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Extension's Capacity to Deliver Quality Early Childhood Professional Development

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Extension's Capacity to Deliver Quality Early Childhood Professional Development

Abstract

In recent years much attention has focused on the role of enhancing a teacher's professional knowledge and skills in helping to improve the quality of early care experiences for young children birth-5. In the study reported here, an environmental scan of the early childhood professional development programs offered within the Extension system was conducted to identify the programs' content, delivery, scope, evaluation, and partners. Results indicate that Extension has been a player in providing professional development opportunities for early childhood professionals and with a focused effort in streamlining the current resources has the capacity to become a leader in this field.

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Introduction

Approximately 12.5 million children ages 0-5 are enrolled in childcare settings (Laughlin, 2010). More than 1.3 million childcare providers care for these children in a variety of early care and education settings, including center and home-based care, the employment of which is expected to grow by 20% from 2010 to 2020 (Bureau of Labor Statistics, 2012). In this article we identify results from a national environmental scan of professional development opportunities offered through Extension for this rapidly growing workforce of those who care for and educate children from birth through age 5.

Educators, neuroscientists, business leaders, politicians and economists emphasize the importance of a child's first 5 years on positive development into adulthood. Research indicates the following benefits of high quality early childhood programming:

- Enhanced cognitive, social, and language development (Bryant & Taylor, 2009; Burchinal,

Vandergrif, Pianta, & Mashburn, 2008; National Institute of Child Health and Human Development, 2005).

- Healthy brain development, vision, hearing, language, and emotional and cognitive development (National Research Council and Institute of Medicine, 2000; Center on the Developing Child, 2010).

- A 20% increase in employment rates for parents and a return of more than two dollars towards local economies for every dollar invested by states in early childhood programs (Committee for Economic Development, 2006).

- Increased likelihood of students' academic success and attending post-secondary education, thus saving school systems up to $3,700 per child and reducing crime-related spending (Belfield & Schwartz, 2006; Wat, 2007).

Need to Support Quality Childcare

Childcare practitioners need competencies, knowledge, and skills to provide high-quality environments and interactions (Bryant &Taylor, 2009). *Skilled* caregivers share pre-academic concepts in developmentally and culturally appropriate ways and are sensitive and warm when interacting with children (Pianta, 2011). However, The National Institute of Child Health and Human Development Early Child Care Research Network (2000) estimated that 61% of children in childcare in the United States receive mediocre to poor quality care. Odom, Bryant, and Maxwell (2012) reported that the training and support available to early childhood providers is often inadequate or unavailable and called for improved professional development that helps providers understand developmentally appropriate practices.

Professional Development and Quality Childcare

Professional development can have a positive effect on observed quality of care provided to children (Burchinal, Cryer, Clofford, & Howes, 2002a; Burchinal, Howes, & Kontos, 2002b; Galinsky, Howes, & Kontos, 1995; Fukkint & Lont 2007). Researchers found that professional development affects both the provider and the childcare environment. Some impacts observed are:

- Providers become more intentional about their work (Galinsky et al., 1995)

- Significant, positive effects of specialized training on providers' competency, (Fukkint & Lont, 2007)

- Formal education and training is a stronger and more robust predictor of childcare quality than adult-child ratio and group size (Burchinal et al., 2002b).

Based on the existing strengths of Extension and the need for quality professional development, this article presents the results of a national environmental scan of early childhood professional development programming conducted within the Extension system in hopes of sparking a

conversation on ways Extension can contribute to creating *quality* early care experiences for children.

Purpose of the Study

Under the auspices of a memorandum of agreement between the United States Department of Agriculture-National Institute of Food and Agriculture and the Department of Defense Office of Family Policy/Children and Youth, the University of Nebraska-Lincoln Extension (UNL) conducted a national environmental scan of the professional development opportunities offered through the Cooperative Extension System to early childhood and school age providers (Gerdes, Felix, Prokasky, Durden, & Lodl, 2011). This article focuses on findings related to early childhood professional development programs. These programs were defined as those that provided learning opportunities for professionals who worked with young children ages birth to five in a variety of childcare settings, whether licensed or unlicensed. An early childhood professional was operationally defined as an individual who served young children (birth-age 5) such as center directors, lead teachers, or assistant teachers. The full report can be found at http://www.extension.unl.edu/web/child/cyttap.

