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SOCIAL POLICY RESEARCH ASSOCIATES

Evaluating the Quality Child-Care Initiative: Child-Care Worker Apprenticeships in the Western States

Final Report

April 30, 2003

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DOL Contract No. G-7713-9-00-87-30

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EXECUTIVE SUMMARY

INTRODUCTION

Dramatic changes in the composition of the labor force since World War II have substantially increased the number of women in the labor force, increasing the demand for child care. Yet, despite the evident demand and the wide recognition of the value of child care to child development, it has been very difficult for the child-care industry to keep pace with demand and provide high-quality care because of low wage levels. According to the Bureau of Labor Statistics, the average hourly wage in 2001 for all child-care workers was only \$8.91. This compares to \$17.09 for a kindergarten and pre-kindergarten teacher. Fringe benefits such as health insurance are available to child-care workers only infrequently. Family care providers do far worse, earning an estimated \$3.84 per hour for an average 55-hour week.¹

Moreover, low levels of compensation almost certainly contribute to low child-care worker retention rates, another factor that early childhood education experts believe is responsible for low-quality care. Low retention rates, in turn, prevent workers from remaining in the industry long enough to acquire the formal and informal skills that are necessary to provide high-quality child care. Furthermore, both employers and workers become reluctant to invest in formal education or training to redress skill deficits when job tenure is so short.

In response to this evident need to improve the skills, wages, and retention of workers, and thus improve the quality of care and education, the U.S. Department of Labor, Office of Apprenticeship, Training, Employer, and Labor Services (DOL), awarded 18-month grants to 32 states to create statewide apprenticeship systems for child-care workers under its Quality Child Care Initiative (QCCI). The initiative also included technical assistance from the Wheelock College, Institute for Leadership and Career Initiatives and an evaluation.

The initiative helps states create a registered apprenticeship for child-care workers. Apprenticeship is a hybrid training method combining a minimum of 2000 hours of on-

¹ Bureau of Labor Statistics (BLS) from the National Compensation Survey for 2001. Family provider data from BLS, contained in Center for the Child Care Workforce, "Current Data on Child Care Salaries in the United States." March 2000.

the-job training under supervision from an experienced journey worker and 144 hours per year of related instruction, normally classroom training in a post-secondary school. Apprentices also must receive wage increases as they gain skill and experience. The apprenticeship method offers certain benefits to the child-care industry. First, it directly attacks low wages and low skills by establishing a wage progression as the apprentice moves to journey status. Second, there is a combination of practical and theoretical learning that is very appealing to child-care practitioners, some of whom may not have succeeded in traditional academic environments that separate theoretical and practical learning. Third, because most apprenticeships are built on recognized national standards, the efforts in the child-care industry to raise the level of professionalism through credentialing are based on uniform standards.

This report evaluates the process of apprenticeship-system development to date in 10 of those grantees in the western states of Alaska, California, Colorado, Iowa, Kansas, Montana, Nevada, Oklahoma, South Dakota, and Washington.² Site visits to gather information for the report occurred between June 2000 and October 2002.

PLANNING THE APPRENTICESHIP

Political, Organizational, and Professional Environment

All of the QCCI grantees had a political environment—including elected and appointed officials and practitioners and advocates—that supported reform in the child-care workforce. These political activities reflect a widespread public and political recognition that there are serious deficiencies in the child-care workforce and related problems with the overall quality of care. However, not every grantee was able to translate generalized stakeholder political support into concrete actions. Perhaps the most important factor was the change in the economic climate. QCCI planning and grant applications began during the good economic times of the late 1990s during a period of rising government revenue, but much of the substantive planning occurred when those revenues were drying up. Consequently, our respondents were a good deal more pessimistic about the prospects of active political and budgetary support for the initiative than they were in their grant applications.

