

Extension Professionals' Attitudes, Self-Efficacy, and Perceptions of Inclusion for 4-H Youth with Disabilities

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Abstract

The 4-H Youth Development program prohibits all forms of discrimination which includes disability. 4-H Extension professionals provide the essential interface between Extension and the local community to create an inclusive environment for all youth, including those with disabilities, that is welcoming and accessible. Attitudes and self-efficacy for working with youth who have disabilities impacts how well 4-H delivers positive youth development programs. The purpose of this study was to determine state-wide 4-H Extension professionals' attitudes, self-efficacy, and perceptions of inclusion toward youth with disabilities. In addition, the researchers sought to examine their use of a training program to better serve youth with disabilities. All 4-H Extension professionals in Ohio were surveyed (N = 135) with 71 responding (response rate of 53%). Results indicated the attitudes of Extension professionals for accepting of and feeling comfortable around youth with disabilities was overwhelmingly positive. They also perceived that youth with disabilities felt that they were included in 4-H activities. For self-efficacy, 4-H professionals reported they could effectively provide inclusive opportunities for youth with disabilities and adapt their level of instruction, take extra time, and pay attention to the needs of youth with disabilities. However, about a third of the respondents somewhat or strongly agreed that their workload would increase by having youth with disabilities in their organization. The disability training program was used by over three-fourths of the 4-H professionals and helped them to engage with parents to learn more about their children with disabilities. The program also improved accommodations and creating a more inclusive 4-H environment.

Keywords: youth with disabilities; inclusive programs; 4-H; self-efficacy

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Introduction and Literature Review

Youth with disabilities have been considered one of the most marginalized groups of youth, experiencing exclusion and stereotyping that prevents them from enjoying full participation in communities (Lansdown et al., 2013; Nario-Redmon, et al., 2013). Roughly 19% of all youth in the U.S. have a disability (National Survey of Children's Health, 2016) signifying that it is highly likely they will be part of the formal education and of out-of-school program communities in which educator's serve. Now more than ever, inclusive education is needed which provides outreach education for

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individuals with disabilities. Children with disabilities can be challenged to complete everyday tasks depending on their disability. For example, those with learning disabilities may have difficulties with social competence, relationships, and interpersonal skills which, can create challenges with friends and peers (Gerhardt et al., 2015; Kavale & Mostert, 2004; Pham & Murray, 2015). Therefore, it is important to create educational spaces for youth with disabilities in which they can practice social and career skills as well as develop new relationships. This need has spurred the development and articulation of different types of educational approaches for these youth.

For many, the difference between inclusive education and special education overlaps, when in fact, there is a strong difference between the two. As defined by Salend (2011) in Hornby (2015, p. 237) special education is characterized by: “individual assessment and planning; specialized instruction; intensive instruction; goal-directed instruction; research-based instructional practices; collaborative partnerships; and student performance.” Whereas inclusive education is characterized by: “a philosophy of acceptance and belonging within a community; a philosophy of student, family, educator and community collaboration; celebration of the diversity and value of all learners...” (Hornby, 2015, p. 237). For 4-H, programming has been developed in order to provide inclusive education for youth with disabilities that incorporates specialized instruction and research-based practices.

4-H Programming and Inclusion

After school groups, clubs, and organizations engage youth through programming outside of the traditional school day. This programming can be aimed towards helping youth improve in school, gain a new skill, or as a way for kids to stay active. Research suggest that these programs may have a crucial role in positive outcomes during adolescence as they are linked to identity exploration, gains in human and social capital, and the development of connections between youth and their schools and communities (Greene et al., 2013). 4-H has long played a role in out-of-school-time programming by offering clubs and camps through which youth learn a variety of skills.

4-H is delivered by Cooperative Extension and provides opportunities for young people to engage with their environment and learn by doing (National 4-H Council, 2020). For over 100 years this program has worked to help young people find their voice to strive for individual and community change (National 4-H Council, 2020; USDA, 2018). Through a county Extension Office, 4-H is led by positive youth development professionals and supported by volunteers to provide opportunities related to science, healthy living, civic engagement, and leadership (USDA, 2018). These experiences can be community service projects, hands-on activities related to animal sciences, communication, food and nutrition, and natural resources, and camping (National 4-H Council, 2020). Currently there are almost six million youth involved with 4-H around the country which include urban, suburban, and rural communities (National 4-H Council, 2020). With such a broad range of communities, both 4-H and Cooperative Extension have continually adapted programming over the years to serve diverse populations. With the passage of the Americans with Disabilities Act (ADA) in 1990, Cooperative Extension had to consider their responsibilities in practicing inclusion across the myriad of communities and sites they served.

