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SOCIAL POLICY RESEARCH ASSOCIATES

## **Models of Sustainability and Comprehensiveness in Child-Care Apprenticeships**

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## **INTRODUCTORY NOTE ON THE MODELS**

The models of sustainability and comprehensiveness are excerpted from the introduction to *Estimating Sustainability and Comprehensiveness in the Quality Child-Care Initiative*, a report prepared by Social Policy Research Associates (SPR) for the Office of Apprenticeship, Training, Employer and Labor Services of the Employment and Training Administration, U.S. Department of Labor (DOL). The report uses the models to assess the prospects for developing sustainable, comprehensive child-care apprenticeship systems in 21 states that received Quality Child-Care Initiative grants in the first two grant rounds (2000 and 2001).

The report was part of an evaluation of DOL's Quality Child-Care Initiative, which was an effort to address the low wages and low skills of the child-care workforce. A final report was submitted to DOL on April 30, 2003, and we expect that DOL will make it available shortly. This initiative provided grant funds to 32 states since 2000 to establish sustainable, comprehensive child-care apprenticeship programs. The initiative sought to increase wages and skills simultaneously by applying the well-established apprenticeship method.

SPR also prepared two other reports in connection with this evaluation: 1) a process evaluation of the grants made to 10 western states in the first two grant rounds, and 2) a descriptive statistical picture of the characteristics of 19 grantees (from all rounds) that reported detailed data on their apprentices, journey workers, and sponsors as of November 2002.

## **BACKGROUND OF OUR FIRM**

A woman-owned small business founded in 1991, **Social Policy Research Associates** offers nationally recognized expertise in policy research and program evaluation relating to employment assistance, job training, education, youth development, and comprehensive social services. Our clients include federal, state, and local governments and foundations. For further information about these models or SPR services, please contact Jeff Salzman at 510-763-1499, ext. 629 or [jeff\\_salzman@spra.com](mailto:jeff_salzman@spra.com) or visit our web site at [www.spra.com](http://www.spra.com).

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## SUSTAINABILITY AND COMPREHENSIVENESS MODELS

### ELEMENTS OF A SUSTAINABLE SYSTEM

**Definition of Sustainability.** For this report, we define sustainability as the sum of a number of the basic organizational and financial elements—each of which contains one or more specific factors—without which the grantee and its partners could not maintain a functional program. Thus, we are trying to infer from the evidence gathered whether the states have established durable infrastructure relationships and processes that will carry forward and sustain the program in the future.

It is also important to distinguish our estimates of sustainability from other types of program evaluation. Thus, we do not measure program quality. For example, we do not judge whether the quality of related instruction is good, the data are rich, or the support from elected officials is strong. Rather we ask, at some minimal level, whether the related instruction is connected to other training, is there any usable data at all or if there is any evidence of a modest gesture of support from elected officials. Nor do we draw any conclusions about the effectiveness of any of the factors. Thus, whether a connection to the professional development initiative is strong or weak is not consequential to the sustainability analysis. And finally, our analysis makes no claims about the relative merits of the various programs, whether they have a net positive impact, provide training at reasonable cost, or meet some other performance measurement standard.

The elements and factors in the model are quite selective. We include those elements of sustainability and comprehensiveness on which there is substantial and interesting variation among the states. Thus, we exclude the following important elements like standards (all states have them and there is little interest so far in modifications)<sup>1</sup> and on-the-job-training (nearly all states have a working version of 4000 hours over 2 years that meets the federal requirement). We also exclude another critical element of sustainability, the ability to deliver measurable benefits to key stakeholders because the design for this process evaluation does not measure program impact and there was limited

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<sup>1</sup> The only significant challenge in the standards area is the development of standards suitable for family providers. Several states have designed such standards and others are considering them. However, this is a very unique circumstance because of the shift away from the conventional employer-employee relationship and should not be an element of sustainability. In any event the real decision is one of comprehensiveness, which we discuss below.

contact with participants and no contact with the final customers, parents and children. The sustainability model has the following principal elements:

- **Creating the administrative capacity.** States need an administrative capacity to deliver the program components with the following components:
  - Staff support.
  - Data.
  - Evaluation.
- **Securing leadership and governance.** States need the support of political leaders and stakeholders in child care with two major components.
  - Support from elected and appointed officials.
  - Advisory committee.
- **Connections to professional development.** Without connections to the other child-care workforce quality initiatives, a child-care apprenticeship risks isolation and may not be sustainable.
- **Providing training.** States need training that connects with other training and education across the state. Related instruction is the key variable.
  - Related instruction
- **Ensuring financial capacity.** States need a financial plan to continue the QCCI program beyond the grant period.

