# Growing Beyond Support to Cultivate Success: Examining the Meaning of School-Based Agricultural Education for Students with Disabilities

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## Introduction & Review of Literature

As far back as its inception, agricultural education has embodied the principles of hands-on, experiential learning, providing skills in ways that are accessible to all learners, including those with disabilities (Hoerst & Whittington, 2009). Rooted in Dewey's philosophy of "learning by doing" and supported by constructivist theorists like Piaget and Lewin, agricultural education has historically emphasized hands-on, context-rich instruction (Dewey, 1938; Knobloch, 2003; Kolb, 2015). Students with disabilities are often drawn to agricultural education due to this hands-on learning approach rooted in real-life application.

During the 2022–2023 school year, the United States Department of Education reported that a record 15 percent of public school students received special education services. Current statistics indicating the number of students with disabilities in Career and Technical Education (CTE) and SBAE is limited. However, earlier research revealed that students with disabilities made up approximately 20 percent of total student enrollment in SBAE programs with continued growth likely (Dormody et al., 2006; Easterly & Myers, 2011; Pense, 2008). Numerous benefits of participation in CTE by students with disabilities have been documented including opportunities for hands-on practice through real-life application, higher graduation rates, higher employment rates following high school, and greater earnings (Advance CTE, 2020; Balfanz et al., 2013; Conrad et al., 2020; Dougherty et al., 2018; Kreisman & Strange, 2019).

Literature centered on students with disabilities in CTE and SBAE programs is limited and primarily focused on teacher attitudes, teacher preparedness, and the ability to carry out and adjust curriculum for students with learning differences. Past studies revealed that SBAE teachers often expressed positive attitudes toward including students with disabilities in their programs but held moderate levels of confidence in their teaching practices (Aschenbrener et al., 2010; Ramage et al., 2021; Wilkins-Brittain et al., 2022). Gaps existed in teacher knowledge related to accommodations, instructional strategies, and understanding special education policy (Aschenbrener et al., 2010; Faulkner & Baggett, 2010; Griffing et al., 2010).

Perceived benefits from the students' perspectives as well as meaningful lived experiences were not uncovered. Prior research is predominantly quantitative in nature and is not told from the perspective of the student living with the disability, leaving their voice unheard. This study aims at filling this gap in literature by telling firsthand stories of experiences held by individuals with disabilities who were active participants in SBAE programs.

## Purpose and Research Questions

The purpose of this study was to describe the meaning of involvement in school-based agricultural education (SBAE) by students with mild to moderate disabilities, as well as to examine what it means for them to participate in all aspects of SBAE. The overarching question

for this hermeneutic phenomenological study is "What does it mean for students with mild to moderate disabilities to participate in SBAE?" The following sub-questions guided this inquiry:

1. How do students with mild to moderate disabilities participate in and experience classroom and lab-based activities?
2. How do students with mild to moderate disabilities participate in and experience Supervised Agricultural Experience (SAE)?
3. How do students with mild to moderate disabilities participate in and experience FFA?

## Research Design

This study used a phenomenological design guided by hermeneutic principles to gain a deeper understanding of the lived experiences of students with mild to moderate disabilities in SBAE programs. van Manen's (2014) hermeneutic phenomenology was used as a guide, as it naturally supports the exploration and reflection needed to uncover meaning from lived experiences. No theoretical framework was applied during data collection or analysis as the goal of hermeneutic phenomenology is to understand meaning from the participant's point of view. Applying a specific theory would have limited the openness and depth of the research.

Participants were selected using purposeful sampling to reflect a shared experience (Patton, 2002). All five participants consisting of 3 males and 2 females, aged 20 to 27, had an Individualized Education Plan (IEP) during high school for a mild to moderate disability, including specific learning disability, speech or language impairment, cerebral palsy, or autism. Each completed four years in their SBAE program, held an SAE, and earned at least a Chapter FFA Degree. Each also demonstrated enough receptive and expressive language to engage in interviews and share experiences. Data collection included two interviews per participant, an initial one-on-one interview and a second with a close family member present to support communication as needed. Artifact elicitation was used during the first interview to prompt memories and deepen reflection. These conversations revealed life history details and allowed participants to comment on the researcher's interpretation of their stories (Crist & Tanner, 2003).