In 1994, McBreen explored the ADA and provided examples of the areas in which Extension personnel would have to address in order to be inclusive in their programming. These areas included facilities, marketing, decision making, faculty knowledge, resources, policies, and evaluation (McBreen, 1994). Around the same time, 4-H was also actively mainstreaming programs so that children with disabilities could participate in traditional 4-H activities (Tormoehlen, 1994). In 2002, a group of educators from North Carolina began a 4-year pilot project titled “Intentionally Inclusive 4-H Club Programs” wherein the needs of people with disabilities were addressed through the creation of accessible environments and the engagement of the community (Stumpf et al., 2002). The program

evaluation revealed that by giving the counties involved resources for their pilot program, they were able to adjust and incorporate the elements as they saw fit (Stumpf et al., 2002).

Efforts to be inclusive to youth with disabilities continued and professionals in two Ohio counties created the Winning 4-H Plan a few years later. The belief that all youth should be able to take advantage of 4-H opportunities undergirded the program and it was specifically designed to help volunteers receive the necessary training to assist those with special needs (Goble & Eyre, 2008). The program provided resources for Extension professionals, volunteers, parents, and youth, and included hands-on activities to help those groups be more aware of some of the experiences that youth with disabilities face daily. This form of training was found to be more effective at helping participants increase their sensitivity to the needs youth with disabilities require, as compared to discussions and lectures (Goble & Eyre, 2008). The Winning 4-H Plan has been continued to be part of Ohio educator professional development in various forms; however, on-going evaluation of its implementation has not been documented.

Although Extension educators look to provide an inclusive space where anyone can participate, there may be gaps between educator knowledge and practice (Hornby, 2015) as well as an awareness of how a program or activity might affect a child (Sze, 2009). This study sought to gain a better understanding of how 4-H educators perceive their own knowledge and practice as well as the degree to which Ohio 4-H programming is inclusive. These findings contribute to the literature on 4-H's efforts to meet the needs of youth with disabilities and offer some practical considerations for further educator development.

Conceptual Model

This study focused on 4-H educators' self-efficacy for and attitudes toward working with youth with disabilities as well as their engagement in professional development. Self-efficacy theory guided the inquiry to explore the knowledge and skills level. Savolainen et al. (2012) understood self-efficacy within the context of a primarily non-disabled educational space that aimed to provide inclusive education to youth with disabilities, thus that perspective informed this part of the conceptual framework. Self-efficacy refers to an individual's belief about their ability to handle and manage various situations (Bandura, 1997). Through his research, Bandura (1995; 1997) argued that perceived self-efficacy, or the belief that one can do something, influences one's choices, aspirations, effort levels, perseverance, and resilience.

Self-efficacy for this research captures how well educators believe they can successfully work with and positively benefit youth with disabilities. Both perceived success in and positive attitudes toward inclusive spaces have been found to be correlated with high teacher self-efficacy when teaching students with disabilities (Aschenbrener et al., 2010; Savolainen et al., 2012).

In addition to self-efficacy, attitudes toward students with disabilities are important to consider as they may influence successful implementation of inclusive education and programs. Attitudes are usually stable and consist of affective, cognitive, and behavioral dimensions (Bizer et al., 2003). Studies in both 4-H and agricultural education programs have shown a trend toward positive attitudes by agricultural and extension educators. One investigation of North Carolina agricultural educators working with special needs students when implementing a supervised agricultural experience (SAE) found that teachers reported beneficial outcomes and positive perceptions for students with disabilities (Johnson et al., 2010). A cross-national study with primary and secondary school teachers in South Africa and Finland found overall neutral attitudes toward inclusion (Savolainen et al., 2012). They also reported a few differences in which Finnish teachers' attitudes toward students with disabilities were very positive or more positive than South African teachers. However, South African teachers were less

concerned about how to include students with disabilities than Finnish teachers (Savolainen et al., 2012). Other studies concluded that Extension professionals reported positive attitudes toward inclusion of youth with disabilities and that 4-H experiences benefit youth with and without disabilities when inclusion of 4-H participants with disabilities are part of the program (Boone et al., 2006; LaVergne, 2013).