#### **Administrative Capacity**

States must design the administrative capacity of their apprenticeship program in a way that it can be sustained beyond the grant period to support the following administrative functions: staff support, data for tracking apprentices' progress through the program, and evaluation for assessing internal operations or program results.

**Staff Support.** In order to market the program, recruit sponsor sites and apprentices, and monitor the program, states need an individual who functions as a project manager or coordinator. Since the programs are still quite small in nearly all the states, these functions may be divided among a larger group of regular staff with broader responsibilities, as is the case in some states where the apprenticeship agency manages the program. Alternatively, where the program is housed in a child-care agency, the coordinator typically works part-time on the apprenticeship and part-time on other child-care programs.

**Staff Support Factor Considered:** Is there a coordinator or available staff to provide the administrative and management functions required by the program.

**Data.** An integral part of administering any training program is collecting data on worker characteristics (for example, age, sex, ethnicity), pre-program experience (work experience, educational level, wages), program progress (hours worked, credits and credentials obtained, wage progression) and outcomes (post-program wages, credentials, retention). Absent some of this information, it is impossible to understand the program and outcomes achieved by workers and employers. Federal officials currently collect only minimal amounts of data on participant characteristics and progress. Thus, states need an alternative system in order to administer their program properly. In some states this is accomplished through a registry developed for all child-care workers under a professional development initiative. In other cases, grantees created their own database with varying amounts of information on characteristics, program progress, and outcomes.

**Data Factor Considered:** Regardless of the approach, sustainability requires a capacity to collect at least some data on characteristics, pre-program experience, program progress, and outcomes. Such data are the basic input into any other administrative function, especially evaluation.

**Evaluation.** Program implementation typically requires some systematic analysis of the training process or the outcomes. An informal internal analysis could range from monitoring the workers and sponsors in the field to desk reviews of reports from local trainers. Other sites may survey participants for both basic data and for conclusions about the effectiveness of the training and its impact on the desired goal of improving child-care quality. Some programs may seek an external organization to provide a formal evaluation. This could range from a process analysis of how the training is being implemented to a quasi-experimental impact analysis.

**Evaluation Factor Considered:** Regardless of approach, a sustainable program will use some process to manage itself and gauge its effectiveness.

### **Governance**

Unlike many apprenticeships in which employers either control the shape of their own training quite directly or create a joint training program governed by an employer-union board, child-care apprenticeships rely heavily on collaborative strategies with a host of stakeholders and public officials. Thus, sustainability in governance has two

general dimensions, reflecting the relative complexity of the child-care apprenticeship. First, elected officials should provide important endorsements for child-care quality in general and for the apprenticeship in particular, while the appointees and career staff who manage the state child-care and education agencies provide critical input of funds and collaboration. Second, stakeholders who represent important advocacy groups, resource and referral agencies, and practitioners should be key members of the advisory committee that helps to shape the program.

**Support from Elected and Appointed Officials.** Child-care quality in general and workforce issues in particular, reside in a competitive political and economic environment. Politically, the shape of an overall child welfare program, including child-care as a component, is a public policy area that is subject to extensive public debate. In many states, elected and appointed officials in each of the states expressed broad support for general quality improvements in child welfare, and specifically for child care. However, several of those states experienced considerable difficulty in translating that support into concrete funding commitments for child care in general, and apprenticeship in particular. We observed that child-care quality effectively competes for general public and political attention and funding with a host of programs to benefit children. For example, in recent years, efforts to strengthen K-12 education have taken center stage in many states, while child protection issues can make unpleasant headlines that will concentrate attention and resources away from child-care quality. Even within the general scope of child-care workforce quality, stakeholders can pursue other initiatives, stakeholders such as tiered reimbursement or TEACH, that attack the same problem and may compete for the attention of public officials and other stakeholders.

