Abstract
Effectively engaging individuals with developmental disabilities is essential to Extension's diversity and inclusion mandate. The Centers for Disease Control and Prevention has reported that over 6 million individuals have developmental disabilities. We in Extension have the potential to include a proportionate number of individuals with developmental disabilities in our programs wherever we serve. The Developmental Disabilities Training Series, an online or in-person professional development series, prepares Extension personnel and volunteers with the knowledge, skills, and confidence needed to design and implement community-based programs for this clientele. The series includes five courses, fact sheets, and resource materials.

Keywords: developmental disabilities, learning styles, behavior management, visual supports, inclusive education

Introduction
Providing opportunities for educators to learn how to effectively engage individuals with developmental disabilities is essential to Extension's diversity and inclusion mandate. Such training will help break down barriers and perceived differences between those with and without disabilities, reduce apprehension, and build confidence for educators and volunteers working with this clientele.

According to the Centers for Disease Control and Prevention (2017), over 6 million people in the United States have developmental disabilities, including learning disabilities, attention deficit disorder, autism spectrum disorders, intellectual disability, and others. We in Extension have the potential to include a proportionate number of individuals with developmental disabilities in our programs wherever we serve. Inclusive programming is programming offered in an accessible setting and provides all learners with the services and accommodations they need (Jackson, Ryndak, & Billingsley, 2000).

Through a literature review, we found that although Extension educators view inclusive programming as favorable (Boone, Boone, Reed, Woloshuk, & Gartin, 2006; Brill, 2011), they report a number of barriers to successful implementation. These barriers include lack of professional development about disabilities, lack of understanding of inclusive educational strategies, and lack of information about available Extension...
programs (LaVergne, 2013; Mouton & Bruce, 2013; Peterson et al., 2012). Providing educational programs
to diverse audiences also requires a good understanding of an identified population's needs (Hoorman,
2002; Peterson et al., 2012). The barriers to including individuals with disabilities often remain unresolved
(Taylor-Winney, Xue, McNab, & Krahn, 2019).

To address the needs identified in the literature, we created the Developmental Disabilities Training Series
(DDTS) to provide Extension personnel, volunteers, and nonformal educators with knowledge and skills for
effectively engaging individuals with developmental disabilities. The content is research based and peer
reviewed. We used literature findings and guidance from experts in the field.

**Program Description**

The DDTS will improve educator competencies in working with individuals with developmental disabilities.
The objectives are for participants to

1. build their knowledge and understanding of common developmental disabilities,

2. develop an understanding of the relationship between developmental disabilities and learning styles,

3. develop an understanding of instructional techniques that enhance this population's learning,

4. develop an understanding of why problematic behaviors occur and identify their common triggers,

5. develop an understanding of the visual learning style, and

6. become familiar with applicable laws on disability accommodations.

The series addresses effective teaching strategies that align with different learning styles, providing
educators with information they can use to optimize the educational setting, such as through using visual
supports. The DDTS raises awareness of how to communicate respectfully and appropriately with and about
people who have disabilities. It outlines the legal protections that help ensure that appropriate
accommodations and modifications meet the needs of the audience.

**Curriculum Delivery**

We deliver the training series in-person or as five online courses through Colorado State University Online.
Both full-day and half-day in-person trainings are available. Pricing depends on the number of participants
and number of courses requested. The online version, accessed through
https://www.online.colostate.edu/badges/developmental-disabilities/, costs $255 for all five courses. Group
discounts are available as are options to take single or bundled course packages.

This flexibility allows Extension services that do not have resources to develop such trainings to select the
delivery mode that is the best fit for their educators and volunteers. Research by Sherfey, Hiller, Macduff,
and Mack (2000) on the need for and interest in online distance training revealed that study participants
had difficulties obtaining the training they needed face-to-face due to factors such as cost, need for time off
from work, and travel necessities. Other research has consistently identified lack of time as a barrier to
pursuing professional development (Bailey & Deen, 2007; Conklin, Hook, Kelbaugh, & Nieto, 2002; Lakai, Jayaratne, Moore, & Kistler, 2012; Mincemoyer & Kelsey, 1999). Online learning provides ease of access and fills the need to reach administrators, educators, staff, and volunteers wherever they are and whenever they are available, in an economically feasible manner, and affords the instructors more readily accessible updates, evaluations, metrics, and impact data.

**Curriculum Materials**

The DDTS includes five peer-reviewed courses, corresponding fact sheets, and a variety of educational resources, including handouts; videos; activities such as behavior scenarios, problem solving, and learning assessments; and recommended reading lists.

The five courses are titled as follows:

- Overview of Developmental Disabilities
- Disabilities and Learning
- Understanding and Managing Behavior
- Visual Supports
- Understanding Disabilities Laws and Making Program Adaptations

Online course participants earn digital badges and professional development hours for each course taken. Those finishing the full series receive 8 hr of professional development, completion certificates, and digital badges. Clickable digital badges are available to insert into an email signature line and social media pages. They allow viewers to see the competencies acquired to earn this credential.

**Conclusion**

It is vital for Extension professionals, whose programming is inclusive, to possess the knowledge and skills necessary to effectively engage clientele with developmental disabilities. There is documented need for professional development in this area. We developed the DDTS to meet this need and to advance the land-grant university mission to take knowledge gained through research and education and bring it to the people to create positive changes.

The goal of this professional development training series is for the participants to learn how to effectively engage individuals with developmental disabilities in Extension programming. Each course has specific learning objectives. Trainees will gain a clearer understanding of developmental disabilities and the characteristics and needs associated with different learning styles. They also will learn how to identify, manage, and prevent problematic behaviors; why and how to use visual supports; and how to make accommodations and modifications that comply with current disabilities laws.

Beyond the Extension system, many organizations could benefit from participation in the training series. Broad participation in this initiative from within and outside the Extension system will raise the visibility of Cooperative Extension as an innovative organization that continues to focus on inclusion.
The DDTS is effective in educating participants to work with individuals with developmental disabilities. Preliminary evaluation data from in-person trainings and online courses showed that participants had a better understanding of developmental disabilities, learned instructional techniques to enhance learning and manage behavior in an inclusive environment, and had a better understanding of how to make accommodations and modifications for this audience. Further program evaluation results will be reported in a separate manuscript.

References