Data analysis followed a non-linear, reflective process. A four-member interpretive team consisting of an experienced agricultural educator, a methodological expert, and a special education expert collaborated to examine transcripts and uncover phenomenological patterns. The team used the five-phase hermeneutic interpretation process involving discussion, debate, and consensus-building (Crist & Tanner, 2003). To ensure rigor and trustworthiness, this study followed deWitt and Ploeg's (2006) framework, which emphasizes balanced integration, openness, concreteness, resonance, and actualization. The findings are specific to the five participants and their families and are not intended to be generalized beyond their experiences.

## Findings

Two overarching patterns emerged from the data: a) *Striving for Independence* and b) *Relying on Support*. Each pattern was divided into sub-patterns.

### Pattern 1: Striving for Independence

Persons with disabilities face challenges and adversity throughout their life, often being limited in what they can accomplish independently. Participants shared stories of personal

struggles and growth in independence related to the phenomenon of experiencing a SBAE program while living with a disability.

**Being part of a group**, feeling included and encouraged to participate in a variety of SBAE activities was a common experience among all participants. Although challenges existed, being able to engage alongside nondisabled peers was important and shaped many of their most meaningful memories. Participants described a strong sense of belonging both in and out of the classroom, with core memories tied to events like FFA Career Development Events (CDEs), the Agriscience Fair, holding officer roles, showing livestock, and going on overnight trips.

For these students, being part of a team mattered more than winning. “I did alright. I was last in my class, but it's alright,” Clint said about one of his CDE experiences. He explained the value of practicing with his group: “We practiced together…If you get stuck on something, we go we review it…We don't work by apart. We work together.” Participants also described peer interactions that helped them build new skills and grow in independence. Maggie, who also has a physical disability, recalled an officer team trip where she went tubing for the first time, “I was like, oh God, this is going to be so dangerous. And that was actually a lot of fun. I was like I'm going to, like, fall off. They’re like, we're not gonna let you fall off.”

While group involvement is not the same as friendship, it gave participants a strong sense of being accepted and supported by their peers. These shared experiences in SBAE helped them feel valued and connected within their programs.

**Establishing friendships** runs deeper than social interactions present during group activities. While participants had difficulty describing their own meaning of friendship, they were often able to name friends made in SBAE. Friendships provide people with disabilities emotional support, self-confidence, independence, and a deeper sense of belonging. Many friendships appeared to stem from shared interests and experiences.

Four of the five participants valued friendships made within their SBAE programs. Clint stated, “I’ve been really close friends with him” when speaking of a fellow FFA officer. Kevin, the most verbally limited participant often referenced friends during his interview. When asked about his favorite parts of the SBAE program, Kevin replied, “It was game night with my best friend Doug.” Clint and Frederick referenced friends from SBAE as being instrumental in helping them find employment during and after high school. Frederick explained, “Well, well my friends over there help me got this job that I’m doing right now. The feed mill.”

**Gaining new skills** through challenging, hands-on learning was a consistent sub-pattern among participants even though specific agricultural content varied across programs. Stories reflected how SBAE programs provide more than instruction in agricultural content; they also fostered independence. In addition to classroom content, all participants discussed aspects of learning through FFA, Supervised Agricultural Experience (SAE), and their use of the Agricultural Experience Tracker (AET).

When asked, “Is there anything you remember through ag to help prepare you for working or your current job?” Frederick shared, “I got to learn how to tie a knot. I use it every single day at my work.” This is very important, as Frederick works at a feed mill, where he ties off hundreds of knots on feed sacks daily. Although a seemingly simple skill, to Frederick, it provides independence. Participants also described growth in various career skills. Maggie

shared that she learned organizational and planning skills as part of the FFA chapter officer team. Sarah conveyed that she gained professional skills as a result of her SBAE, “I would just kind of say that you’re taught to carry yourself, you know, the way you’re taught to conduct business meetings, the way you’re taught to interview.”

### Pattern 2: Relying on Support

Participants strived for self-reliance by learning new skills, building friendships, and collaborating on shared projects with their peers. Each participant also required unique supports tailored to their individual disabilities. Ultimately, the agriculture teacher emerged as the most significant source of support for each participant. Additionally, parental involvement played a crucial role, offering both advocacy and, in some cases, presenting challenges for participants.