Economically, the planning for the apprenticeship programs largely occurred during an economic expansion, with the grant awards announced in 1999 and 2000, although the actual awards were not completed until 2000 and 2001. Federal Child Care and Development Fund allocations, state matching funds, and other state appropriations were relatively plentiful and expected to increase. But when the grantees were seeking to sustain their programs, the prospects for the increases in the federal grants had declined and nearly all the states were in a dramatically worse economic position than they were when the grants were made, facing severe budget deficits and the necessity of cutting programs rather than expanding them.

Given this complicated, politicized environment, we posit the importance of some form of support from outside the program itself. If, from both a political and economic

standpoint, there are important choices to be made, support from elected officials may be essential in setting the broad outline of public policy. Support from appointed officials or key career administrators may be equally critical in giving specific shape to those policies and establishing funding priorities. Practitioners and other stakeholders may also play vitally influential roles.

**Governance Factor Considered:** The governance in a sustainable program will reflect support from elected, appointed or administrative officials through public expressions, financing decisions, or programmatic connections.

**Advisory Committee.** Advisory committees, with representation from key stakeholders and diverse communities, are important to ensure that an apprenticeship program meets industry and worker needs and reflects the best practices in the industry. States anticipate that maintaining an active advisory committee composed of key stakeholders will also shore up ongoing political and policy support for the apprenticeship program from elected and appointed officials. The advisory committee in a sustainable environment will revise standards where necessary and improve training curricula

**Advisory Committee Factor Considered:** There should be an active, diverse advisory committee that is readily available to oversee or revise the program, as necessary.

### **Collaboration with the Professional Development Initiative**

Most states have completed or are developing a professional development initiative to promote quality throughout the child-care workforce. These initiatives tie together many of the quality efforts and generally have a degree of credibility among practitioners in the field. These initiatives have developed core competencies and systematically link credentials with career advancement through the career lattice. They often include other compensation programs such as Teacher Education and Compensation Helps (TEACH) or recommended wage levels. Equally important, collaboration may be the mechanism for the child-care apprenticeship to obtain other critical elements of sustainability, such as financing, data systems, or evaluation. These connections are so critical that we consider a strong connection to the initiative a necessary—although not sufficient—condition for the viability of the apprenticeship.

**Professional Development Collaboration Factors Considered:** A sustainable apprenticeship program must have some systematic link to a state professional development initiative. And if that initiative has created a career lattice, the apprenticeship must have a place on that lattice.

## **Related Instruction**

Apprenticeship is a combination of related instruction and on-the-job-training, and a sustainable program should have both components well developed. Many of the QCCI states, however, placed greater emphasis on the development of their related instruction than on the on-the-job-training (excluded from the model because all states had at least minimally sustainable components and variation was modest).<sup>2</sup> We found three important factors: core competencies, credit-bearing courses, and articulation.

The child-care industry has made substantial efforts in recent years to establish clear skill standards for the workforce in the form of core competencies developed by the National Association for the Education of Young Children. Most of the states have adapted these competencies and integrated them into a variety of credentials and levels of achievement. Nearly all states have built their curricula around the state's core competencies and we have omitted discussion of this issue in the state-by-state analysis.

A sustainable program also needs to be cognizant of the educational foundation of the child-care industry, which places great importance on academic credentials. Thus, it is important for the related instruction in the apprenticeship to provide credit to facilitate the pursuit of associate and higher degrees.

Finally, the child-care system has gone to great lengths in most states to rationalize the training system and assure that there are connections between all forms of training, generally known as articulation. This process enables a child-care worker to pursue a Child Development Associate credential, an apprenticeship, or associate and higher degrees without duplicating courses or having to take extra courses in similar areas. In a few cases, there are also articulation agreements with secondary education.

The related instruction factors, because they are so closely intertwined with the state professional development initiative, also appear to be necessary conditions for a viable program.