Methodology

The environmental scan research team consulted related literature and research on professional development experiences within early childhood education and Extension. The research process consisted of five steps.

1. Development, piloting, and adaptation of the questionnaire: A questionnaire was developed (Appendix A) to determine a professional development program's target audience, scope, goals, contact hours, delivery method, partnering agencies, and evaluation strategies. The questionnaire was initially piloted via a phone interview with a group of participants from a separate project focused on childcare quality and accessibility in 13 states. The questionnaire was adapted into a table that allowed participants to easily enter their program information (Appendix B).

2. Identification of the Sample: A purposeful sample of Extension participants (faculty, directors, educators, and other key leaders) who had knowledge of or access to the Extension programs offered within each state was identified. The table and an introductory letter about the environmental scan project were emailed to Extension contacts in the 37 remaining states.

3. Data Collection: The research team made weekly follow-up phone calls to increase the response rate. Data were ultimately collected from a total of 48 states.

4. Data Cleaning: Programs that did not meet the definition of providing early childhood professional development were removed. Grammatical, formatting, and minor edits were also made. Following edits, respondents were given opportunities to revise, edit, or confirm the information through a member checking process (Lincoln & Guba, 1985). Frequency counts were recorded for target audience, content area, contact hours, scope of program, delivery method, and year program began.

5. Data Analysis: Using descriptive analysis, the researchers identified the distribution, central

tendency, and dispersion of data (Gravetter & Wallnau, 2007). States could report multiple responses for target audience, content area, scope of program, and delivery method; therefore, these numbers represent duplicated counts. Curricula titles, contact hours, and year the program began were unique responses and provide unduplicated counts of programming. The content areas of professional development programs reported were coded and collapsed into common themes (Miles & Huberman, 1994) by consulting the child and youth development literature on common content areas (e.g., nutrition, health and safety, child development, etc.).

Limitations of the Study

Methods used to ensure the credibility and trustworthiness of the information collected in the environmental scan included multiple opportunities for participants to revise, edit, and add information to data collected within their states through member checking. Reliability and validity of the qualitative analysis were addressed by: appropriate preparation (skill/knowledge level) of the researchers; appropriate review of the existing literature; working inductively through the analysis; using appropriate methods and design; and leaving an audit trail such that an independent researcher could check the research events and decisions (Richards & Morse, 2007). Where qualitative coding processes were used, each member of the team coded independently, and a consensus meeting was held where final codes and themes were decided to ensure they were valid and representative of the data collected.

A limitation of the study is that the data rely on self-reporting, and therefore only the data received from participants were analyzed. It is also possible that the questionnaire may not have reached all participants with knowledge of early childhood professional development occurring in their states. Furthermore, this environmental scan only asked about professional development programs and resources. It did not provide a comprehensive picture of the array of other services and resources available through Extension to early childhood providers such as those provided on websites, through local publications or news briefs, or other Extension outreach efforts.

Results

Number of Programs Offered

Among the 48 states that provided information, 339 (70%) of the programs targeted early childhood care providers. States ranged from offering one program for early childhood professionals to as many as 48 programs. There was variation in intensity, duration, and scope among the early childhood programs. One program, Better Kid Care (BKC), developed by Pennsylvania State University Extension, was reported across multiple states. However, BKC was counted only once in each state. Because BKC offers 150 professional development options for providers, programming may have been underrepresented in this environmental scan. While some states did not report the year that programs began, of those programs that did (n=268), 74.6% began in 2005 or later, while only 7.1% began prior to 2000. Increased national attention and funding for early childhood might explain this marked increase in programs offered through Extension beginning in 2005.

