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THE CURRENT STATUS OF CLASSROOM INCLUSION ACTIVITIES OF SECONDARY AGRICULTURE TEACHERS

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Abstract

The current status of classroom inclusion activities among agriculture teachers in comprehensive secondary agricultural education programs in Ohio is reported. The researchers describe secondary agriculture teachers' needs related to teaching learners with special needs in inclusion classes, given legislative mandates. Specifically, the researchers describe the teaching techniques used, the comfort level with various techniques used, and the services/resources provided to teachers when teaching learners with special needs in inclusion classes. Secondary agriculture teachers generally felt comfortable teaching in inclusion classes yet reported the need to obtain more knowledge in order to clarify how an inclusion classroom should function. Various techniques for teaching learners with special needs were deemed successful, unsuccessful, comfortable to use, and uncomfortable to use by the teachers studied. The researchers concluded that restructuring preservice agriculture teacher programs to include more instruction on how to teach learners with special needs was necessary. Teachers of learners with special needs in inclusion classrooms also need pertinent services, resources, and inservice educational opportunities to stay current in teaching practices and policies for teaching in inclusion classes.

Introduction

The current American education system stresses the importance of meeting the diverse needs of all learners. Passage of numerous legislative acts throughout the last four decades has made it illegal to provide unequal educational opportunities to students who may be considered disabled or difficult to teach. However, researchers (Heath, Patrakos, Finn, Karagiannakis, Mclean-Haywood, & Rosseau, 2004) indicate that, "Despite a general move and support for inclusion of children with exceptionalities in the regular classroom, children…are often excluded" (p. 1).

\According to the U.S. Department of Education (2006), steady numbers and proportions of children with learning disabilities are being served in mainstream programs. During the 1993-94 school year, 12% of learning disabled students were served in mainstream programs compared with 14% in 2003-04. Although the responsibility for meeting the educational requirements of learners with special needs does not automatically fall to agricultural education, agriculture teachers must assume their share of this responsibility by providing programs for those who desire and can profit from instruction in agriculture (Hamilton, 1968).

Even before the implementation of legal mandates, agricultural education was instrumental in assisting learners with special needs. The foundations of agricultural education have provided opportunities for instructors of agriculture to accept the challenges to equip these students with the skills necessary to become productive citizens (Steed, 1971). Increased awareness among current agricultural education instructors and their desire to provide quality education for students with diverse educational needs are imperative to maintaining the value of agricultural education programs.

Problem, Purpose, and Objectives

Inclusion of learners with special needs is not only mandated by law but also is a civic and moral duty for teachers. Thus, the need exists to equip teachers with effective techniques for teaching learners in inclusive settings. Preservice educational institutions need to be aware of the limitations and concerns of teachers who are currently serving learners with special needs.

With the exception of the 1960s and 1970s, little research has been conducted to address inclusion practices and needs of secondary agriculture teachers. As such, at this time there is little published record of current knowledge on the status of secondary agriculture teachers and their needs in the classroom concerning teaching learners with special needs. Identifying teachers' needs is important for providing preservice institutions with pertinent information for restructuring preservice teacher education programs.

Therefore, the purpose of this study was to describe the current status of classroom inclusion activities among agriculture teachers in secondary comprehensive agricultural education programs in a Ohio. Objectives guiding the study were to describe: (a) agriculture teachers' perceptions of their knowledge of inclusion classrooms, (b) teaching techniques used by secondary agriculture teachers to teach learners with special needs, and (c) services/resources provided to secondary agriculture teachers teaching learners with special needs.

Theoretical Framework

The theoretical frame for this study is couched in inclusion and student-centered learning. One of the foundations underpinning inclusion of learners with special needs into the regular education classroom is that mainstream schools can and should develop structures and practices that allow teachers to respond more fully to the diverse populations of students (Clark, Dyson, Millward, & Robson, 1999). "The inclusive school is different from the non-inclusive school not simply in terms of its commitment to inclusion, but in terms of its internal structures and practices" (Clark, et al., p. 158). Inclusive education of students with special needs "recognizes that special learning needs can arise from social, psychological, economic, linguistic, and cultural, as well as physical (or disability) factors, hence the term 'children with special needs' rather than 'children with disabilities'" (Kisanji, 1999, p. 3). Many disability groups have argued that disability is socially constructed and that society places barriers on certain groups of people; therefore, learner-centered classrooms provide the most effective education for students with special needs.

