnic education: Theory and practice*. Boston, MA: Allyn and Bacon.
- Brown, F.G. (1983). *Principles of educational and psychological testing* (3<sup>rd</sup> ed). New York: Holt, Rinehart, and Winston.
- Cooper, K., Bocksnick, J., & Frick, M. (2002). Trends in working with special needs students. *The Agricultural Education Magazine*, 75(3), 28-32.
- Cotton, S. (2000). The training needs of vocational teachers for working with learners with special needs. *Dissertation Abstracts International*, 62(06), 2087. (UMI No. 3017791).
- Dormody, T. J. & Torres, R. M. (2002). A follow-up study of agricultural education program graduates on teaching competencies. *Journal of Agricultural Education*, 43(4), 33-45.
- Dyer, J. E. & Breja, L. M. (2000). A delphi-study of agriculture teacher perceptions of problems in student recruitment. *Proceedings of the 54<sup>th</sup> Annual AAAE Central Region Research Conference and Seminar in Agricultural Education*, St. Louis, MO, 54, 69-80.
- Elbert, C. D. & Baggett, C. D. (2003). Teacher competence for working with disabled students as perceived by secondary level agricultural instructors in Pennsylvania. *Journal of Agricultural Education*, 44(1), 105-115.
- Faltis, C.J. (2006). *Teaching English language learners in elementary school communities: A joint fostering approach* (4<sup>th</sup> ed.). Columbus, OH: Merrill/Prentice Hall.
- Fass, S. & Cauthen, N. (2007). Who are America's poor children? The official story. The National Center for Children in Poverty. Retrieved from [http://www.nccp.org/publications/pub\\_787.html](http://www.nccp.org/publications/pub_787.html)
- Feller, B. (2005, June 2). American schools packed. *Kingston Daily Freeman*, B1.
- Files, J. (2005, June 10). Report describes immigrants as younger and more diverse. *New York Times*, A12.

- Gagnon, D. & Keith, K. (1988). *A guide to curriculum planning in agriculture education*. Madison, WI: Wisconsin Department of Public Instruction.
- Kessell, J. (2005). *Agricultural education student teachers' confidence and knowledge: Teaching special needs students*. Unpublished doctoral dissertation, Texas Tech University.
- Miller, L. E. & Smith, K. L. (1983). Handling non-response issues. *Journal of Extension*, 21(5), 45-50.
- National Commission on Teaching and America's Future. (2003). No dream denied: A pledge to America's children. Retrieved from <http://www.nea.org/goodnews/citation.html>
- Roach, V., Salisbury, C., & McGregor, G. (2002). Applications of a policy framework to evaluate to and promote large-scale change. *Exceptional Children*, 68, 451-464.
- Salend, S.J. (2008). *Creating inclusive classrooms: Effective and reflective practices for all students*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Schwager, T. & White, J. (1994). Teachers' perceptions of SAE programs and benefits for students with special needs in Oklahoma. Retrieved from: [http://eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/22/d9/dd.pdf](http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/22/d9/dd.pdf)
- Smith, T.C. , Gartin, B.C., Murdick, N.L., & Hilton, A. (2006). Families and children with special needs: Professionals and family partnerships. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Short, D. & Echevarria, J. (2005). Teacher skills to support English language learners. *Educational Leadership*, 62(4), 9-13.
- Sorensen, T. J., Tarpley, R. S., & Warnick, B. K. (2005). In-service needs of Utah agriculture teachers. *Proceedings of the 24<sup>th</sup> Annual Western Region Agricultural Education Conference*.
- Tomlinson, C.A. (2001). *How to differentiated instruction in mixed-ability classrooms* (2<sup>nd</sup> Ed.). Alexandria, VA: ASCD.
- Warren, C. & Alston, A. (2007). An analysis of diversity inclusion in North Carolina secondary agricultural education programs. *Journal of Agricultural Education*, 48(2), 66-78.