Purpose and Objectives

The purpose of this study was to explore 4-H professionals' (Extension educators and program assistants) attitudes and perceived self-efficacy of working with youth with disabilities as well as their engagement with resources, such as the Winning 4-H Plan, to support their programs. The following objectives guided our investigation:

1. Describe the attitudes of 4-H educators and program assistants towards youth with disabilities.
2. Describe 4-H educator and program assistant perceived self-efficacy in areas of inclusive programming for youth with disabilities.
3. Identify the levels of engagement in the Winning 4-H Plan and characteristics of inclusive programming.

Methods and Procedures

A questionnaire using a cross-sectional research design was employed in this study. The questionnaire collected current attitudes, perceptions, and practices of 4-H youth development educators and program assistants. By surveying this population and not Extension employees broadly, the research focused on those working primarily with youth. The total population of the study was 135 4-H Extension professionals. Before the study was implemented, it was approved by The Ohio State University institutional review board for research with human subjects.

An online questionnaire was administered using sets of statements with a Likert-type scale as well as yes/no questions with follow-up open-ended probes. These statements gauged the educator's perceptions and attitudes about youth with disabilities as well as assessed what resources were utilized and where gaps existed for developing programs welcoming to youth. The Likert scale consisted of the following agreement response levels: 5-strongly agree, 4-agree, 3-undecided, 2-disagree, 1-strongly disagree. The statements listed in Table 1 were adapted from studies done by Boone et al. (2006) and Savolainen et al. (2012) to measure both perceptions toward youth with disabilities and self-efficacy for working with them.

Table 1

Items used to Measure Attitudes and Self-Efficacy about Youth Disabilities

Scale	Items
<i>Attitude</i>	<p>Extension educators and program assistants in my organization would be willing to accept youth with disabilities as 4-H members.</p> <p>Other members and leaders in my county 4-H clubs feel comfortable with a youth with disabilities as members of the group.</p> <p>Members with disabilities in Ohio 4-H are able to feel included in all aspects of the program.</p> <p>Youth with disabilities will not be able to participate in most activities or projects.</p> <p>The interest of youth with disabilities is being met through other programs within my community.</p> <p>Including youth with disabilities as members provide good experiences for other members.</p> <p>If I must make contacts with people with disabilities, I make them brief and finish them as quickly as possible.</p>
<i>Self-Efficacy</i>	<p>I can prevent disruptive behaviors from any youth in a group.</p> <p>I can give appropriate attention to all youth in a group.</p> <p>Involvement of youth with disabilities will take my time away from other members.</p> <p>I am aware of the needs of the youth in my programs.</p> <p>My staff feels prepared for events where youth with disabilities attend.</p> <p>If youth with disabilities are included in my organization, my workload will increase.</p> <p>I can take extra time during programming to work with youth with disabilities.</p> <p>I can adapt my instruction to help youth with disabilities understand the task at hand.</p> <p>When planning a program or event, I pay attention to the needs of youth with disabilities that may attend and prepare accordingly.</p>

“Yes” or “no” questions with open-ended follow-up probes were used to capture qualitative data. In addition, specific questions were included that referenced the Winning 4-H Plan. A program created by Extension professionals from Highland and Pike counties in Ohio to better serve youth with disabilities. Refer to Table 2 for the specific questions and open-ended probes.

Table 2*Yes and No Questions Paired with Open-Ended Follow-up Probes*

1.	Do you have youth with disabilities in your program?
Yes	How have you prepared to work with youth with disabilities in your program? How have you made accommodations and engaged youth with disabilities in activities?
2.	Does your 4-H program have information available to parents of youth with disabilities?
Yes	What type of information is available? Where is this information made available?
3.	What resources and/or training do you need in order to develop inclusive programming for youth with disabilities?
4.	What items might be of benefit if you are not comfortable working with accommodations for youth with disabilities?
5.	Have you used the Winning 4-H Plan?
Yes	Please explain how you have incorporated it into your programming or events.
No	Please explain why you have not utilized it (e.g. unaware of the plan, no youth with disabilities in group, etc.)
6.	Have you attended a training in conjunction with the Winning 4-H Plan?
Yes	How have you used that training in your position?
No	What has prevented you from attending a training?

Content validity was established for the instrument by using a panel of experts that included academic faculty and extension professionals. For reliability, Cronbach's alpha (Cronbach, 1971) was used to measure internal consistency for the self-efficacy items. The reliability measure for Cronbach's alpha is considered acceptable if $\alpha > .80$ (Carmines & Zeller, 1979; Nunnally, 1978), however it has also been cited that $\alpha > .60$ is acceptable for exploratory studies (Hair, 2010; Nunnally, 1967). Cronbach's alpha was computed to determine reliability and the analysis for each construct and all α values were greater than .6, indicating that the instrument measured what it intended. Cronbach alpha reliability coefficients for disability self-efficacy, $\alpha = .692$, were considered sufficient for this study.

