Early childhood workforce studies can be a valuable planning tool for states, communities and early childhood organizations to use as they develop policies and strategies to improve the quality of early care and education settings and learning outcomes for young children. Community agencies and state funders often undertake these studies without understanding their complexity, cost and the necessary scope of data collection. The early childhood workforce encompasses a wide and varied field of professionals, including:

- Leaders and staff who work directly with young children in center-, school-, and home-based settings, as administrators, teaching staff or family child care educators; and
- Professionals who support the field by providing technical assistance and professional development.

This factsheet will provide guidance on conducting workforce studies that describe center-based administrators and teaching staff. Below is a list of questions that should be considered before conducting or funding an early childhood workforce study.

### Who is being surveyed?

Funding adequacy may be a factor in deciding who can be effectively surveyed. Administrators can provide valuable information about their own education, demographics, salaries, longevity, professional development, and career goals. They also can provide the policy and organizational context by sharing information on center auspice, accreditation, QRIS or licensing status or center turnover rate or their own center’s policies, such as education requirements for teaching staff, starting and highest wages, benefits offered, etc. In large corporate settings, even some of these questions might be difficult for site administrators.

Without surveying teaching staff directly, it is difficult to obtain an accurate picture of their economic status, demographics, achieved and desired education, use of services, job satisfaction, family situation, longevity or career intentions. However, identifying teaching staff directly can be challenging since most states do not maintain a statewide list of teaching staff from which to draw a sample. Some states do maintain a statewide list of centers through licensing that sometimes will have data that can be used to estimate the number of teaching staff. This means that researchers are required to rely upon administrators to either distribute surveys to teaching staff or provide a roster of personnel that can be used by researchers to contact them directly. Each of these methods has its drawbacks and can lead to sampling biases, because not every director that researchers contact can be expected to provide timely and reliable information about their teaching staff needed in lieu of surveying them directly.

### What proportion of the workforce and/or programs will be surveyed?

In smaller states or communities, 100% of centers, including both the administrative and teaching staff, may be able to be surveyed. But in most cases, researchers choose to do a sample or proportion of centers. It is really important to understand how the sample will be drawn. Will the sample be large enough to ensure that the respondents can fairly represent the workforce? Will it be done as a simple random sample? Or will it be in done as a stratified random sample? What key variables will be used on which to stratify the sample—geography, types of programs, size of programs, etc.?

### Will the questions be constructed in a way that gets the answers you need?

First, given the wide variability of formal education within the workforce, it is extremely important to develop questions using very simple vocabulary, sentence construction and instructions. Second, it is important to pretest the validity and reliability of the questions. Often, it is easier to seek permission to use questions from studies where they have been used multiple times and are considered reliable than to develop new ones.

### What methods will be used for data collection?

With the ability to do online surveys, many researchers often think this is the easiest and fastest method to use. However, with the early childhood workforce, particularly teaching staff and family child care educators, it is important to determine if the surveyed population has access to a computer and the internet and is comfortable with this technology. Paper and pencil surveys are a little more expensive to do, both in terms of printing and data entry costs. However, it may be critical to getting the needed responses. Another approach is the use of phone surveys. Again, this may be more costly and also ineffective in finding the times that work for prospective respondents to do the survey. To ensure a high response rate, a combination of methods may prove best. Typically workforce surveys are too long to get good responses through cell phones. And sometimes, particularly on surveys of administrators, responses will require that the administrator look up the requested information within the center’s policies or records.
**What is a sufficient response rate?**

This is a really important question, particularly when using a sample of programs. For example, North Carolina uses samples in conducting statewide studies, but always achieves at least a 75% response rate (http://www.childcareservices.org/2015-north-carolina-child-care-workforce-study/). Many studies have rates much lower than that. Having a low response rate may bias the data in a way that disguises the true picture. A low response rate may occur because some targeted teaching staff may not have actually received the surveys, ignored the survey or found it too long to answer. Excluding these “hard to reach” and “too busy to answer” groups can bias responses in a different way. Early responders to the study may be better educated than late responders. If there is reporting data from a survey with a low response rate, this might make the workforce appear better educated than it really is. There are some statistical techniques that can be used to ameliorate this, but many studies just take the data on face value, without applying some of these techniques to ensure representativeness. In addition, certain questions such as family income may have higher non-response rates. A trained researcher can determine if certain item-response rates are so low as to affect the validity of the data.

**Did the individuals and programs responding fairly reflect the individuals/programs in the state?**

This question speaks to the representativeness of respondents in the study. To test for representativeness, the study researcher must determine the key variables against which representativeness will be measured. For example, if geography is a measure, the researcher will want to look at the data on the numbers of early care and education programs and children in those programs in rural and urban settings in a state. For example, imagine that rural communities have 35% of all the early childhood programs, but only 28% of child population in child care enrolled in those programs. In this case, it would be important to have a response from program administrators in rural settings that approximates 35% of the cases. Because children mirror staff ratios, look for close to 28% of responding teaching staff from rural areas. Other important variables might be license status and type, QRIS level, national accreditation, program auspice, size and tax status. The key to being able to assess representativeness of responses is linked to availability of these data system-wide so that survey responses can be compared to information for the entire population of programs or teachers.

**Were the data interpreted and explained to help the reader understand key relationships in workforce development, support and retention compared to program location, type, size, quality and sponsorship?**

Workforce studies can provide great information on the workforce at large, using simple statistical measures such as means and medians. But study researches can also disaggregate the data to look at means and medians of subpopulations. Here are some examples: a snapshot of the median wage of all teaching staff by qualifications; a comparison of the median wages of teaching staff who work with babies and toddlers vs. the median wages of teaching staff who work with three and four year olds. Other comparisons could include key variables against major indicators like program size, auspice, tax status and staff credentials by roll, as well as geography and levels of quality. And the significance of these relationships could be measured. For example, a finding might be that rural teaching staff are paid significantly less than urban teaching staff. On the other hand, when the cost of living in rural vs. urban settings in a state is taken into consideration, that significance could disappear. It is always best to plan these types of comparisons well before the survey begins to assure that the right questions are being asked. These types of analyses require personnel trained in research and statistical analysis.

Getting an accurate picture of the early childhood workforce can make a difference in making the case for workforce investment, and these data can also track, at the population level, progress over time to assess whether the investments are paying off. Because these studies are so important, it is critical that the agencies doing such studies have the knowledge, skills and research expertise they need to ensure that the studies are done well.

**Workforce Study Examples**

- Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education (NSECE)  

- Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study  

- Working in Early Care and Education in North Carolina: 2015 Workforce Study  