The professional and organizational relationships generally endured the economic downturn better than the political ones. Organizational support from key stakeholders in

² DOL contracted with Research and Evaluation Associates to evaluate the other grantees.

the child-care industry for workforce professional development and—the QCCI in particular—was consistent across nearly all states. Eight of the grantees were the state child-care or Head Start agency (or a college that administered professional development services for the child care agency). These grantees had the obvious advantage of an immediate connection to the professional development initiative and potential financial and administrative resources that come from the Child Care and Development Fund and Head Start Collaboration. In the other two states, the grantee was the state apprenticeship agency, which had the advantage of familiarity with the apprenticeship method and the development of standards.

Several states, across both types of grantees contracted out project management while others retained this responsibility in-house. One state, Montana, developed a unique partnership in which the child-care agency was the grantee and responsible for staffing the project, but the administrative staff members were housed in the apprenticeship agency and received supervision and support from the apprenticeship administrator.

Partnerships with Apprenticeship and other Workforce Development Agencies

All the states developed some level of partnership between child care and apprenticeship. In general, the grantees stated that the support received from DOL apprenticeship officials was invaluable to the development of the program. Most important was a patient explanation of the apprenticeship process and the significance of the standards. We observed no differences in the extent or form of technical assistance provided in support of QCCI planning between states that had only a federal presence and states with both a federal program and a State Apprenticeship Council.

Regardless of organizational form of the apprenticeship agency, there were two distinct approaches used by the apprenticeship agencies. The first is an approach in which the apprenticeship staff indicated that they would be very flexible in accepting standards that the industry wanted. Under this more flexible approach, staff knew that the standards were imperfect, but they registered them anyway, stating that the goal was to get the apprenticeship started and that they could make adjustments as necessary after the program was up and running. The second is a more regulatory approach in which the apprenticeship staff emphasized consistency and sought a greater measure of conformity to other apprenticeship programs. Proponents of this approach thought compliance with apprenticeship's regulatory requirements were a good predictor of long-term program success.

There was relatively little interaction between the child-care apprenticeship planning the welfare and workforce development systems. Only a few states developed active planning partnerships with either component. There was only one instance in which a local workforce board actually approved the child-care apprenticeship an eligible training provider so that an apprentice might be able to obtain an Individual Training Account using Workforce Investment Act funds.

Influence of the Professional Development Initiative on QCCI Planning

Nearly all of the 10 grantees were already involved in a broad movement to elevate the professionalism and quality of care provided by the child-care workforce, generally known as a professional development initiative. These initiatives are comprehensive efforts to establish standards, to provide clear paths for career advancement and mobility, and to create programs that increase skills, wages, retention, and quality of care.

Professional development initiatives typically have the following components:

- **Core competencies** establish the knowledge, skills, and abilities that child-care workers should possess at different levels of the career lattice. The competencies formed the basis of the apprenticeship curricula in all the states, facilitating curriculum development, making credentials portable, and permitting assessment of student progress.
- **Career lattices** provide logical career paths for workers, both upward and laterally, based on achieving the core competencies required for each position. The apprenticeship occupied a level in the career lattice in most states.
- **Articulation** of training curricula allows child-care workers to take classes for one credential or degree and have that academic work recognized by institutions providing the next higher credential. It rationalizes training and reduces duplication. Notable were connections to the Child Development Associate credential and the associate degree.
- **Workforce-improvement programs** synthesize the other components of the professional development initiative and link workforce-quality improvements to improvements in quality of care. These are typically programs that link compensation to increases in skills, such as the apprenticeship or Teacher Education and Compensation Helps program (TEACH).

A connection to the professional development initiative was one of the key steps in making sure that the apprenticeship was relevant to ongoing work in the child-care industry. Although the western states were in varying stages of their professional development initiatives, the apprenticeship program found a niche in the initiative. This

pattern was similar in states where the initiative was well advanced to those where the professional development initiative was still emerging.