A recruitment email with the description of the survey and anonymous link to the survey was sent to all 4-H Youth Development Educators and Program Assistants in Ohio. Interested individuals followed the provided link where they completed an informed consent form before beginning the survey. The survey was administered through Qualtrics on The Ohio State University's platform. After one-week of sending the survey, a reminder email was sent to all potential respondents. A final reminder was sent two weeks after the initial recruitment email. Data collection process yielded 71 total responses out of a state-wide population of 135 4-H Extension professionals (educators and program assistants), resulting in a response rate of 53%.

All data was kept in Qualtrics, SPSS, and Box. The only individuals with access to this data were the project researchers. Quantitative survey data from the Likert-type scales were downloaded from Qualtrics and analyzed through SPSS (v.26) for descriptive purposes. Open-ended responses were reviewed for descriptive purposes only, rather than formal qualitative analysis.

Findings

The data collected represented 55 of the 88 counties in Ohio and the number of program participants they served in their programs ranged from 12 to 4,500. This broad range of participation reflects the variety of 4-H experiences from club participation to school-embedded programs (urban and rural areas). Respondents also reported a broad range of experience in their current position from less than 1 to 40 years, with an average employment time of 10.5 years. Overwhelmingly the respondents indicated they had youth with disabilities in their program at 97%. In addressing the first objective to determine 4-H professionals' attitudes towards youth with disabilities, findings indicated their attitudes were inclusive toward youth with disabilities and their ability to participate in 4-H programs with 85% or more of respondents reporting positive attitudes on related items. For example, 88.7% of respondents agreed that members with disabilities would be able to participate in most 4-H programs and activities. In addition, 85.9% of respondents believed youth with disabilities felt they were included in all aspects of program. The findings were mixed about whether youth with disabilities could find other programs of interest in their county, with 39.5% indicating they could and 25.3% indicating they could not find other programs of interest. Extension professionals reported they engaged in the necessary time needed to involve youth with disabilities (91.5%). See Table 3 for attitudes of Extension professionals about youth with disabilities.

Table 3*Percentages by Level of Agreement for Disability Attitude Items*

Items	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
Extension educators and program assistants in my organization would be willing to accept youth with disabilities as 4-H members.	94.4%	5.6%			
Other members and leaders in my county 4-H clubs feel comfortable with youth with disabilities as members of the group.	29.6%	59.2%	7.0%	4.2%	
Members with disabilities in Ohio 4-H are able to feel included in all aspects of the program.	28.2%	57.7%	11.3%	1.4%	
Youth with disabilities will not be able to participate in most activities or projects.	4.2%	1.4%	5.6%	40.8%	47.9%
The interest of youth with disabilities is being met through other programs within my community.	9.9%	29.6%	35.2%	22.5%	2.8%
Including youth with disabilities as members provides good experiences for other members.	93.0%	7.0%			
If I must make contacts with people with disabilities, I make them brief and finish them as quickly as possible.	1.4%		5.6%	19.7%	71.8%

Note. N = 71.

For the second research objective, Extension professionals' self-efficacy for having confidence to engage youth with disabilities was strong. Most, 93%, perceived they could adapt their level of instruction to help youth with disabilities understand the activity or task. They also reported they could take extra time to support members with disabilities (81.7%) and pay attention to their needs when planning programs (88.8%). Not all of the findings were positive for how Extension professionals believed in their abilities to involve youth with disabilities. For example, 11.3% of professionals thought that by having youth with disabilities involved, it would take time away from other members. Further, about one-third of the respondents, 32.4%, somewhat or strongly agreed that by having youth with disabilities in their organization, their workload would increase. Refer to Table 4.

Table 4*Percentages by Level of Agreement for Disability Self-Efficacy Items*

Items	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
If youth with disabilities are included in my organization, my workload will increase.	4.2%	28.2%	22.5%	23.9%	21.1%
I can take extra time during programming to work with youth with disabilities.	32.4%	49.3%	11.3%	7.0%	
Involvement of youth with disabilities will take my time away from other members.	11.3%	9.9%	33.8%	45.1%	
I can adapt my instruction to help youth with disabilities understand the task at hand.	62.0%	31.0%	5.6%	1.4%	
When planning a program or event, I pay attention to the needs of youth with disabilities that may attend and prepare accordingly.	43.7%	45.1%	9.9%	1.4%	
I can prevent disruptive behaviors from any youth in a group.	5.6%	50.7%	19.7%	21.1%	2.8%
I can give appropriate attention to all youth in a group.	31.0%	60.6%	7.0%	1.4%	
I am aware of the needs of the youth in my programs.	26.8%	62.0%	5.6%	5.6%	
My staff feels prepared for events where youth with disabilities attend.	21.1%	38.0%	26.8%	12.7%	1.4%

Note. N = 71.

