

The Cornell Cooperative Extension Statewide Data Collection System: An Online Data Collection Tool for Parent Education Programs

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Abstract: *The Statewide Data Collection System for Parent Education Programs is an online tool for collecting statewide data on Cornell Cooperative Extension (CCE) parenting education programs. The process of the development and use of this data collection tool are provided as a guide to Extension systems. Results for data entered between March 2009 and July 2010 from participants in CCE parent education programs indicate significant improvements on eight out of 10 measures of parenting attitudes, behaviors, and knowledge, and highlight the value of this online tool for assessing the impact of parent education programs in New York State.*

Introduction

The Cornell Cooperative Extension (CCE) system offers a variety of parent education programs throughout New York State. Until recently, most such programs were evaluated on a per program basis, with no system in place for collecting statewide program data. To address this need, The Statewide Data Collection System for Parent Education Programs was developed. This article describes the process behind the development and use of an online statewide data collection tool as a guide for other Extension systems seeking to develop easy-to-use, systematic ways of collecting program data. Also presented are results from an analysis of data collected using this system.

Development of a Systematic Method for Evaluating Parent Education Programs in the Cornell Cooperative Extension System

Approximately 90 Cornell Cooperative Extension (CCE) parent educators deliver parent education programs in 40 counties across New York State. CCE educators and faculty wanted a systematic way to document the type and quality of parenting programs statewide. Evaluation methods across counties differed widely in their format and content, signaling the need for a more consistent and systematic method of evaluation.

A team of Cornell researchers and CCE parent educators worked together to develop a comprehensive set of common outcomes for parenting education programs and to develop a tool for collecting this data statewide. First, researchers and educators identified domains that most parent education programs in the state would be likely to influence. These domains represent the key dimensions on which parent education program data would be collected. Domain selection was influenced by the *National Extension Parent Education Model (NEPEM)* (Smith, Cudaback, Goddard, & Myers-Walls, 1994), a list of 29 parenting practices organized into six themes. Together, these domains identify practices that Extension professionals have identified as important components of parent education. Table 1 lists the identified domains, which closely

align with the six identified NEPEM themes.

Table 1.
Cornell Cooperative Extension Parent Education Domains

Parent Education Domains		NEPEM Category	Parent Education Survey Questions
PERSONAL & FAMILY MANAGEMENT	<i>Parents are able to take care of themselves so that they will be able to engage in all other domains.</i>	Care for Self	I honestly believe I have the skills necessary to be a good caregiver.
CHILD DEVELOPMENT	<i>Parents gain awareness and access to necessary knowledge to foster positive child development.</i>	Understand	I try to make rules that take my child's individual needs into consideration.
APPROPRIATE GUIDANCE	<i>Parents can provide developmentally appropriate discipline, supervision, and foster child's responsibility for self.</i>	Guide	I do not have as much patience with my child(ren) as I should. How often do you yell at your child? I try to explain the reasons for the rules I make.
SOCIAL & EMOTIONAL WELL BEING	<i>Parents are able to create a warm home environment and treat children with respect.</i>	Nurture	How many times in the past week have you shown your child physical affection (kiss, hug, stroke hair, etc.)? How many times in the past week have you told another adult (spouse, friend, co-worker, visitor, relative) something positive about your child?
EDUCATION	<i>Parents are able to foster early literacy, school readiness, critical thinking skills and a love of learning for their children.</i>	Motivate	How often do you read to your child or does your child read for enjoyment? Think for a moment about a typical weekday for your family. How much time—either in your home or elsewhere—would you say your child spends watching television on a typical weekday?

COMMUNITY CONNECTIONS	<i>Parents create a support system for themselves and their children.</i>	Advocate	Sometimes a person needs the support of people around them. When you need someone to listen to your problems when you're feeling low, are there...
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Next, survey questions were identified to align with each of the domains (Roucan-Kane, 2008). In order to compare CCE participants with national samples of parents and to ensure that survey items would be valid and reliable, items were selected from national surveys, including The Three Cities Study (Angel, Burton, Chase-Lansdale, Cherlin, & Mofitt, 2009) and the National Longitudinal Survey of Youth (NLSY; Bureau of Labor Statistics, 2011).

Ten questions (listed above) capturing important parenting behavior, and that encompass the variety of parenting programs offered across the CCE system were selected as survey items to be used in statewide data collection tool.

Development of an Online Evaluation Tool

Next, the Cornell team decided on a Web-based system for gathering and entering statewide survey data collected from participants of parenting programs that are comprised of at least 6 hours of content delivery. The advantages of using an online reporting system for evaluating multi-site parent education programs have been demonstrated by Peters, Rennekamp, and Bowman (2008). The current article extends this work by describing the method used for developing the survey questions, matching the survey questions to national data, the methods used for analyzing the data, and results for data entered between March 2009 and July 2010.

Participants in CCE qualifying programs complete both a pre- and post- survey. The survey includes 10 questions about parenting attitudes, behaviors, and knowledge designed to capture some of what is taught in the various parenting classes. The pre/post study design allows researchers to see if attitudes, behaviors, and knowledge change during the course of the workshop; however, this type of research design does not allow one to determine whether taking part in a parent education class *caused* a change in knowledge, attitude, or behaviors.

All counties in New York State delivering parenting education programs that meet the criteria for inclusion in the online Statewide Data Collection System follow a specific *Protocol for Use* that outlines specific instructions about human participants, participant identification, steps for collecting data during the first and last sessions, as well as a step-by-step guide for entering data in the system.

The online system is accessed via an internal Cornell University server and requires log-ins, passwords, and SSL protections. Parent educators across the state are responsible for entering pre- and post-test data into the online system. Educators log in with an ID and password, and enter the data gathered from their programs with an easy-to-use, point-and-click method. Once the data is entered and submitted, educators have the ability to review their past entries and to stop and start entering data at any time.

Cornell researchers can access and analyze data entered in the online system and use this data to generate reports describing the pre/post-test results by educator, program, county, and statewide. The reports allow researchers to document types of programs carried out across the state and characteristics of families taking part in those programs and to assess the importance of parent education to maintaining healthy families in New York. Extension educators use these reports to present findings to their supporters, funders, and local boards (Stup, 2003).

After undergoing an extensive pilot-testing phase, parent educators began entering data using the Web-based tool in March 2009. Results for data entered between March 2009 and July 2010 for 340 participants who completed both a pre- and a post-test survey show significant improvements from the pre- to the post-test on eight out of the 10 survey items (Korjenvitch,

Dunifon, & Kopko, 2010).

Conclusion

The Statewide Data Collection System for Parent Education Programs is an effective, user-friendly online tool for entering parenting education program data across New York State. Developed in consultation with researchers and parent educators, the system allows for examining data at various levels, including county, program, and state. Outcomes can be utilized for a variety of purposes including program evaluation, impact, and county and statewide-level reporting. This online data collection system may serve as a model for states seeking to gather data on Extension programming statewide.

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