Developing Apprenticeship Standards

Apprenticeship standards provide the essential framework for all registered apprenticeship programs. They are normally incorporated into a formal agreement between the sponsor and the apprentice, laying out mutual expectations and the plan for training. Once the standards are registered with the apprenticeship system, participating employers have a path to improve the skills of their workers and apprentices have a career progression. Federal regulations require that all registered apprenticeships meet at least 22 standards, including a combination of related instruction and on-the-job-training and a progressively increasing schedule of wages. Nearly all the states developed common statewide standards to implement the general federal requirements. Only one state used an entirely local planning model, under which local apprenticeship committees would write their own standards. However, several states were planning to create local advisory committees that would be authorized to alter standards to fit local conditions.

While the standards development and other planning was lengthy and difficult in a few states, several others were able to create their standards in as less time, with one state taking less than two months.

Of all the standards, the wage issue was perhaps the most challenging issue because it directly addressed the very reason for QCCI. Establishing a wage progression was relatively uncontroversial. But far more troubling to project leaders was a decision on establishing a minimum-starting wage. Several states debated whether to set a minimum that would raise the wage levels of many participants, consistent with QCCI's overall goal of increasing wages of child-care workers. However, only one state set a minimum that excluded the lowest-paying centers. One other state used grant funds to subsidize the wage progression to ensure that participating low-wage employers would at least reach the market average. The other states left their minimum wages at the low end of the market or even, in one case, at the federal minimum wage. These states argued that to exclude the lowest-paid workers would leave out those who need training and the wage progression the most. Thus, the experience of these states in developing wage standards highlights the difficulty that the industry faces in increasing wages to levels that will solve the industry's workforce problems. For the most part, apprenticeship planners left actual wage levels to the ongoing operation of the child-care labor market. In states that did not raise wage levels in their standards development process, employers will

explicitly set the wage levels and progressions in their individual apprenticeship agreements. Moreover, even in some of the states that established minimum wage levels, the exceptions for low wage areas or individual employers effectively left most existing low-wage levels intact.

The debate about minimum wage levels also reflects a broader debate over the role of quality standards within the industry. Should quality-improvement programs, such as the apprenticeship, be offered immediately to the weakest child-care centers? Or, should these programs avoid diluting standards and possibly diminishing the value of the apprenticeship program by setting high standards and likely excluding weak centers? There were also several implementation issues that raise these very questions about how to target the benefits of an apprenticeship program among existing centers.

IMPLEMENTING THE APPRENTICESHIP

The western states implemented their apprenticeship designs in several different ways and in different types of sites. States used either a pilot or statewide approach and also differed on the extent to which they relied on centralized administration or local networks. Exhibit ES-1 summarizes how each state implemented the grant.

Exhibit ES-1 Implementation Sites

State	Implementation Approach	Sites
Alaska	Pilot Centralized with local network	Anchorage, Juneau, and Fairbanks, comprising the majority of the state's population
California	Pilot	Nine counties, covering northern and southern California [no implementation actually has begun].
Colorado	Pilot Centralized with local network	Jefferson, Gilpin, and Clear Creek Counties in the Denver metropolitan area
Iowa	Pilot Local network	Davenport (medium size city) Waterloo (medium size city) Northwest Region (small, rural communities)
Kansas	Pilot Centralized with local network	Butler County (Wichita metropolitan area) for initial implementation, then expand to areas where demand exists

State	Implementation Approach	Sites
Montana	Statewide Centralized	All areas of the state are included; rural areas are supported by a correspondence course
Nevada	Statewide Centralized	All areas of the state
Oklahoma	Pilot Centralized with local network	Ten counties in the central Oklahoma, including Oklahoma City
South Dakota	Statewide Centralized but with sponsor discretion	All areas of the state are included; rural areas supported through internet and video conferencing courses
Washington	Statewide Centralized	Areas served by eight community colleges in all regions of the state

The more centralized approaches, with greater reliance on staff than local networks, tended to recruit participants more quickly. However, it is still too early to tell whether more localized approaches will eventually catch up or surpass the centralized methods. Exhibit ES-2 shows the number of apprentices, journey workers, sponsors, and family providers served as of November 2002.