For the third research objective we sought to identify levels of engagement with the Winning 4-H Plan which was designed to improve program inclusion and increase understanding of the needs of youth with disabilities. These data were drawn from the open-ended responses, of which 65 of the 71 respondents completed. From these responses, 55 participants indicated they have prepared to work with youth with disabilities in their program by using the Winning 4-H Plan as a training tool with local school staff and volunteers to better understand how to meet the needs of these youth. The Winning 4-H Plan resources served as tools to identify when accommodations can be made and how to do so

successfully, as well document that accommodations have been made. Specifically, the Winning 4-H Plan was utilized for modifying judging at events (n=15) and as means to communicate with parents about the needs of their child (n=14). Those that have not used the plan reported that it is too in-depth and time consuming and have existing programs in place for members with disabilities.

There were 32 of 65 respondents who indicated they attended a training to use the Winning 4-H Plan. Those who had attended a training in conjunction with the Winning 4-H Plan noted they used the training as a topic during their advisor trainings and to be more aware of how to better serve their families. Extension professionals reported the skills learned at these trainings increased their knowledge around how to approach parents and volunteers about working with youth with disabilities and when to provide accommodations and written individual plans. The 4-H professionals who had not attended a training indicated that they were unaware of any offerings (n=18) or that the timing of the training was inconvenient (n=8).

As part of this objective, the characteristics and perceptions of inclusive 4-H programs for youth were also identified. For accommodations, almost all, 62 of 65, respondents reported that they have adjusted their programs, judging activities, and/or ensured the use of proper facilities/equipment to better serve youth with disabilities. These accommodations have included opportunities to go through judging processes in another space, allowing extra time during events, and providing additional help from older teens and volunteers. Further, notifying judges of accommodations and hiring interpreters or other individuals to assist with youth were also strategies employed in events.

During club activities, inclusive experiences were fostered by adjusting activities and providing proper equipment and accommodated materials to successfully engage in hands-on activities. Of the 62 respondents that reported accommodations, only two stated that their counties offered special events for members with disabilities only. This indicates that most events are mainstreamed, with everyone participating. They also met with parents to discuss and better understand their child's needs as well as have attended trainings and in-services.

Having specific information available for parents of youth with disabilities was reported by 56 of the respondents. Some of the information counties made available to their families included information on the Winning 4-H Plan, special activities that were geared toward youth with disabilities such as "A Day in the Show Ring" and the "Buddies Program," as well as the 4-H member handbook. Respondents reported this information could be found on the counties' websites, in their offices, at events in the schools, in their enrollment packets, and by request of the parent or guardian.

Although the aforementioned responses identify practices that support youth with disabilities in their 4-H programs, study participants also shared what resources would help create more inclusive programming. These resources included print or readily available online resources with specific examples of how to accommodate youth with disabilities in programming, on-going training opportunities, and courses that meet 4-H professionals at their level of knowledge with inclusive programming. Potential training topics included learning more about different physical and intellectual disabilities as well as how to best train volunteers and communicate with parents. A few (n=11) participants requested that these resources be available through The Ohio State University and Ohio 4-H office or that there also be a list of 'mentors' who had experience working with this population that they could contact for support.

Discussion

In this study we explored the attitudes and perceived self-efficacy of 4-H Educators in Ohio working with youth with disabilities as well as their knowledge of and engagement with resources to

support inclusive programs. The findings were strongly positive about the attitudes of Extension professionals for accepting and feeling comfortable around youth with disabilities. They also reported that they perceived youth with disabilities felt included in 4-H activities. This finding is supported by an earlier study about attitudes of Extension agents and their involvement of youth with special needs (Boone et al., 2006).

