

## Prevalent Approaches to Professional Development in State 4-H Programs

### Abstract

High-quality 4-H programming requires effective professional development of educators. Through a mixed-methods study, we explored professional development offered through state 4-H programs. Survey results revealed that both in-person and online delivery modes were used commonly for 4-H staff and adult volunteers; for teen volunteers, in-person delivery was most common. Additionally, most professional development efforts were characterized as episodic, expert-led, and group-based (traditional approaches); the least common approaches were described as ongoing, learner-centered, and group-based (reform-based approaches). Interview data supported survey findings. Traditional approaches to professional development are considered ineffective; thus, the implementation of more reform-based professional development opportunities is recommended.

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### Background

Educators, those with responsibilities for direct delivery of educational programs, are primary contributors to program quality and learner outcomes (Borden, Schlomer, & Wiggs, 2011; Pozzoboni & Kirshner, 2016). Effective professional development can help advance educators' abilities to facilitate learning experiences by improving their content knowledge, understanding of desired learning outcomes, and pedagogy (Barker, Grandgenett, & Nugent, 2009; Hunzicker, 2011; Smith, 2013). Therefore, organizations that provide professional development need to ensure that these opportunities are successful in enhancing educators' knowledge and skills regardless of an individual's level of experience.

Within 4-H, one-time workshops represent the most common approach to the delivery of educator professional development (Kaslon, Lodl, & Greve, 2005; Senyurekli, Dworkin, & Dickinson, 2006; Smith, Meehan, Enfield, George, & Young, 2004). Workshops are characterized as representing a traditional approach to professional development that is hierarchical, typically involving highly skilled professionals demonstrating knowledge and proficiencies to less experienced individuals (Fleischer & Fox, 2003; Lambert et al., 2002; Sparks, 2004). Such professional development strategies are largely ineffective in changing practice because they are fragmented, lack learner-centeredness, and are decontextualized (Bissonnette & Caprino, 2014; Penuel, Fishman, Yamaguchi, & Gallagher, 2007).

In the last decade, some authors have advocated for the use of reform-based methods of professional development, such as communities of practice, to help meet the needs of 4-H educators, including staff and volunteers (Garst, Baughman, & Franz, 2014; Smith & Schmitt-McQuitty, 2013; Sobrero & Craycraft, 2008). Communities of practice are organized networks of peers within a profession and represent a model for situated professional development whereby groups of educators work toward shared learning goals that arise through authentic practice (Buysse, Sparkman, & Wesley, 2003). Given that learning is a social endeavor where dialogue and reflection with others are critical components (Lave & Wenger, 1991; Vygotsky, 1978), community of practice participants co-construct knowledge and advance their practice through social interactions.

There is a documented need to explore reform-based models of educator professional development in 4-H (Kaslon et al., 2005; Smith, Dasher, & Klingborg, 2005; Smith, 2013; Smith & Schmitt-McQuitty, 2013). Therefore, the goal of our study was to gain a deeper understanding of professional development opportunities offered currently to staff, adult volunteers, and teen volunteers through state 4-H programs. Two specific research questions were as follows:

- What is the prevalence of delivery modes for professional development—in-person, online, or both?
- What is the frequency of use of professional development models based on characteristics of traditional versus reformed-based approaches?

## Methods

We employed a sequential explanatory mixed-methods study design, a two-part approach whereby qualitative data helped explain initial quantitative outcomes (Creswell & Plano Clark, 2011). The first strand was quantitative, with data collected through the use of an online survey that was disseminated to all 84 state 4-H program leaders representing 1862, 1890, and 1994 land-grant universities. Program leaders were invited to participate via email, and two follow-up requests were sent at regular intervals. Furthermore, program leaders were given the option to complete the survey themselves or, where available, to delegate the responsibility to professional development specialists in their states.

### Online Survey

Survey respondents were asked to report the proportion of all professional development opportunities that were provided to staff, volunteers, and teens through in-person implementation, online delivery, or a combination of both delivery modes. Additionally, respondents were asked to rank eight profiles describing characteristics of professional development models that ranged from more to less reformed-based. The eight

profiles were defined by different combinations of three characteristics: frequency (i.e., single episode; multiple increments), approach (i.e., expert-led; learner-centered), and participant grouping (i.e., individual-based; group-based) (see Figure 1). Specifically, respondents were asked to rank these profiles in regard to the frequency with which they were used with staff, volunteers, and teens.

Data from completed surveys were compiled, and descriptive statistics were generated. For ranked data, average rankings were calculated by summing response counts for answer choices multiplied by the weight of the ranked positions (e.g., the first choice was weighted eight and the last choice was weighted one) and divided by the total responses.

## Telephone Interviews

The second strand of the study was qualitative, with data collected through individual telephone interviews. We selected interview subjects through the use of a stratified random sample of survey respondents such that the four regions defined by the National Association of Extension 4-H Agents (northeast region, southern region, north central region, and western region; two interview subjects per region) and the 1890 land-grant universities (two interview subjects) were represented.