Program Delivery

Programs were delivered using multiple strategies with varying amounts of dosage. Highlights of the program delivery findings include:

- The average number of contact hours for each participant during a program was 4.26 hours.

- Sixty-seven percent of individuals attended programs face to face between 1 and 3 hours. Seven percent of participants attended programs offered for more than 10 contact hours

- Programs were delivered face-to-face or online with the majority (n=269) offered face to face.

- Four percent of the programs were delivered in another format such as self-study or a hybrid (face to face and online) delivery.

It is important to note that the environmental scan did not ask respondents to identify the average number of trainings childcare providers attended or the average total hours of professional development obtained by individual childcare professionals. Such data could begin to document sequenced engagement and depth of learning that does occur through Extension.

Program Scope

Of the programs identified in the scan, 18% were offered locally (e.g., one county or community in the state), and 60% in multiple counties or all counties. A little more than 11% were offered in multiple states or nationwide.

Program Content

Extension is playing a critical role in providing professional development opportunities for childcare providers on issues facing our nation such as: childhood obesity; language and literacy; social-emotional health; brain development; and health and safety. As represented in Figure 1, the most common content areas for early childhood trainings were child development and nutrition, health, and safety. The child development content area included programs providing information such as domain-specific content, developmental milestones, brain development, and adult-child interactions.

Figure 1.
Early Childhood Professional Development Program Content Areas.

Early Childhood Program Content Areas

Content Area	Value
Child Development	137
Nutrition, Health, Safety	120
Behavior Management	26
Child Care Administration	28
Quality Child Care Environments	23
Other	14
Working with Parents/ Engaging Families	14
Parenting	7
Military Culture	5
Children with Special Needs	5

Programs providing domain-specific content (cognitive, language, social, physical, creative arts) were further analyzed and broken down into domain area (Figure 2) as a sub-set of the child development content area. Language and literacy and social/emotional development comprised a majority of the programs.

Figure 2.

Child Development Domains.

Child Development Domains

Domain	Value
Science	3
Physical	4
Math	5
Creative Arts	8
Social/Emotional	19
Language/Literacy	31

Programs focused on early literacy and social/emotional development have important implications, not only to Extension's leadership role in early childhood professional development, but also in opportunities for cross-discipline collaboration. There is a growing body of scientific evidence identifying how early influences are essential to the development of children's brains and their lifelong health (Center on the Developing Child, 2010). Findings from the environmental scan suggest there are multiple programs offered through Extension teaching participants basic concepts of early brain development and how cognitive development influences, and is influenced by, social/emotional, physical, and language/literacy development.

Program Partners

Environmental scan respondents reported a variety of early childhood partners with whom they work to provide programs. The most common partners at the local level included childcare centers, churches, and libraries. State partners included the Child Care Resource and Referral agencies, Health and Human Services, Head Start State Collaboration Office, and the Department of Education. States also reported partnering with national agencies such as the National Association for the Education of Young Children (NAEYC), Head Start, and Child and Adult Care Food Program (CACFP).

Program Evaluation

Quality professional development program evaluation should document behavior change, focus on a set of skills and competencies, and be able to effectively evaluate program impact (Pianta, 2011). Participants were asked to share how the reported program was evaluated. However, because specific evaluation data were not collected for each program reported, a determination could not be made as to whether a program was evidence-based. States reported program evaluation strategies for 268 of the 339 programs. The two most frequently reported evaluation types were 1) pre/post evaluation and 2) post-workshop evaluation. States did not report an evaluation strategy for 71 of the programs, and it is unclear whether these programs failed to conduct any evaluation for the program or if respondents left the item blank for a different reason.

