

Inclusion of Special Education Students in Agricultural Education Through Cooperative Learning

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Introduction

Inclusion in education is the idea that no child or learner shall be excluded from public education based on their differences (O’Hanlon, 2003). In the United States, a free and appropriate education shall be provided to all children regardless of disability (IDEA, Public Law 101-476, 1990). While there is a clear obligation to include children with exceptionalities, few agriculture teachers feel that they have the skills to do so (Giffing, Warnick, Tarpley, and Williams, 2010). Hoerst and Whittington (2006) purported that restructuring pre-service agriculture teacher programs to include more instruction on how to teach learners with special needs was necessary. Incorporating a cooperative learning approach where students with special needs learn from general education peers can be effective. A cooperative learning model can improve student performance and peer relations, while integrating students with special needs into general education (Stevens and Slavin, 1995). General education peers can provide cognitive support and be someone that students with special needs rely on for feedback and coaching (Stevens and Slavin, 1995). This abstract outlines the implementation of a cooperative learning model at the secondary level and incorporating special needs inclusion training in undergraduate pre-service teacher courses to increase inclusion of students with special needs in school based agricultural education (SBAE). Additionally, implementation of this innovative idea could increase pre-service teachers’ self-efficacy when working with students with special needs. This innovative idea aligns with Research Priority 2 of the *National Research Agenda* (Linder, Rodriguez, Strong, Jones, & Layfield, 2016).

How it Works

Ponchatoula High School is located in the rural community of Ponchatoula, Louisiana. Ponchatoula High School serves a student population of over 1,800 with 400 students enrolled in agriculture courses. In the 2017-2018 school year, 11% (46) of the SBAE enrollment were students with severe special needs. Aside from being enrolled in agriculture courses, these 46 students primarily learned in six, separate, self-contained classes with an assigned special education teacher and two paraprofessionals. To fully include these students in SBAE, a cooperative learning course (Agricultural Leadership) was created. This course provided experienced senior level students to be partnered with students with special needs to serve as peer mentors referred to as “Ag buddy” teams. Prior to this partnership, senior student mentors completed a multi-week sensitivity training where they learned about the history of special education, specific disabilities, and educational accommodations. In addition to special education training, the senior mentors learned about proper lesson planning. After the completion of the training, the mentor students were charged with the task of reflecting on prior agriculture courses they had taken to develop weekly lesson plans to teach. Partnerships of students were assigned by the agriculture and special education teachers with much consideration given to personal interests, personalities, gender, physical accommodations, and student requests. The same partnerships were used for the entire school year. Senior mentors, with guided assistance from the teachers, taught agricultural lessons that focused on developing social skills, employability and life skills, and basic agricultural literacy.

Results to Date

The Agricultural Leadership course has been implemented at Ponchatoula High School for two academic years. A total of 41 senior mentors and 50 mentees with special needs have completed the course. This course allowed 100% of self-contained students with special needs to be enrolled in a course with general education students. Senior mentor students developed skills in mentorship, leadership, teaching/curriculum planning, and gained an overall appreciation for diversity and inclusion. What started as mentorship and cooperative learning within a classroom environment eventually led to miraculous friendships outside of the classroom. Ag buddy teams spent time eating lunch together, attended FFA events, attended school functions like dances and sporting events, and even spent free time together after school and on weekends. Students with special needs gained social and employability skills through agricultural lessons taught by their senior mentors and teachers. Amanda Armstrong (personal communication, October 22, 2018), special education teacher stated, "As a result of our Ag buddy program, relationships were formed between unique individuals that may have never happened if it not had been for this program. As for my special education students, the program raises their self-confidence and self-esteem. The program allows them to feel accepted, which does not always happen for students with disabilities." Additionally, an increase in inclusion of students with special needs was seen across campus

Future Plans

The Agricultural Leadership course will continue to be offered at Ponchatoula High School, but similar experiences should be expanded to other programs. Recognizing that there is a gap in agriculture teachers' skills to include learners with special needs (Giffing et al., 2010), future plans should include the incorporation of a program of this nature in pre-service teacher training. For example, a partnership could be developed between a local high school and pre-service teachers enrolled in a teaching methods course. Pre-service teachers would be instructed on how to serve as mentors to local students with special needs and tutor them weekly. This partnership would allow pre-service teachers to develop relationships with students with special needs and receive guidance from the special education teachers and paraprofessionals. Through their experiences, pre-service teachers would develop the skills and confidence necessary to implement a similar mentorship program in their own agriculture programs. Further, pre-service teachers should be challenged to reflect on their experiences and plan for future implementation.

Resources Needed/Costs

There are no direct monetary costs associated with this program other than typical consumables based on topic selection. However, teacher educator time to develop relationships with local school administrators and special education teachers is needed. To implement the program mentioned under future plans, a considerable amount of time in program planning and a partnership with a local high school would be required.

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