> "In learner-centered classrooms, teachers are attentive to issues surrounding children's cognitive and metacognitive development" (Daniels & Perry, 2003, p. 102). A classroom where learner-centered teaching practices are used might be described as one in which teachers generally provide a range of instructional activities that are relevant to students and are tailored to fit their developmental levels (Daniels & Perry). The learner-centered approach to teaching has been used as an early model for inclusion education to promote individual assistance to students with special needs (Harper, Tourlentes, & Switzer, 1969).

Legislative Acts

Vocational Education Acts. The 1917 Smith-Hughes Act was the national legislative model for establishing agricultural education programs in public high schools. Switzer (1969, as cited in Jewell, 1993) found that the Smith-Hughes Act of 1917 established the precedent for funding vocational education programs for the handicapped, but it was not until the Vocational Educational Act of 1963 that the term "special vocational needs" became widely used. "The Vocational Education Act of 1963, signed into law on December 19, 1963, by President Lyndon B. Johnson, is the most comprehensive vocational education measure that has ever been approved by congress in the history of our nation" (Mobley, 1965, p. 7). The major difference between the 1917 and the 1963

acts was who was to be served (Hamlin, 1965). Following the 1963 Act were the amendments of 1968, which placed additional pressure on vocational education to provide training for students with special needs. Following the extensive acts of the 1970s came the Carl D. Perkins Vocational Education Act of 1984. Perkins was intended to make vocational education programs accessible to all students by providing funds to improve buildings and facilities. The Perkins Act and its amendments concentrated mainly on serving the disadvantaged and handicapped (Iverson, 1993).

Special Education Acts. The 1970s provided the most notable changes in the way our country treated people with exceptional needs. "Section 504 of the Vocational Rehabilitation Act of 1973, which protected the civil rights of the disabled (PL 94-142), was the most sweeping federal legislation" (Osgood, 2005, p. 105). The act prohibited discrimination of any kind against individuals with handicaps or disabilities. Section 504 of the Vocational Rehabilitation Act of 1973 and the American Disabilities Act have begun to see more attention from schools because "more and more parents are beginning to request services for children who are not eligible for services under the Individuals with Disabilities Education Act" (Smith, 2001, p. 1). Both pieces of legislation specify that students are considered to have a disability if they meet any one of the following criteria: has a physical or mental impairment that substantially limits one or more of the major life activities, has a record of such an impairment, or is regarded as having such an impairment (Newcomb, McCracken, Warmbrod, & Whittington, 2004). Section 504 required any recipient of federal funding to provide a free and appropriate education to handicapped persons. Public Law 94-142 addressed the exclusion of children with disabilities from public schools (Delks & Sillery, 1993); this landmark special education legislation of 1975 established mainstreaming and prescribed that which schools must do to serve the handicapped (Iverson, 1993).

Recent Legislative Acts. Public Law 94-142 was modified in 1990 as the Individuals with Disabilities Education Act (IDEA). Conditions such as autism and traumatic brain injuries were added to the list of disability categories (Osgood, 2005). In 1997, IDEA was transformed once again, this time to protect the rights of students whose disabilities result in violent and dangerous behavior and to improve parent participation as well as school-parent relationships in special education (Osgood).