Exhibit ES-2
Number of Apprentices, Journey Workers, Sponsors by State

	Apprentices	Journey Workers	Center Sponsors	Family Providers
Alaska	33	21	21	
California	0	0	0	
Colorado	128	35	25	10
Iowa ³	40	22	10	9
Kansas	54	48	63	
Montana	116	105	44	
Nevada	136	91	92	
Oklahoma	84	56	19	
South Dakota	80	51	26	
Washington	186	81	51	
Total	857	510	351	19

³ Data from Iowa is from March 31, 2003.

Recruiting Sponsors, Apprentices, and Journey Workers

Setting participation goals. Early in the implementation of their projects, grantees typically made several key decisions that significantly shaped participation goals for their child-care apprenticeship systems in terms of:

- **Types of providers.** Should the project include a broad range of provider types, from individual family providers to group homes to centers, or a narrower range of providers? A related question was whether to serve unlicensed group and family providers in states that permitted such care.

All but two states focused exclusively on centers. One state included group homes. All providers, including family providers, had to be licensed.

- **Age domains.** Should the project include providers of care for some or all of the age domains: infant/toddler, pre-school/Head Start, and school-age/after-school?

All states served all age domains.

- **Types of workers.** Should part-time workers in Head Start and after-school care participate, even if the apprenticeship duration in those workplaces would have to increase?

All but two states included part-time Head Start workers. Workers in after-school programs were generally served if they worked full-time in centers that served other age domains.

- **Setting quality standards for sponsors.** Should the QCCI project establish minimum quality standards that centers must meet in order to participate in the apprenticeship program?

Five states used quality standards in recruiting. For example, one local area permitted only accredited centers to serve as sponsors, while two others recruited only sponsors with qualified journey workers. The other states took a neutral stance or explicitly targeted lower-quality providers.

- **Setting quality standards for journey workers.** Should the project require provisional journey workers to meet certain quality standards in order to supervise apprentices? Should journey workers themselves undergo mentor training (discussed in Chapter II)?

Most states set fairly high qualification standards for provisional journey workers. Most states used formal mentor training.

Recruiting sponsors (child-care employers). Overall, respondents reported that center directors responded favorably to their project's recruitment efforts. The most important factor that influenced center directors to participate was the expectation that the apprenticeship program would help professionalize the staff and increase staff retention.

Excellent recruiting strategies and tactics notwithstanding, some center directors turned down the opportunity to participate as sponsors. We found two general types of objections. First, a few center directors were concerned about potential loss of management rights because of the grievance procedure and affirmative action requirement. Second, there were center directors who were skeptical of the potential for change through apprenticeship because they felt that the wage progression was too small to solve their basic workforce problems.

Regardless of recruiting techniques, we found important differences in recruiting between the states using pilot and statewide implementation approaches. Pilot sites typically emphasized recruiting centers that were active in resource and referral or active in apprenticeship planning. This approach certainly facilitated initial recruitment. However, because there was such a strong emphasis on recruiting among project organizers themselves or those deeply committed to professional development, the pilot states did not get as much experience in marketing the program to more skeptical center directors, which is likely to be essential to developing a successful statewide program. In contrast, the grantees that began with a statewide implementation approach had to reach out to a broader group of initial sponsors, including those with whom they did not have immediate personal or professional relationships.

Recruiting apprentices. Most apprentices were recruited internally, from among the sponsor's workforce, rather than from external sources. Sponsors, however, varied considerably in the extent of managerial control they exercised in the selection of apprentices. Some center directors did not play an active role in screening or selecting individual participants relying on worker self-selection. In other centers, directors played a stronger role in selecting apprentices. Among those playing an active role, directors had different assumptions about which workers would be most valuable to have as apprentices. Some directors encouraged more experienced workers to sign up for the program, reasoning that once they completed their training, they would be more effective as journey workers in mentoring more junior employees, and would thus yield greater overall quality increases at the center. Other directors, by contrast, felt that offering the training to less skilled workers would yield the greatest overall increase in the quality of care within their centers.