**Feeling connected to the teacher** was important to all participants and extended to the participants’ entire families. Maggie expressed her teacher’s willingness to support students at all levels, stating, “He's definitely one of those people that is very supportive…To me, that makes a huge difference.” Maggie went on to share other qualities that she appreciated her teacher possessing including his sense of humor, being open-minded to what students want to learn more about, and connecting his students with experts in areas he was less knowledgeable in.

Clint expressed the importance of communication. People with intellectual and communication disabilities often benefit from clear, concise communication. They may have difficulty recalling dates and information to relay to their family members. Clint described challenges with communication in his first SBAE program that limited his participation. Clint’s second program was much better with communication, using group texts and other methods to send dates and reminders home to students and families allowing his participation to increase.

**Being bolstered and protected by mom** emerged as a sub-pattern from observational data recorded during interviews and from occasional participant stories. Four mothers and one father took part in an interview. Mothers spoke of children’s gains in independence and skillsets with the undertone of their children not being perceived as competent by others. Mothers were also observed using “we” and “us” often in joint conversations when speaking of participants, which leads to questions in perspectives of independence. Many mothers also shared stories of serving as a disability advocate for education and occupations on top of their traditional parental roles. Clint’s mother did not hesitate to advocate for Clint and did what it took to make sure he got opportunities, even telling me she is often labeled as a difficult person to deal with.

Overall, participants spoke very little of the supports provided by their parents. However, the phenomenon of parent support in advocating for independence, in Maggie’s case, was countered by her mother’s protectiveness. She described instances where her mother limited her from participating in activities in SBAE and life in general but described it as looking out for her.

## Conclusions/Implications/Recommendations

The patterns illuminated through this study add to the limited body of research in agricultural education on serving students with disabilities. Participants consistently described a dual experience, striving for independence while simultaneously relying on support, across all three components of SBAE. The two patterns, while seemingly competing, took on a pendulum effect, where the recurring patterns influenced one another over time.

Within the pattern of *Striving for Independence*, participants valued social interaction across SBAE activities. While developing technical and practical skills was important to them, the social context of working with peers, collaborating on CDE teams, and bonding through FFA trips played a significant role in their feelings of inclusion and belonging. These shared experiences helped them build confidence and friendships. As they grew more involved, especially in more specialized SBAE opportunities like leadership roles or SAEs, their sense of belonging deepened, laying a foundation for inclusion and personal identity development.

To encourage meaningful inclusion, it is recommended that SBAE teachers facilitate peer mentoring by involving nondisabled students in collaborative activities with students with disabilities. Supporting and encouraging interactions among all students may help break down negative social bias towards students with disabilities. Future research should investigate how group participation is initiated across all three circles. Research should explore accommodations available at state-level FFA competitions. There may even be opportunities to develop new events that better reflect a range of abilities.

In terms of skill development, all participants appreciated hands-on learning and were motivated by challenging, rigorous tasks. Teachers should maintain high expectations, encouraging all students to participate fully in SBAE experiences while tailoring supports to individual needs. Collaboration with special education teams and families early in a student's program is critical, especially when planning SAEs. Understanding each student's IEP, learning strengths, and limitations helps teachers create meaningful, attainable experiences that can promote both technical skill growth and independence.

The pattern *Relying on Support* revealed how deeply participants depended on both their SBAE teachers and their parents. While participants saw parents as advocates, some also experienced a fine line between support and overprotection, especially from their mothers. Strong, trusting relationships with SBAE teachers helped students and families feel more secure, while poor communication from teachers became a barrier. Participants appreciated when their agriculture teachers were supportive, encouraging, flexible, communicative, and connected to the community. Effective teacher-family communication through AET, group texts, or social media was cited as key to engagement.

Parental involvement, while generally beneficial, was sometimes overwhelming. In interviews, mothers often took over conversations, which may reflect anxieties about their child's future. Still, these same parents also recognized and celebrated their child's growth through SBAE. Teachers can support this balance by keeping parents informed of student progress while promoting student autonomy. In some cases, this might mean limiting parental involvement on trips to allow students more independence.

Overall, participants' lived experiences shed light on effective teaching strategies and dispositions that support students with disabilities in SBAE. Their stories highlight the importance of relationships, belonging, and purposeful inclusion. While each reader may interpret these findings differently, based on personal experience and perspective, this study contributes meaningfully to the growing dialogue around inclusive agricultural education. Most

importantly, it opens the door for future research centered on the voices and perspectives of students with disabilities as participants in SBAE.

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