Changes in the educational system have stemmed from various encounters with legislative actions, court decisions, practical experience, and exposure to some long-held, but never outdated, visions as well as concerns (Osgood, 2005). The most current education act, No Child Left Behind (NCLB), implemented by the George W. Bush administration, will continue to expand the list of laws and government mandates, resulting in restructuring existing practices of teaching learners with special needs. NCLB demands that public school students annually test in specific academic areas and grades, as outlined in the law, to ensure schools are held accountable for the achievement of all students, including those with disabilities (National Center for Learning Disabilities, 2005). "Under the NCLB, students with disabilities…must be provided the appropriate accommodation necessary to participate in these (achievement) tests" (National Center for Learning Disabilities, p. 1).

Preservice Teacher Training

Research showed that teacher training programs designed to "address the instruction of students with disabilities had existed since at least the late 1800s" (Osgood, 2005, p. 98). As the number of students with special needs increased in agriculture programs, agriculture teachers' needs for additional training also increased (Elbert & Baggett, 2003). Baggett, Scanlon, and Curtis (1985) found that appropriate training was needed to secure additional competencies required to work with disabled students in Pennsylvania. Because the level of education received by all agriculture and career and technical educators is similar across universities in the United States, it

was theorized that teachers in Pennsylvania were not different from the teachers across the nation with respect to competency levels both held and needed while working with disabled students. (p. 10)

Public Law 94-142, although considered by researchers as the most thorough and revolutionizing legislation for people with disabilities, "did not address training practices for special education teachers. As a result, teachers continued to be divided in the training between '*teachers*' and '*special education teachers'* (Osgood, 2005, p. 120). The continued separatist approach in teacher education considers special education as a separate entity "and one that did not and need not involve intensive collaboration or even cooperation with regular classroom teachers…" (Osgood, p. 120). As found by Elbert and Baggett (2003), "secondary agricultural education teachers need additional training to develop IVEP and IEP plans and training to become more knowledgeable with laws that apply to special needs students" (p. 113). As increased numbers of special needs students enter into agricultural education, it can be "theorized that agricultural education teachers should be provided the educational training opportunities to learn and implement various teaching strategies and competencies for different types of students" (Elbert & Baggett, p. 106).

Teaching Techniques and Strategies

Historically, a majority of all teachers of students with special needs practiced two teaching strategies. "Special needs students were grouped along with other students and permitted to do the best that they could without any assistance or they were isolated from the other students and given some type of label…" (Powers, 1993, p. 8). "With learners with special needs, techniques that appeal to multiple senses and those that reinforce and re-emphasize learning are needed" (Newcomb et al., 2004, p. 305).

To successfully accommodate the melting pot of teaching exceptionalities, learning styles, and abilities in agriculture classrooms, teachers will "often need to individualize their instruction" (Repps & Dormody, 1993, p. 20). Curtis and Howell (1980) stated, "It was imperative that agricultural education teachers know individual and group techniques to help special needs students develop to their full potential" (p. 17). Hamilton (1968) found that "teaching materials and learning activities should be planned which are consistent with the lower ability levels…and occupational aspirations of these students" (p. 74). Harlan and Grimes (1968) researched agriculture programs for slow learners and found that "through the cooperative teaching effort, we can motivate students and help them become better students and citizens" (p. 59). Through analysis of research, it was found that a commonly practiced teaching technique used when teaching students with special needs was the cooperative learning approach. "Pairing academically disadvantaged students with advanced students, helped both parties" (Iverson, 1993, p. 6).

"Research has shown that experiencing activities is one of the best techniques of learning" (Fettig, 1971, p. 237). An agriculture program for youth with special needs must begin with the student's attained level of achievement and start building at this point (O'Brian, 1966). Directing agriculture programs toward preparation for existing agricultural occupations which are realistic in the light of the student's potential will benefit learners with special needs (Hamilton, 1968). "Teaching by demonstration and learning by doing should characterize much of this instruction" (O'Brian, p. 75). O'Brian also addressed the need for immediate gratification on the part of learners with special needs and their interest in skill training can be accomplished in terms of months, not years.