Survey outcomes guided the development of the interview questions. Interviewees were asked to describe approaches to professional development used currently in their states; to identify how, if at all, professional development strategies differed for staff, volunteers, and teens; and to describe how, if at all, evaluation findings were used to inform professional development in their states. Where appropriate, we used probing questions for the purpose of clarifying responses or exploring responses in more depth. Responses were recorded by interviewers. We analyzed data using the constant comparison method, whereby explanatory patterns were identified through repeated evidence that emerged from the data (Hatch, 2002).

## Results

### Online Survey

A total of 48 completed surveys were received for an overall response rate of 57%. Ninety percent of survey respondents were from 1862 land-grant universities, and 10% represented 1890 land-grant universities. No responses were received from 1994 institutions. Thirty-seven respondents were state 4-H program leaders, and 11 were other state staff responsible for professional development.

On average, respondents reported using a combination of in-person and online modes most frequently for the professional development of staff (84%) and adult volunteers (72%). For teen volunteers, in-person delivery was used most often (65%), and the combined approach was less common (35%). For all three audiences, the use of online delivery only was the least frequently reported. Table 1 provides a summary of survey results.

**Table 1.**

Average Proportions of 4-H Professional Development Opportunities Involving In-Person, Online, and Combined Delivery Modes by Audience

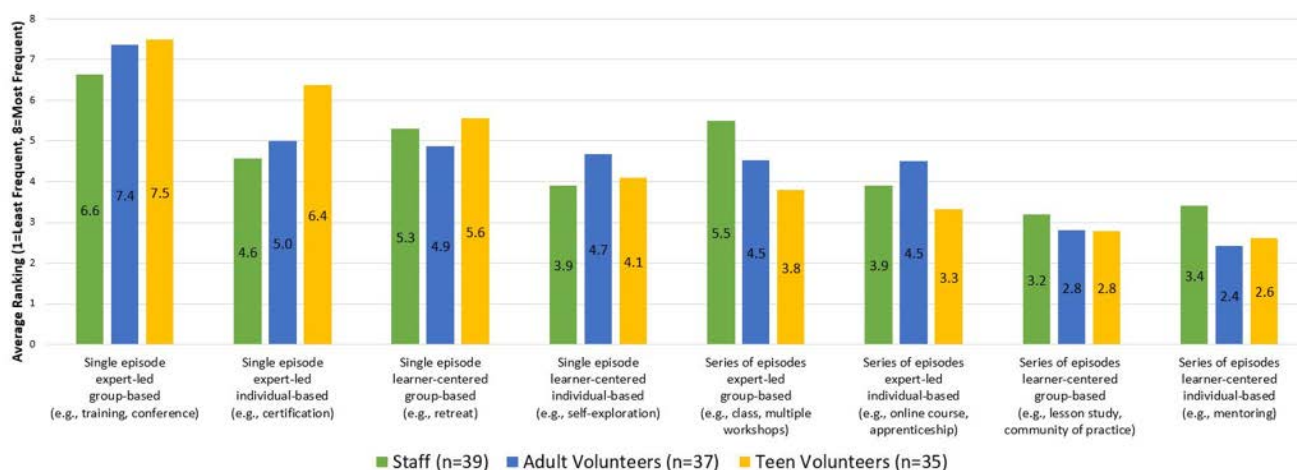
<b>Delivery mode</b>	<b>Staff (n = 38)</b>	<b>Adult volunteers (n = 39)</b>	<b>Teen volunteers (n = 34)</b>
In-person only	16%	25.5%	65%

Online only	0%	2.5%	0%
Both in-person and online	84%	72%	35%

The four most common professional development profiles involved single-episode events (see Figure 1). For all three audiences—staff, adult volunteers, and teen volunteers—the top-ranked professional development profile comprised the characteristics single episode, expert-led, and group-based (e.g., training, conference). Ranking patterns then diverged according to audience type: the single episode, learner-centered, and group-based profile (e.g., retreat) ranked second for adult and teen volunteers; the profile characterized by a series of episodes that were expert-led and group-based (e.g., classes, multiple workshops) ranked second for staff. Profiles that included a series of episodes that were learner-centered and either individual-based (e.g., mentoring) or group-based (e.g., lesson study, community of practice) ranked the lowest for adult and teen volunteers and second lowest for staff.

**Figure 1.**

Average Rankings of Professional Development Profiles (Clusters of Characteristics) in 4-H by Audience



## Telephone Interviews

Interviewees represented a random subsample of survey respondents. Two survey respondents from each of the four National Association of Extension 4-H Agents regions and two respondents from 1890 institutions were interviewed.

Nine of 10 interview respondents reported that most professional development was conducted through discrete trainings or workshops and was typically facilitated by experts. Responses included the following comments:

- "For staff, we do 3-day workshops and 1 day workshops that are run by outside experts. For volunteers, we do 2 day workshops in the fall and spring."
- "Most professional development is workshop based: 3 day workshops, one to two times per year for staff. Volunteers, if we're lucky, receive 1 to 2 hr trainings."
- "For staff, the professional development is sporadic and basic—in-person workshops that are introductory in nature and focused on specific topics. For [adult] volunteers, we have very little professional development

right now, and nothing for teens."