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<sup>2</sup> On-the-job training illustrates the conceptual distinction between quality and sustainability. We observed in the detailed study of the western states that there were limited opportunities for direct supervision and there was far greater emphasis placed on learning the particular procedures and knowledge required by each sponsor. But these were issues of quality that did not threaten the viability of the program.

**Related Instruction Factor Considered:** A sustainable program be linked with other training through articulation agreements, and carry college credit.

### **Financial Capacity**

Most respondents during the site visits indicated that the most important issue facing states is financially sustaining the QCCI project beyond the grant period. This is an acute problem for the child-care apprenticeship because—unlike most industries—child care lacks financial independence to raise its prices to pay for workforce-quality improvement and thus must rely heavily on external funding. We observed three types of costs in the child-care apprenticeship: administrative (such as the coordinator’s costs), participant-related (related instruction, stipends), and employer-related (wage progression). Of these three broad cost types, participating sponsors are meeting the cost of the wage progression in nearly all states. Thus, in order to sustain the program, states must be able to pay for the other two types of costs. It is also important to note that costs across states vary considerably because of their program designs, but the common denominator for sustainability lies on the revenue side to pay for the costs of that program design.<sup>3</sup>

The predominant source of funds to meet these costs is the Child Care and Development Fund quality account, which provides potentially flexible funding for infrastructure costs and participant-related costs. Other important sources include TEACH scholarships or other professional development initiatives and Pell grants, mostly to cover the costs of related instruction. In-kind services are also significant.

Financial capacity is also a critical condition because it lies under most of the other elements in sustainability and comprehensiveness. It is simple and well understood by all. Programs lacking the money to pay for their costs are certain to fail.

**Financial Capacity Factors Considered.** A sustainable program must have the ability to pay for its own administrative costs and the participant-related costs, especially related instruction.

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<sup>3</sup>See Chapter IV of *Evaluating the Quality Child-Care Initiative: Child-Care Worker Apprenticeship in the Western States*, for a full discussion of the financial model.

## ELEMENTS OF A COMPREHENSIVE SYSTEM

**Definition of Comprehensiveness.** The QCCI grants required the states to establish statewide systems. We believe that the term statewide connotes a level of activity that may be premature at this stage of the evolution of the child-care apprenticeships. If the term were literally applied, all states would almost certainly fail any reasonable test. It is simply unrealistic, given the limited capacity of child-care employers or child-care block grant or other sources to finance the program, to expect that the program could have spread any faster. In this regard, it is instructive to note that West Virginia, which was the model for QCCI, has served only 641 apprentices in 13 years of operation. So, instead of manipulating the term “statewide” to reflect these realities, we adopt a more feasible term “comprehensiveness” to describe how states are broadening and deepening their initial efforts.

Comprehensiveness embraces several elements that reflect the breadth and depth of the program, such as total numbers served, the types of workers and sponsors recruited, the breadth of distribution, both spatially and population-wise, and the capacity to increase the other elements. As with sustainability, there are one or more key factors in each element against which we estimate state progress.

We try to be especially wary of false precision in the application of this definition because these factors should not establish a precise threshold that can be used to measure whether or not a state has satisfied each factor. Instead, it provides a flexible method to estimate roughly the progress that the states are making from a zero point to some desirable outcome determined by the states themselves. This flexibility is necessary because the states really had different intentions in taking these grants. A few states invested extensively in the apprenticeship as a principal method for training entry-level workers. But other states had considerably less ambitious plans, with some states viewing the apprenticeship as only one method among several for training staff.

Comprehensive System should include the following elements:

- **Number of apprentices.** The total number of apprentices.
- **Wide distribution.** The hallmark of a comprehensive system is that it must be in many areas of a state or available to a large segment of the population.
- **Including all age domains.** A comprehensive system should offer training to workers who take care of all age groups of children.
- **Serving all types of providers.** Child care has many types of providers, so states need to be able to develop a program that addresses multiple needs.

- **Diverse populations and social groups.** State programs must recognize the diversity of the child-care workforce and the diverse communities in which they work.
- **Capacity to expand the system.** Since all states are starting from a zero point and resources are limited in the immediate term, there should be a capacity to expand the program in response to demand.