Specific to agricultural education, the problem-solving teaching technique has been implemented for teaching all students, regardless of ability. "The problem-solving approach that leads to applied learning and cooperative learning is as effective for those labeled 'special' as for those not so labeled" (Petrea, 1993, p. 20). Students should share in formulating the statement of a problem. In a discussion of the problem, all students in a class should be encouraged to participate (Phipps & Osborne, 1988). The teacher should aim to use a variety of teaching

methods while using the problem-solving technique with students. A variety of instructional methods can stimulate student interest (Phipps & Osborne).

Education is successful only as it relates to the needs, interests, and aptitudes of the students to whom it is directed. Teachers of agricultural education have been proponents of this philosophy and have structured their programs accordingly. "If our teaching is to be student-centered, we must accept the idea of teaching individual students in classes rather than teaching classes" (Priebe, 1971, p. 239).

Accommodations for teachers to use when teaching students with special needs are plentiful. According to the National Assessment of Educational Progress's annual report, *The Condition of Education* (1996), the most frequently used classroom accommodations are large print booklets, extended time in regular sessions, read aloud in regular sessions, small groups, one-on-one instruction, scribes and use of computers to record answers, bilingual booklets, bilingual dictionary, and other format or equipment accommodations such as sign language translator, amplification devices, or magnification equipment (Mazzeo, Carlson, Voelkl, & Lutkus 1996).

Methods

Frame, Population, and Response Rate

A researcher-designed questionnaire was used to obtain the information needed to address the stated objectives for this descriptive study. A census of the secondary agriculture teachers employed in comprehensive agricultural education programs in a Ohio was conducted (N = 301). The frame was obtained on April 26, 2007, via e-mail from the state department of education. Data were collected from May 9 to June 1, 2007. A total of 184 responses (61.13%) were collected.

Instrumentation

The researcher-designed questionnaire contained quantitative and qualitative items. Section I (12 items) was designed to more thoroughly understand agriculture teachers' perceptions of learners with special needs. In section II (seven items), teachers' needs related to teaching learners with special needs were collected. Section III (five items) was designed to recognize the teaching techniques used by agriculture teachers to teach learners with special needs. Section IV (12 items) examined services provided to agricultural education teachers of learners with special needs. In section V (six items), agriculture teachers' frequency of teaching learners with special needs was collected. Finally, in section VI (six items), demographics of the teachers were collected.

Validity and Reliability of the Instrument

Face and content validity of the instrument were established by a review from a panel of experts in agricultural education. Examples of the modifications included: changing the terminology of *segregated classrooms* to *special education classrooms*, providing a listing of teaching techniques to answer questions in Section III, and removing some demographic items.

Reliability was established with a pilot test. The pilot was designed to examine the internal consistency of agriculture teachers' perceptions of teaching learners with special needs. A frame of 24 preservice agriculture teachers enrolled in senior courses pilot tested the instrument. A Cronbach's alpha of .766 was established. Because Ary, Jacobs, and Razavieh (1996) stated that an appropriate reliability is deemed according to the situation the instrument is to be used, the researchers deemed the first-time researcher-developed instrument acceptable.

Threats to internal validity were considered, and strategies were used to control them. Because the study was a census, there were no generalizations beyond the population. Therefore, no threats to external validity were considered. Data were analyzed with SPSS version 14.

Conditions of Testing

A SurveyMonkey online survey was used to administer the questionnaire. Data were collected using Dillman's (2000) tailored design method, which was modified to fit the situation. The study used four of the five parts of the tailored design method: (a) respondent-friendly questionnaire, (b) up to five contacts with the recipient, (c) personalized correspondence, and (d) a

token incentive sent with the thank you letter (Dillman).

Results

As seen in Table 1, 80% of secondary agriculture teachers in the study indicated they needed to learn more teaching techniques for inclusion; however, 78% disagreed that they are unprepared to teach in inclusion settings. Regarding clarification, 55% of teachers indicated they needed clarification on how an inclusion classroom should function.

