

Abstract

Programs that teach strategies for long-term support and assistance help people with intellectual and developmental disabilities (IDD) reach new heights, so they may thrive in our communities. To ensure programming is accessible and appropriate for all, Cooperative Extension professionals must understand how to effectively adapt programs to meet the learning needs of people with IDD. SNAP-Ed educators participated in Skillfully Working with People with Disabilities, a five-session virtual training, to learn how to adapt methods to better support adults with IDD. The project intended to teach how to make informed choices about healthy lifestyles; it's proven to go beyond, impacting life and social skills.

Introduction

An estimated seven to eight million Americans of all ages, 3% of the general population, experience intellectual or developmental disabilities (IDD); many live in family homes and group settings. Intellectual and Developmental Disabilities are differences that are usually present at birth and uniquely affect the trajectory of the individual's physical, intellectual, and/or emotional development (Zablotsky et al., 2023). Intellectual disability starts any time before a child turns 18 and is characterized by differences in intellectual functioning or intelligence, including the ability to learn, reason, problem solve, and other skills; and adaptive behavior, including everyday social and life skills.

The term "developmental disabilities" is a broader category of often lifelong challenges that can be intellectual, physical, or both. "IDD" is the term used to describe situations in which intellectual disability and other disabilities are present (Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2024). Nearly one in ten families in the U.S. is directly affected by a person with IDD at some point in their lifetime (Tanis, 2024).

Despite the number of people with IDDs, this audience is underserved in many realms due to a lack of specialized training among

community educators and service providers who support them. Programs that offer support and assistance help people with IDD reach new heights and thrive in our communities. To ensure inclusive and accessible programming, Cooperative Extension professionals need a foundation of knowledge about intellectual and developmental disabilities and how to effectively adapt and create programs to meet learning needs. Training can establish Extension professionals as leaders who forge valuable partnerships with organizations that help people with IDD achieve productive, meaningful lives and reach their full potential.

Background

Individuals with IDD often experience poorer health outcomes compared to their "typical" peers. Historically, people with IDD have faced significant health disparities, driven by factors such as limited access to high-quality medical care, insufficient training of healthcare providers to address their specific needs, the influence of social determinants of health, and exclusion from public health initiatives and preventive services. Research indicates that health inequities observed in this population are primarily a result of social and economic determinants, rather than the intellectual disability itself (Anderson et al, 2013; Hatton & Emerson, 2015). Recently, there has been increased attention to identifying and addressing these disparities through initiatives focused on promoting healthy lifestyles and improving healthcare provider training (Liao et al., Anderson et al., Murthy et al., 2021).

Although research has identified a need to improve healthcare education for individuals with IDD, insufficient training is a common barrier identified for professionals who work with this population. Education on IDD for medical professionals often reflects an ableist perspective and is presented minimally, if at all, throughout all years of medical school (Siegel et al., 2023). Likewise, a lack of professional development about disabilities is also reported by Extension educators as a barrier to effective inclusive programs (Brill, 2011). It is important that Extension

educators, including those in the SNAP-Ed program, receive additional training specific to teaching individuals with IDD to best meet the needs and learning styles of this population.

There is limited research on the benefits of conducting nutrition education with individuals with IDD. However, there are some studies that show a positive impact. SNAP-Ed has been utilized to increase nutritional knowledge in adults with IDD living in group homes and the site managers (Piccolo & Christofferson, 2013). Another study piloted a 6-week Cooking Matters for Adults series of classes, adapted for people with IDD and their direct support professionals. Results showed improvement in healthy food preparation, eating a balanced diet, and improved kitchen skills as a result of the intervention (Barnhart et al., 2019). Including cooking as a component in nutrition education interventions is one example of healthy lifestyle programming that supports people with IDD. While there are nutrition interventions for this population that include a focus on MyPlate, fruits and vegetables, and grocery shopping, there are currently no nutrition interventions with a focus on cooking skills for individuals with IDD specifically (Goldschmidt & Song, 2017). Rather, educators adapt curricula (like Cooking Matters for Adults, mentioned above) to fit this need.