Recruiting journey workers. In a mature apprenticeship system, the very operation of the program yields trained journey workers. But in an emerging program, sponsors and project managers need to pay careful attention to recruiting provisional

journey workers who have knowledge, experience, and an ability to train fellow workers. States used both experience and educational qualifications in their recruiting efforts. All the projects stated that provisional journey workers must have experience working in the child-care field, but not all projects specified the type and amount of experience and education. Three states felt that the available level of expertise was insufficient and used external journey workers—typically well trained consultants who visited the apprentices at their workplace. In addition, several grantees provided financial incentives to their journey workers. But the apprenticeship-agency grantees, reflecting their apprenticeship heritage, rejected the use of incentives.

Implementing On-the-Job Training and Related Instruction

Once the three principal participants in an apprenticeship—sponsors, apprentices, and journey workers—are in place, training can begin. An apprenticeship structure calls for two coordinated training components: on-the-job-training and related instruction. This combination permits trainees to learn both theoretical and practical aspects of the occupation. All but one of the states used a two-year program with 4000 hours of on-the-job-training and 288 hours of related classroom training.

On-the-job-training. On-the-job training required four major steps:

- Designating a cadre of journey workers who could supervise the training (discussed above).
- Training journey workers in the mentoring skills that they would need to work with apprentices. Nearly all states created journey-worker training specifically for the apprenticeship program or adapted mentoring programs from their professional development initiative.
- Designing a curriculum. States were only beginning to develop a curriculum for on-the-job-training at the time of the site visits. These curricula were fairly rudimentary
- Developing procedures to oversee the training and ensure its consistency across sites.

Overall, progress in this component was slow, largely because all these components had to be created “from scratch.” The curriculum was simplified and supervision was generally limited. There was greater emphasis on counting the requisite hours than on extensive experiential learning. The lack of detailed structure probably meant that there was a greater emphasis on the employer’s particular practices than on generic skills.

Related instruction. In contrast to their limited progress with on-the-job-training, the grantees made relatively rapid progress in developing the related instruction, which

typically could be adapted with only minor modifications from existing community college courses. There were two major factors that eased their way. First, many courses were already based on the core competencies developed through the professional development initiative. Second, the community colleges were already delivering courses for the Child Development Associate credential, which in all states comprised the curriculum for the first year of related instruction. Most of the states relied on their community college system to deliver the instruction so the courses articulated with the Child Development Associate credential and the associate's degree.

Coordinating related instruction and on-the-job-training. Although many respondents indicated that there was regular informal communication between educators, journey workers, and center directors on a broad range of quality activities in the resource and referral and Head Start Collaborative networks, very little progress had been made in coordinating the two components of the apprenticeship into a coherent training program at the time of the site visits. Only two states had developed specific coordinating mechanisms for the on-the-job-training and related instruction.

Building Diversity into the Initiative

The QCCI called for grantees to ensure that apprenticeship training is available to child-care workers in communities that are often bypassed by training and other quality improvements in the child-care field. The states responded in their grant applications with outreach and recruiting strategies. Although it does not appear that the grantees have been very active in implementing broad strategies to build diversity, the minority percentage of the enrolled child-care apprentices has generally mirrored or exceeded the minority proportion in the child-care workforce. Several states with substantial Native American populations on reservations were notable for actual outreach to tribal child-care workers and efforts to create curricula that were culturally sensitive to Native traditions.

Financing Local Apprenticeships

The states needed to develop a financial strategy on both costs and funding sources that was consistent with their overall approach to the initiative.

Costs. We classified costs into three categories:

- Administrative costs to support the program, including planning, supporting the advisory committee, recruiting, and oversight.
- Participant-related costs, including related instruction and incentive stipends.

- Employer costs, especially wage increases from the wage progression.