Table 1
Secondary Agriculture Teachers' Perceived Knowledge of Inclusion Classrooms

	I need to learn more techniques	I am unprepared	I need clarification
	f (%)	*f* (%)	*f* (%)
Very strongly disagree	1 (.5)	8(4.3)	2 (1.1)
Strongly disagree	3 (1.6)	21 (11.4)	9 (4.9)
Disagree	28 (15.2)	116 (63.0)	65 (35.3)
Agree	111 (60.3)	28 (15.2)	89 (48.4)
Strongly agree	26 (14.1)	5 (2.7)	11 (6.0)
Very strongly agree	11 (6.0)	2 (1.1)	2 (1.1)
n	180	180	178
Mean (*SD*)	4.06a (0.8)	4.00b(0.8)	3.54b (0.8)

Note. aScale = 1(very strongly disagree) to 6 (very strongly agree). *Note*. bScale = 1(very strongly disagree) to 6 (very strongly agree).

As seen in Table 2, 60% of secondary agriculture teachers reported they need more training in writing educational goals and objectives for individual educational plans (IEP). More than half (58%) reported they need more training in providing services using assistive technology and also reported needing more training in writing behavioral objectives (57%). Exactly half (50%) of the teachers reported they needed more training in interpreting assessment results. Secondary agriculture teachers feel they are competent in the areas of collaborating and communicating with team members, giving individual assistance, working with family members, and participating in IEP conferences.

Table 2

Secondary Agriculture Teachers' Needed Competencies When Teaching Learners with Special Needs

Factor	Yes, I need more training *f* (%)	No, I do not need more training *f* (%)
Adapt materials	59 (32.1)	125 (67.9)
Adapt environment	57 (31)	127 (69)
Adapt curriculum	84 (45.7)	100 (54.3)
Manage challenging behaviors	79 (42.9)	105 (57.1)
Give individual assistance	39 (21.2)	145 (78.8)
Write behavioral objectives	105 (57.1)	79 (42.9)
Work with family members	43 (23.4)	141 (76.6)
Interpret assessment results	92 (50)	92 (50)
Participate in IEP conferences	48 (26.1)	136 (73.9)
Write educational goals and objectives for IEP	111 (60.3)	73 (39.7)
Monitor student progress on IEP	82 (44.6)	102 (55.4)
Collaborate and communicate with team members	36 (19.6)	148 (80.4)
Set expectations for students	48 (26.1)	136 (73.9)
Provide services using assistive technology	107 (58.2)	77 (41.8)

As seen in Table 3, secondary agriculture teachers who teach learners with special needs used the discussion teaching technique most often (32%) followed by the demonstration technique (16%). Role play (0.5%) and resource people (0.5%) were used least frequently.

A seen in Table 4, secondary agriculture teachers indicated they were most comfortable using demonstration (28%) and least comfortable (22%) using lecture as a teaching resource when teaching learners with special needs.

Table 3
Frequencies of Teaching Techniques Used in Secondary Agriculture Classes Where There Are Learners with Special Needs (n=184)

Teaching technique	Used most often *f* (%)	Used 2nd most often *f* (%)	Used 3rd most often *f* (%)
Discussion	60 (32.6)	24 (13.0)	20 (10.9)
Lecture	19 (10.3)	14 (7.6)	13 (7.1)
Worksheets	6 (3.3)	20 (10.9)	18 (9.8)
Peer-teaching	12 (6.5)	24 (13.0)	14 (7.6)
Field trips	2 (1.1)	2 (1.1)	10 (5.4)
Electronic media	6 (3.3)	11 (6.0)	6 (3.3)
Student notebooks	7 (3.8)	10 (5.4)	13 (7.1)
Handouts	16 (8.7)	15 (8.2)	25 (13.6)
Independent studies	3 (1.6)	4 (2.2)	5 (2.7)
Role play	1 (.5)	1 (.5)	4 (2.2)
Resource people	1 (.5)	4 (2.2)	1 (.5)
Supervised studies	6 (3.3)	16 (8.7)	9 (4.9)
Demonstration	31 (16.8)	26 (14.1)	31 (16.8)
Printed media	5 (2.7)	2 (1.1)	5 (2.7)