Rutgers Cooperative Extension's (RCE) Department of Family and Community Health Sciences (FCHS) offers limited-resource audiences, including those with IDD, nutrition education through Supplemental Nutrition Assistance Program Education (SNAP-Ed). Recognizing the need for training to more effectively reach the IDD population, SNAP-Ed nutrition educators participate in a virtual online training, Skillfully Working with People with Developmental Disabilities (Rutgers Cooperative Extension, n.d.). Skillfully Working with People with Developmental Disabilities is an online training series developed by RCE in collaboration with Colorado State University Adult Continuing Education to address the need for more trainings for professionals and educators to better serve people with IDD (Keywood & Brill, 2020). The specialized training provides foundational knowledge for teaching, assisting, and working with people with IDD.

Educators learn to recognize various behavioral patterns and apply effective strategies to create a safe and inclusive learning environment. Since 2019, the five-course virtual program received over 1,500 enrollments representing a variety of formal and informal educational settings including school districts, long-term care facilities, day programs, residential housing programs, youth development organizations, and Extension educators.

The five courses within Skillfully Working with People with Developmental Disabilities include an overview of disabilities, learning styles and techniques, understanding and managing behaviors, use of visual supports, and disability laws and program adaptations. Participants learn how to identify behavioral and environmental triggers and techniques to modify learning materials, increase visual supports, and create positive learning environments. The courses are self-led. allowing participants to complete the training at their own pace. Those who successfully complete all five courses receive a digital "Mastery Badge" as evidence of their continued education and eight hours of professional development.

How Extension Educators Put Learned Skills into Practice

Extension educators use skills acquired through Skillfully Working with People with Developmental Disabilities to adapt and pilot SNAP-Ed interventions to teach individuals with IDD how to eat healthy, make informed decisions about what they eat, and how to prepare simple recipes. From Fall 2020 to Fall 2022, two SNAP-Ed educators collaborated with The ARC Gloucester County to pilot a modified nutrition education initiative. The mission statement of The ARC Gloucester is "To empower individuals with intellectual and developmental disabilities and their families to achieve their highest potential through advocacy, education and quality services," making them an ideal partner (The Arc Gloucester, 2025). The first curriculum adapted and taught was Just Say Yes to Fruits and Vegetables, which consists of 13 lessons including MyPlate, fruits and vegetables, whole grains, and healthy

beverages. Working with The ARC Gloucester County, 13 classes were taught at a variety of sites, including group homes, supervised apartments, and special needs centers. Utilizing skills learned from the Skillfully Working with People with Developmental Disabilities training, SNAP-Ed nutrition educators adapted the curriculum to better suit the audience. Educators used a variety of strategies to engage adults with IDD in the curriculum (Table 1).

Classes were adapted to be highly interactive and supported with help from site leaders (Table 1). Physical activity was included with each class to get participants moving during a time when they were mostly sedentary. The most innovative component of the program was conducting hands-on cooking during class. Recipes were chosen with assistance from the site, and SNAP-Ed nutrition educators worked with site leaders to help participants cook and taste a healthy recipe.

Pleased with the program, The ARC requested additional lessons, so the Food Smarts for Adults curriculum was adapted and taught next (Table 1). Food Smarts is a flexible, learner-centered cooking and nutrition curriculum that aligns with traumainformed principles. This allowed for continued work with these groups and reinforcement of topics over a longer period of time. The program continued to grow, expanding to an additional 22 sites, 10 more educators, and 3 other New Jersey counties. Currently, twelve educators in our four SNAP-Ed counties work with individuals with IDD using strategies acquired through the online webinars and through peer-to-peer sharing and modeling. SNAP-Ed educators reported to supervisors that training to develop skills that support outreach to adults with IDD improved their ability to deliver lessons that were meaningful and on-point with clientele needs.