All 10 interviewees reported limited or no use of evaluation findings to inform professional development. Responses included the following comments:

- "Very little evaluation data are being used to inform professional development."
- "We do not do this in our state; however, it is key that we get to the point where our professional development is data driven."
- "We do not do this; there is a big disconnect here; there is no 'informing the future' [through data]."

Further interview data included professional development being described as "pretty old school" by one state 4-H program leader (e.g., face-to-face workshops) and as a "weakness" and a "struggle" by others. Another program leader indicated that, until recently, professional development opportunities for staff and adult volunteers had not been available in the state for 5 or 6 years. Furthermore, three interviewees referred to professional development in their states as reactionary, meaning that it was offered mainly in response to specific situations (e.g., new curriculum) or to policy changes, as opposed to being driven by data. Lastly, only one respondent referred to an ongoing mentoring program that included informal coaching.

## Discussion

High-quality programming requires educators who are well prepared (Borden et al., 2011; Garst et al., 2014). Therefore, the availability of effective professional development is critical to enhance their competencies (Garst et al., 2014). Outcomes from our investigation revealed that the professional development strategies used most commonly by state programs for 4-H educators involved expert-led workshops. Such strategies are largely ineffective in changing practice and are typically viewed by educators as disconnected and irrelevant (Bissonnette & Caprino, 2014; Lieberman & Mace, 2010; Penuel et al., 2007). Outcomes from our study also showed that professional development for 4-H educators is normally offered only intermittently, and that it is rarely informed by evaluation data. Professional development that is intermittent in nature can be detrimental to educators' continued learning (Lieberman & Mace, 2010). Furthermore, the absence of data from learners to inform professional development decontextualizes the process for educators by not connecting it directly to their practice (Smith & Schmitt-McQuitty, 2013).

Data from our study also disclosed that reform-based approaches to professional development—strategies that have been shown to be effective in improving educators' practices (Garet, Porter, Desimone, Birman, & Yoon, 2001; Lambert et al., 2002)—are used least commonly by state 4-H programs. Reform-based professional development models include a series of episodes over time, are constructivist-based and learner-centered, foster collaboration among educators, include active learning, emphasize pedagogy, occur in authentic contexts, are data driven, and connect to broader organizational and systemic efforts (Garet et al., 2001; Hunzicker, 2011; Smith & Schmitt-McQuitty, 2013). Such approaches help connect professional development to authentic issues associated with educators' practice, which helps advance their knowledge (Hunzicker, 2011; Lieberman & Mace, 2010).

Reform-based models include lesson study (Smith, 2013), action research (Bissonnette & Caprino, 2014), and professional learning communities (Lieberman & Miller, 2011). All of these approaches involve educators

engaged in a community of practice *with* other educators rather than experts working *on* educators (Wenger, McDermott, & Snyder, 2002). Although there have been several publications that outline the benefits of community of practice–based professional development in Extension broadly (e.g., Kelsey & Stafne, 2012; Sellers, Crocker, Nichols, Kirby, & Brintnall-Peterson, 2009; Sobrero, 2008; Sobrero & Craycraft, 2008) and 4-H specifically (Garst, et al., 2014; Smith, 2008; Smith & Schmitt-McQuitty, 2013), there are only a few examples of the use of these models to advance 4-H educators' practice (e.g., Smith, 2013).

There were several limitations to our study. We did not assess nationally offered professional development (e.g., webinar e-academies, opportunities associated with grants or special initiatives) or professional development offered outside the purview of state 4-H offices (e.g., county offices, partner organizations). We assessed perspectives from state 4-H program leaders and professional development specialists; thus, findings cannot be generalized beyond the scope of our investigation.

## Conclusion

To advance their knowledge and skills, educators require access to and participation in reform-based professional development opportunities that are driven by data from target audiences (Garst, et al., 2014; Gusky, 2003; Loucks-Horsley, Love, Stiles, Mundry, & Hewson, 2003; Smith & Schmitt-McQuitty, 2013). We recommend continued efforts to shift the types of professional development available to 4-H educators—staff, adult volunteers, and teen volunteers. We see a need to introduce more reform-based professional development opportunities into the 4-H landscape in a systematic and intentional manner. We also recommend that 4-H continue to support multimodal delivery of professional development (e.g., in-person, online) and explore blended learning opportunities, which involve a combination of face-to-face workshops and online components (e.g., Barker et al., 2009; Lobley & Ouellette, 2013).

Although our study focused on professional development offered through state 4-H programs, reform-based approaches to professional development involving communities of practice are applicable to other Extension programs (e.g., Pankow & O'Neill, 2008; Sellers et al., 2009; Sobrero, 2008; Sobrero & Craycraft, 2008). We recommend systematic research to investigate current approaches to professional development in other Extension program areas and ways in which reform-based strategies might be used to augment or strengthen them.

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