Table 4
Teacher Comfort Level of Teaching Resources Used in Secondary Agriculture Classes in Where There Are Learners with Special Needs (n=184)

Teaching technique	Most comfortable *f** (%)	2nd most comfortable *f**(%)	Least comfortable *f**(%)	2nd least comfortable *f** (%)
Discussion	52 (28.3)	30 (16.3)	3 (1.6)	6 (3.3)
Lecture	17 (9.2)	15 (8.2)	42 (22.8)	18 (9.8)
Worksheets	10 (5.4)	20 (10.9)	1 (.5)	8 (4.3)
Peer-teaching	14 (7.6)	14 (7.6)	19 (10.3)	19 (10.3)
Field trips	5 (2.7)	5 (2.7)	9 (4.9)	9 (4.9)
Electronic media	8 (4.3)	15 (8.2)	14 (7.6)	17 (9.2)
Student notebooks	10 (5.4)	11 (6.0)	2 (1.1)	6 (3.3)
Handouts	15 (8.2)	24 (13.0)	1 (.5)	4 (2.2)
Independent studies	5 (2.7)	7 (3.8)	33 (17.9)	28 (15.2)
Role play	3 (1.6)	5 (2.7)	22 (12.0)	16 (8.7)
Resource people	4 (2.2)	5 (2.7)	2 (1.1)	13 (7.1)
Supervised studies	13 (7.1)	13 (7.1)	3 (1.6)	6 (3.3)
Demonstration	53 (28.8)	20 (10.9)	4 (2.2)	2 (1.1)
Printed media	4 (2.2)	2 (1.1)	12 (6.5)	13 (7.1)

As seen in Table 5, secondary agriculture teachers indicated that of the 12 services/resources listed, the appropriate class size was the only one provided to them when teaching learners with special needs. Almost half (47%) of respondents reported that appropriate class sizes should be provided to secondary agriculture teachers when teaching learners with special needs.

More than one-half of the respondents reported that the following services/resources were not provided to them for teaching learners with special needs: opportunities for staff to observe other teachers who teach learners with special needs (56%), access to special education periodicals (52%), help by volunteers in the classroom (57%), part-time teacher aide in the classroom (53%), and a full-time teacher aide in the classroom (60%).

Table 5

Frequencies and Perceptions of Services/Resources Provided to Secondary Agriculture Teachers When Teaching Learners with Special Needs

Services/resources	Yes, it is currently provided *f* (%)	No, it is not currently provided *f* (%)	Yes, it should be provided *f* (%)	No, it does not need to be provided *f* (%)
Appropriate class size	14 (7.6)	40 (21.7)	87 (47.3)	2 (1.1)
Collaboration teaming among special education and regular education teachers	0 (0)	43 (23.4)	91 (49.5)	6 (3.3)
Faculty and staff who strongly support inclusion	0 (0)	35 (19.0)	75 (40.8)	6 (3.3)
Opportunities for staff to observe other teachers who teach learners with special needs	0 (0)	104 (56.5)	95 (51.6)	15 (8.2)
Access to special education periodicals	0 (0)	96 (52.2)	61 (33.2)	46 (25.0)
Help by volunteers in the classroom	0 (0)	106 (57.6)	73 (39.7)	31 (16.8)
Part-time teacher aide in the classroom	0 (0)	98 (53.3)	67 (36.4)	36 (19.6)
Full-time teacher aide in the classroom	0 (0)	111 (60.3)	40 (21.7)	65 (35.3)
Teaming regular education teachers with appropriate special education specialists	0 (0)	65 (35.3)	88 (47.8)	11 (6.0)
Inservice training on	0 (0)	72 (39.1)	86 (46.7)	17 (9.2)

Services/resources	Yes, it is currently provided *f* (%)	No, it is not currently provided *f* (%)	Yes, it should be provided *f* (%)	No, it does not need to be provided *f* (%)
the regular education curriculum for special education teachers				
Opportunities for regular contact with and support from the learner's with special needs family	0 (0)	46 (25.0)	86 (46.7)	9 (4.9)
Faculty and staff release time for meetings with specialists and family members	0 (0)	68 (37.0)	90 (48.9)	12 (6.5)

Approximately one-half of the respondents reported that the following services/resources should be provided to them: collaboration teaming among special education and regular education teachers (49%), opportunities for staff to observe other teachers who teach learners with special needs (51%), and faculty and staff release time for meetings with specialists and family members (48%).