Outcomes

Program success was evaluated through structured debriefs and anecdotal feedback from staff at The ARC, providing meaningful insight into the program's relevance, delivery, and observed benefits among participants. The majority (88%) of program participants

individuality. ARC staff reported that SNAP-Ed lessons helped them achieve this goal in an interactive, hands-on format. Likewise, ARC clients shared their enthusiasm for the lessons with feedback such as, "I like learning how to eat healthy and lose weight with the SNAP-Ed class so I can get down to my goal weight of 159 pounds!" Another shared that he, "was surprised that the SNAP-ED Cowboy Caviar recipe ended up tasting good, but I did like it!"

Although SNAP-Ed sessions were not traditionally part of The ARC's programming, they emerged as a popular and effective tool for teaching new skills and promoting healthy behaviors. Adaptations made to increase accessibility for individuals with IDD fostered strong engagement from both participants and staff. Also, participants at each site returned weekly to each class, which helped to reinforce the topics they were learning.

To evaluate the impact of the Skillfully Working with People with Developmental Disabilities training series on students' professional practices, a post-course survey was distributed to 185 course participants(including the SNAP-Educators) who completed the course between 2019-2025. Forty-six responses were collected (response rate of 25%). Table 2 presents the employment industries represented by survey respondents. Survey participants indicated the degree to which they agreed with statements related to their knowledge gained from the courses (Table 3), their implementation of information gained from the courses (Table 4), and their perceived level of skill improvement (Table 5). Results show that participants improved their knowledge and skills (98%), reported professional and personal growth (95%), and improved outcomes for their clientele (92%) because of participation in the course. Respondents also reported a better understanding and use of procedures when working with people with IDD (90%), a better understanding of IDD (85%), and having applied the course information into their professional work (80%).

The survey is ongoing and made available to course participants after a minimum of six months post-course completion. Since 2022, limited grant funding has enabled 12 New Jersey SNAP-Ed educators to access the Skillfully Working with People with Disabilities

online training series. During routine team check-ins, nutrition educators consistently reported that the training improved their ability to adapt and deliver lessons more effectively and boosted their confidence in working with individuals with IDD. Similarly, staff from The ARC noted that the lesson modifications implemented by educators enhanced lesson effectiveness and were well-aligned with the needs and abilities of their clients with IDD.

While internal feedback on the training has been overwhelmingly positive, a key limitation of this study is the lack of a specific identifier for SNAP-Ed on the course survey. Fifteen respondents identified as Extension professionals, five of whom were from New Jersey. From these five responses, three individuals listed their job title as "Nutrition" Educator." However, we are unable to determine their alignment with SNAP-Ed. We suspect that high staff turnover within SNAP-Ed could potentially contribute to a lower response rate, as some educators likely exited their roles before receiving the survey. Additionally, the demanding outreach schedules of SNAP-Ed educators—who dedicate approximately 75% of their time to community engagement—could have limited their availability and willingness to complete optional post-training surveys.

Conclusion

Extension professionals can learn simple strategies to reach individuals with IDD, welcoming them into our programming and offering them much-needed opportunities for education and enrichment. Trainings such as Skillfully Working with People with Developmental Disabilities offer convenient opportunities to make training accessible and possible for all Extension professionals. Likewise, applying skills and techniques can support Extension educators in adapting existing curricula and developing innovative new curricula that target people with IDD specifically. Although further evaluation of the Skillfully Working with People with Disabilities training is ongoing, current data, along with staff and site feedback, suggest that it is a valuable resource for enhancing Extension educators' capacity to effectively support individuals with IDD.