Discussion and Recommendations

Based on environmental scan results, 70% of the programs reported focused on meeting the professional development needs of early childhood providers. By offering opportunities for early childhood providers to receive the knowledge, skills, and competencies needed to provide high-quality care and positive learning environments for young children, Extension is inevitably helping to improve the quality of care young children receive, consequently improving the quality of life and economic benefits in local communities. With increasing numbers of dual-employed parents and more children in childcare, Extension is meeting the growing need for childcare professional development by shifting some resources from parenting education to early childhood professional development programming (Cathey, White, Braud, & Gioe, 2009; Shaklee, 2002).

As reported, 60% of the programs reported in the scan were offered statewide, compared to 11% of Extension programs developed and offered in one community. This statewide reach indicates that Extension is an important provider of professional development for early childhood professionals at *the state* level and, with a focused effort in streamlining, coordinating, and promoting current programs and resources, has the capacity to become a *national leader* in this field. Environmental scan respondents reported more than 330 professional development programs targeting early childhood providers. Many of these programs responded to local needs of the community, region, or state. A focus on local, immediate needs allows the Extension system in each state to create and provide responsive, high-quality professional development, yet often needs are similar across states.

Therefore, the potential exists for Extension to develop programs on a national scale, providing the opportunity to work more efficiently and effectively by sharing resources. The scope and reach of Extension-based programming allows for national distribution of research-based, accessible professional development to early childhood providers.

While the scan indicated the majority of programming offered by Extension is delivered face to face, the challenges of substitute care, time to attend training, and increasing costs to travel to workshops may hinder participation in workshops. Extension needs to challenge itself to strongly consider how online and virtual educational programs can be as interactive and high-touch as signature face-to-face models. How can we use social media, eXtension, and community publications to enhance, extend, and expand current professional development programming?

The environmental scan indicated that Extension provides programing in areas addressing societal issues in early childhood such as childhood obesity, language and literacy, social-emotional health, and early brain development. Arguably, the sustainability of the diverse range of programs offered by Extension and the opportunities to serve as key leaders in providing research-based early childhood professional development depend greatly upon Extension's engagement and professional relationships with community partners and stakeholders. Extension personnel consult and work with multiple partners within the early childhood community to conduct, fund, or manage professional development programs. To expand Extension's reach and leadership in early childhood professional development, establishing and strengthening a common national network of key early childhood partners should be considered.

Last, the foundational framework of the Extension model is to provide research-based programming and resources to meet local needs. The evaluation measures used to determine whether early childhood professional development programs were effective were highly variable across and within states. The opportunity exists for Extension to support more rigorous program evaluation efforts to document provider and child outcomes and impact. Practically, a first step should be for Extension personnel to document the impact of professional development programs on the early childhood providers who attend. While there is anecdotal evidence of program success, there are few results based on rigorous evaluation processes.

Extension has a distinct role in providing professional development to early childhood professionals. More discussion needs to occur nationally about how Extension can effectively use and maximize its national educational system and network of expertise to become a leading and recognized national player with a reputation for providing accessible, effective, and research-based early childhood professional development programming. The following are recommendations for next steps to enhance early childhood professional development through Extension.

- Identify a small number of early childhood professional development programs to offer, support, and promote nationally by Extension, providing consistency for professionals who move among states and allowing for Extension to address current issues in early childhood as well as introduce novel topic areas.

- State Extension programs should share programs and use existing professional development curricula rather than continue to develop their own curricula. The development of a national Extension early childhood professional development database would allow programs to be accessible within and beyond Extension.

- Consider ways to reach more providers by offering multiple modes of delivery, such as face-to-

face, online, or on-site professional development using a coaching or professional learning community model.

- Identify evaluation rubrics or measures to demonstrate more rigorous program impact evaluation for professional development programs offered throughout the Extension system. The implementation of rigorous and intentional program evaluation procedures could allow programs to transition from research-informed to evidence-based.

Extension should strive to maintain, strengthen, and expand local, regional and national partnerships with key early childhood leaders and stakeholders such as Head Start and local CCR&Rs. Also, a network of national partners could be established to encourage multi-state, regional, and national partnerships between these entities and Extension.