More than 35% of secondary agriculture teachers perceived that a full-time aide in the classroom was unneeded when teaching learners with special needs. One-fourth of the respondents felt that access to special education periodicals was unneeded when teaching learners with special needs.

Conclusions, Results, and Discussions

Secondary agriculture teachers in the study feel prepared to teach learners with special needs in inclusion settings but need to learn more about inclusion classrooms. Secondary agriculture teachers also need further clarification about how an inclusive classroom should function. Preservice education needs to include more instruction about how to operate an inclusion classroom, focusing on using methods of teaching that provide positive results when teaching students with special needs. Current secondary agriculture teachers need to have resources available to help strengthen their inclusion classroom structure. As the number of learners with special needs increases in agriculture programs, agriculture teachers' need for additional training also increases (Elbert & Baggett, 2003).

Secondary agriculture teachers in the study are confident in their competence to adapt materials, give individual assistance to learners with special needs, participate in IEP conferences, and work with family members. However, they do not feel competent in writing educational goals and objectives for IEP, writing behavioral objectives, and providing assistive technology to learners with special needs. More training in collaborating and communicating with team members is also needed. Consistent, updated training for secondary agriculture teachers of learners

with special needs is needed to enhance inclusion benefits. Inservices focusing on developing competencies when working with learners with special needs would benefit both teachers and learners. In situations in which inclusion students lack classrooms with confident and skilled teachers updated with special education training, the schools are providing a disservice to all students involved.

Discussion is the teaching technique used most often by secondary agriculture teachers when teaching learners with special needs, followed by demonstration. Teachers reported they are most comfortable with demonstration and discussion, which may be the influential factor for using these teaching methods most often. Teachers find it takes less effort to quickly adapt discussion and demonstration techniques to fit the needed scenarios for special needs students than it does to adapt premade worksheets, handouts, electronic media, and other printed media. Teachers reported they are less comfortable using role play, resource people, and printed material when teaching learners with special needs, all of which are also used less frequently by the teachers. Over the years, research has shown that learners with special needs learn best from experiential learning techniques and other techniques that stimulate multiple senses. Secondary agriculture teachers teaching learners with special needs should vary their instructional teaching techniques to reach all learners' senses (Newcomb et al., 2004). Data from the study reported that teaching methods that stimulate senses, other than hearing and seeing, are used in the classroom less often than discussion and demonstration. More research is needed to verify why teachers do not use these techniques as much and why they feel less comfortable when utilizing them in the classroom.

Secondary agriculture teachers in the study are not receiving the mandated resources/services needed to teach learners with special needs. Agriculture teachers admit they need to expand their knowledge of teaching learners with special needs, but administrators are not providing inservice opportunities for these teachers. School systems must provide appropriate resources/services to secondary agriculture teachers who teach learners with special needs. School systems need to support inclusion practices to their fullest potential in order to benefit all learners. Secondary agriculture teachers cannot be expected to properly teach learners with special needs if the necessary equipment is insufficient or nonexistent. It is recommended that further study be conducted to describe how agriculture teachers could change their teaching methods as technology rapidly enhances the classroom experience for all students and budget cuts rapidly takes a toll on educational funding and services.

Agricultural education must integrate inclusion processes into the programming, such that it is an area of education that is recognized as supporting the diverse needs of learners. During a time when financial cuts are critical to the survival of school systems across America, agricultural education must adapt to the needs of its consumers and provide opportunities for students and teachers to succeed. As more and more students are being classified as special needs, and as more elective classes are being replaced with core remediation courses for struggling students, agricultural education must step forward as a place that serves all students and reports success.

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