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 Table 1. Strategies to Engage Adults with IDD in the Curriculum

Engagement Strategy	Examples of Implementation in Instruction		
Use multiple methods to deliver information.	 Show visuals of MyPlate & speak about each food group. Bring whole foods for participants to touch and interact with. Have participants draw pictures of fruits and vegetables they like. 		
Be very clear and specific in your language.	Instead of saying, "Limit sugary drinks," say instead, "Drink water. Try not to drink soda or fruit punch; those have a lot of sugar."		
Present oral information at a measured pace, using pauses to encourage understanding.	After explaining a new topic, use thumbs up/thumbs down for knowledge check.		
Offer cues to help with transitions.	 "We have 5 minutes left until our taste-testing activity is over." "We have 10 minutes to peel potatoes for the soup." 		
Employ modeling to help participants learn appropriate interactions.	Model how to politely decline a food they dislike. Say, "No thank you, I don't want any more," with a smile and polite tone. Participants observe facial expressions, tone, and body language.		
Employ rehearsing to help participants learn appropriate interactions.	 Show different steps of a recipe and have participants act out. Demonstrate specific exercises for participants to rehearse; break into smaller steps if needed. 		
Employ role-playing to help participants learn appropriate interactions.	 Simulate shopping at the grocery store, identifying foods, and choosing healthy options. Simulate preparing a meal together as a family. 		
Embrace consistency and simplify	Have the same structure each week: ice breaker, lesson activity, movement break, recipe demonstration.		
Be positive and patient. Remember that an unconventional response may be influenced by cognitive difficulty that affects interaction.	Allow all participants the opportunity to respond to questions and participate, without rushing them.		
Minimize environnemental distractions.	Turn off screen savers.Silence cell phones.Eliminate background noises.		
Skillfully Working with People with Disabilities https://online.colostate.edu/badges/developmental-disabilities/			

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 Table 2. Employment Industries of Survey Respondents

Employment industries (select all that apply)	n=37		
	# of respondents		
Cooperative Extension	15		
Education	13		
Community Outreach	10		
Social Services	8		
Healthcare	3		
Rehabilitation	2		
Other	2		
Long-term care	1		

Note. n=number of responses. The survey employed a multiple-choice prompt allowing respondents to submit multiple answers.

Table 3. Skillfully Working with People with Developmental Disabilities Post-Course Impact Survey - Knowledge Gained

	n=40 % of respondents				
Statement: As a result of this course					
	"Agree" or "Strongly Agree"	"Neither Agree nor Disagree"	"Disagree" or "Strongly Disagree"		
I have a better understanding of procedures to follow when working with clientele with developmental disabilities.	90%	3%	8%		
I learned instructional techniques to enhance learning in an inclusive environment.	90%	3%	8%		
I have a better understanding of how to use visual supports.	90%	3%	8%		
I have a better understanding of how to make accommodations and modifications for youth and adult audiences.	88%	0%	12%		
I have a better understanding of developmental disabilities.	85%	0%	15%		
I have applied the information received from the course in my professional work.	80%	10%	10%		

Note. n=number of responses. The survey employed a 5-point Likert scale, with response options ranging from "strongly agree" to "strongly disagree," including "agree," "neither agree nor disagree," and "disagree."

Table 4. Skillfully Working with People with Developmental Disabilities Post-Course Impact Survey - Implementation

Statement: As a result of this course	n=40				
	% of respondents				
	"Yes, I do."	"I plan to."	"I already did this before the course"	"I do not."	
I use more visual aids.	66%	17%	15%	2%	
I use instructional techniques to enhance learning in an inclusive environment.	60%	18%	20%	2%	

Note. n=number of responses. The survey employed a 4-point Likert scale, with response options including "Yes I do", "I plan to", "I already did this before the course", and "I do not".

Table 5. Skillfully Working with People with Developmental Disabilities Post-Course Impact Survey - Skill Improvement

	n=39			
Rate your level of improvement as a result of this course in the following	% of respondents			
categories:	"Significant Improvement"	"Some Improvement"	"Little Improvement"	"No Improvement"
Improved knowledge and skills	44%	54%	2%	0%
Professional growth	51%	44%	3%	2%
Personal growth	49%	46%	3%	2%
Critical thinking and decision-making	38%	54%	5%	3%
Improved outcomes for clientele	56%	36%	5%	3%

Note. n=number of responses. The survey employed a 4-point Likert scale, with response options including "significant improvement", "some improvement", "little improvement", and "no improvement".