Extension has the capacity and experience in delivering early childhood professional development. By building upon the results of this environmental scan, Extension is in an optimal position to strengthen quality early childhood programs implemented on a national scale and be a nationally recognized contributor in enhancing the quality of childcare for our youngest citizens thus improving opportunities for their future success.

Acknowledgments

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Appendix A.

Questionnaire Used with Pilot States

Extension Early Childhood/School-Age Professional Development Programs Environmental Scan Survey

1. What is the name of the Extension professional development program?

    _____

2. Does this professional development program focus

    _____professional development for early childhood providers (Ages birth to 5)

    _____professional development for school-age providers (ages 5-12, before and after school and youth programs)

3. On what age of child does this professional development focus its teaching? Select all that apply

    _____Infants (0-18 months)

    _____Toddlers (18 months- age 3)

    _____Preschoolers (3 to 5 year olds)

    _____Middle childhood (ages 6-12)

4. In what year did the program begin?

    _____

5. Is the program still active?

    _____Yes

    _____No

6. What is the scope of the program?

Local County/Parish   ____Yes   ____No

Multi-county/Multi-parish   ____Yes   ____No

State   ____Yes   ____No

Multi-State   ____Yes   ____No

7. What are the goals/objectives of the program?

_____

_____

8. Does this professional development program provide information or training on working with parents and families?

____No

____Yes

If yes, what is the content of the program that relates to working with parents and families?

_____

_____

9. Who do you partner with to conduct this professional development program?

_____

_____

_____

_____

10. Who is the primary target audience for this professional development program?

_____

11. Does this professional development program serve providers who care for children from military families either on or off base?

____Yes, on base

____Yes, off base

____Yes, both on and off base

____No

_____Not sure

12. Please describe briefly the educational activities in the program and how they are delivered (face to face, distance education, hybrid, etc).

_____

_____

_____

_____

_____

_____

13. When this professional development program is conducted, how many total contact hours does an individual participant receive?

_____1-2 hours

_____3-4 hours

_____5-6 hours

_____7-8 hours

_____9-10 hours

_____11 or more hours

　　　Please estimate the number of hours that the participant receives _____

14. How often is this professional development program conducted during a typical year?

_____once a year (1 time)

_____twice a year (2 times)

_____three times a year (3 times)

_____four times a year (quarterly)

_____every other month (6 times)

_____ Every month (12 times)

_____Ongoing ---please describe

_____

_____Other---please specify

15. How has this professional development program been evaluated? Please share any documented results.

16. Is there any additional information about the program that you would like to share, this could include links to websites?

17. Do you have an additional professional development program that you would like to report?

_____Yes

_____No

18. Do you offer professional development programs that focus specifically on training providers to support parents and/or families? (supporting and working with parents and families is the main goal of the professional development program)

_____No

_____Yes---please describe what these programs look like

_____

_____

_____

_____

_____

_____

_____

19. Who is the target audience for these professional development programs?

_____

_____

_____

_____

20. Does these program serve providers who work with children from military families?

_____Yes

_____No

_____Sometimes

Appendix B.
Table for Data Collection

Extension Resources for Early Childhood and School Age Professional Development									
Curriculum Name	Target Audience	Content	Goals and Objectives	Contact Hours	Scope of Program (County, Local, Statewide)	Delivery Method (Face to Face or Online)	Year Began	Partners	Evaluation
Working with Military Families*	Childcare providers	Working with Military families	Increasing childcare provider knowledge of stressors experienced by military families,	3 hours	Multicounty	Face to face	2011	None	Pre- and post- testing

			and how to identify issues and best work with parents						
4-H*	Youth program leaders	Quality After-School Environments	Provide training to youth programming staff to understand youth development and implement 4-H Curricula and other programs	varies	Statewide County	Face to face	1996	Army Navy Air Force	Individual workshop evaluation
*Indicates that this program serves providers who work with military families.									