Self-efficacy findings of this study are consistent with previous research in which perceived success in and positive attitudes toward inclusive spaces were correlated with high teacher self-efficacy (Aschenbrener et al., 2010; Savolainen et al., 2012). High-levels of self-efficacy were reported by 4-H professionals in this study, reflecting their perceived ability to provide inclusive opportunities for youth with disabilities. Most perceived that they could adapt their level of instruction, take extra time, and pay attention to the needs of youth with disabilities. Many professionals felt they were able to prevent disruptive behaviors, give appropriate attention to all members in the group, and give extra time to those who need it. These results are supported by a study of early career agriculture teachers who also reported high levels of self-efficacy for working with students who have special needs (Aschenbrener et al., 2010). As higher levels of self-efficacy can influence one's choices, aspirations and effort levels perseverance, and resilience (Bandura, 1995; 1997), understanding educator's self-perceptions can offer insights into the capacity for further professional development and program expansion for youth with disabilities. The interest in more resources and training from the open-ended responses of this study, reflect the educators' desire for more knowledge and skill-building in this area, despite their high levels of self-efficacy.

For the final research objective, most of the Extension professionals reported they have youth in their county 4-H program who have a disability. This finding would be expected, since about 19% of all youth in the U.S. have disabilities (National Survey of Children's Health, 2016). The Winning 4-H Plan, which was developed in Ohio, was often used by 4-H professionals to provide trainings for volunteers to effectively meet the needs for youth with disabilities. Extension professionals were engaged with parents to learn more about their children with disabilities and to help with making accommodations and creating a more inclusive 4-H environment.

Respondents made accommodations to better serve youth with disabilities by creating a plan with parents prior to participation, assistance from older 4-H youth, adaptations in judging events, and hiring interpreters. However, participants also expressed that additional resources would support their professional development related to working with this population such as online and print literature, specific examples of accommodations, access to professionals with experience, and training targeted to their level of knowledge or skill. Research has shown professional development can improve the ability to accommodate youth with disabilities and there are high levels of interest in additional professional development (Sharp, et al., 2012; Smith, 2011). Therefore, the challenge is to identify funding and time to provide these resources to 4-H educators and disseminate them broadly.

Conclusion and Recommendations

The passage of the Americans with Disabilities Act (ADA) in 1990 requires that accommodations be made for individuals with disabilities in the community; however 30 years later, many out-of-school time programs are still struggling to meet the needs of those with disabilities (Sharp et al., 2012). Developing inclusive programming for youth with special needs has been a goal of Extension professionals and volunteers for more than three decades (Goble & Eyre, 2008; Tormoehlen & Field, 1994). However, a literature review about inclusion of youth with disabilities concluded that there is a need for mores studies to document data of programs serving these youth in 4-H (Taylor-Winney et al., 2019).

Although our study described the attitudes and self-efficacy of educators in the state of Ohio, we recommend a larger sample with additional scales related to attitude could yield correlations to the number of years' experience in 4-H and previous education on youth with disabilities. Formal evaluation of programs and how they meet youth needs would also aid in identifying best practices. Further recommendations include comparative studies across states which may identify both differences in how programs support youth with disabilities as well as best practices. Several participants in the open-ended portion of our study discussed the need for specific examples of how educators have worked with youth in their programs. Through a future in-depth qualitative study, rich descriptions of strategies, challenges, and successes from the perspectives of educators, parents, and youth could also provide valuable data for 4-H educators.

Not only is inclusion of youth with disabilities important for the U.S. Extension system, but also for teaching agriculture in high school (Aschenbrener, et al., 2010; Smith & Rayfield, 2019). Yet, the school and out-of-school program systems often operate separately. With the mechanisms in school settings such as Individualized Education Plans (IEP) for students with disabilities and special education professionals who are formally trained, schools can be an important resource for out-of-school time programs such as 4-H. This could perhaps bridge the gap between special education and inclusive education and borrow from research-based instructional practices that are successful in schools. Agricultural education teachers may also have accommodations in place for their students in agriculture-related activities and experience partnering with special education teachers. Therefore, more intentional partnerships between 4-H programs and local schools can provide opportunities for learning, growth, and increased support for youth with disabilities.

Finally, strengthening the networks of researchers, teachers, and youth educators as part of the land-grant system can help meet the needs of these youth. Land-grant universities have expertise in the areas of human development, positive youth development, teaching and learning, and program evaluation. Intentional connections among faculty engaging in research and practitioners with experience, as well as access to evidence-based best practices would bridge the gap for county educators who may be new to engaging youth with disabilities.

With millions of youth in the U.S. with disabilities, it is of utmost importance for 4-H Youth Development programs to offer inclusive programs which accommodate them. This effort can aid in fulfilling their mission to further youth's development as self-directing, contributing, and productive members of society. By leveraging the resources of the land-grant system, 4-H can continue to "Make the Best Better."

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