Our elements and factors of comprehensiveness, unlike the inherently predictive character of sustainability elements, are estimates of the current state of affairs. The only exception is the “capacity to expand.”

### **Wide Distribution to Geographic Locations and Populations**

**Total Number of Apprentices.** Each state reported data to SPR for the descriptive statistics report, which we present here. To help interpret these numbers, we also provide an index of the number of apprentices per thousand child-care workers in the state (data from Occupational Employment Statistics from the Bureau of Labor Statistics). This index roughly estimates the depth of investment that the state is making in the program and adjusts it for the size of the state. The average index (sum of state indices divided by 21 states) for all states is 21.

For most states that are still operating under the grant or have only recently completed the grant, the factors of total numbers and geographic location are affected by the size of the grant (this is constant for most states), program design, and costs. Nevertheless, the results from our process evaluation of the western states suggest that the total number of apprentices is one of the best available indicators of the depth of interest and investment in the program.

**Total Number of Apprentices, Factors Considered:** A comprehensive apprenticeship program should at least maintain the number of apprentices served under the grant and yield an index of at least 10 (per 1000 child care workers).

**Geographic Locations and Population.** The program should be available widely across the state’s geography and to its main population centers. But this factor must be applied very flexibly, and in the context of the state’s goals. Population and state size must be important considerations. Most of the states received the same size grant, which would obviously go further in meeting the requirements for New Hampshire than it would in California. Further, population in some states is highly concentrated (for example, Colorado) and, therefore, establishing apprenticeships in those population areas

might reasonably be construed as wide availability. At the same time, some consideration should be given to states that expend scarce resources serving isolated rural and low-income communities.

At the end of each state write-up is a map showing the distribution of apprentices by the county in which they work.

**Wide Geographic Location Factor Considered:** A comprehensive apprenticeship program should be delivered fairly widely, according to a standard that makes sense in the context of the state's plan for the apprenticeship and the available resources.

### **Age Domains**

Creating a program that serves child-care workers that work with infant/toddler, pre-school/Head Start, and school-age/after school children is the most comprehensive approach. All states are generally covering all age domains, and we deal only with any exceptions in the state write-ups under the element "Types of Providers."

### **Types of Providers**

Providing an apprenticeship program that is inclusive of all providers is the most thorough approach. There are, however, two common exclusions. The first type is the sponsor who employs part-time workers at a school-age-only or Head Start center. A number of states have excluded part-time workers because of a concern that their longer duration in the program would contribute to a higher drop-out rate.

The second exclusion is family providers. We consider a system to be comprehensive despite excluding family providers because family providers lack an employer-employee relationship and their inclusion poses several technical difficulties in applying the standards. Most of the states decided to create center-based systems first and leave the difficult technical issues of the proper standards and the higher costs associated with including family providers to future consideration. However, the two states that focused on family providers are analyzed on the basis of their efforts to recruit family providers.

There was no evidence reported of any exclusion because of the provider's organizational type, such as corporate chains.

**Types of Provider Factor Considered:** Comprehensive System should work with all types of providers, including Head Start. However, including family providers should increase comprehensiveness, but the absence of family providers does not indicate a lack of comprehensiveness.

#### **Wide Availability to Diverse Ethnic and Cultural Groups**

Recruiting diverse participants is an explicit requirement for all the grants. Further, given the diverse cultural needs of children and the increasingly diverse background of the child-care workforce, diversity should be incorporated into teaching methods and curricula so that the program can be rich and inviting to all.

**Diverse Ethnic and Cultural Group Factor Considered:** A comprehensive system will ensure that it is registering a diverse group of apprentices that resembles the diversity of its child-care workforce. For the purposes of this analysis we use the diversity of the state's population as a rough proxy for the diversity of its child-care workforce.

#### **Capacity to Expand**

Even though programs may have limited geographic reach at the outset, a comprehensive system should have the capacity to offer the program throughout the state, when requested.

**Capacity Factor Considered:** States should have the capacity to offer the apprenticeship anywhere in the state where a sufficient number of employer sponsors request establishment of the program.

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