The balance between administration and participant-related costs tended to reflect the general approaches to apprenticeship implementation and the total of funds available, including both QCCI and external funds. But regardless of approach, participant-related costs in nearly all states were generally the largest component of the cost structure. Exhibit ES-3 displays the average annualized cost for each apprentice.

Exhibit ES-3
Average Annual Participant-Related Costs

	Total Cost Per Apprentice⁴
Alaska	\$2400 ⁵
California	No implementation
Colorado	\$2500
Iowa	\$4000
Kansas	\$700
Montana	\$3500 ⁶
Nevada	\$3600
Oklahoma	\$3000 (2000-hour program)
South Dakota	\$3500
Washington	\$3000 (3000-hour program)

The variation in participant-related costs is largely attributable to community college tuition rates and a decision about whether to pay stipends to apprentices and journey workers as incentives to participate.

Funding sources. Unlike most apprenticeships, where the employer-sponsors pay for all or most training costs, child-care employers have such limited resources that there

⁴ Total cost per apprentice is an estimate provided to illustrate the overall magnitude, rather than the precise amount, of spending. There are likely significant differences in how states estimated how their costs fit into this cost model. Entries are rounded to the nearest hundred.

⁵ Alaska's payment of the wage progression, which averaged \$1760 per apprentice per year, is not included because it is normally an employer-borne cost.

⁶ For Montana, \$3,500 reflects the inclusion of stipends for apprentices and sponsor centers. After the first year, these stipends were discontinued, resulting in an estimated \$1,200 per apprentice.

was no discussion of employer-paid training. Rather, the child-care apprenticeship projects relied heavily on their QCCI grants. The Child Care and Development Fund and TEACH scholarships provided the balance of support in most of the states. In the one state with no current access to these sources, the grantee was able to tap Head Start Collaboration and state-appropriated funds. Several states were tapping into Pell grants for some eligible apprentices. One state received a tentative Workforce Investment Act state reserve grant, but no local Individual Training Account funds were provided anywhere.

Employers generally funded their costs for the wage progression out of normal operations. Several project managers contended that employers could pay for the wage progression with money saved by reducing recruiting and internal-training costs.

BUILDING SUSTAINABLE, COMPREHENSIVE SYSTEMS

In assessing the child-care apprenticeship approaches developed by the demonstration states, SPR has considered the ability of the states to achieve two critical goals that DOL has set for the initiative:

- **Sustainability.** Do states have the organizational and financial capacity to carry out the basic functions of the apprenticeship after the QCCI grant ends?
- **Comprehensive reach.** Do states have the capacity to deliver the program widely to child-care employers and workers throughout the state?

Social Policy Research developed models of sustainability and comprehensiveness to address these questions. The western grantees made significant progress in implementing, sustainable comprehensive child-care apprenticeship systems. However, because most of the grantees are still at an early stage of implementation, much remains to be done. Thus, our findings and any conclusions on the major topics of statewide reach and sustainability must be considered tentative.

Sustainability

- **Administrative capacity and governance.** The prognosis on the infrastructure component of sustainability is very encouraging. Administrative capacity and governance functions that were established under the grant in most states are still in place and do not require significant overhaul to serve sustainable systems.
- **Standards.** All grantees developed apprenticeship standards. No major changes are anticipated

- **Training.** Related instruction is well established in all the states, with resource and referral and postsecondary schools generally offering high quality training. All grantees articulated the apprenticeship curricula with the requirements for the Child Development Associate credential and most provided credit courses that will build towards an associate degree. On-the-job-training is somewhat less well-established in some states where there is a rudimentary curriculum and relatively little active supervision. On the positive side, nearly all states have developed mentoring programs to improve journey worker skills.
- **Financial capacity.** This remains the most problematical area. Only five states have solid funding commitments, mostly from the Child Care Development and Fund beyond the grant period. One other state will use regular apprenticeship staff to implement the program and will rely on external funds to cover participant costs such as related instruction.
- **Professional development initiatives.** Nearly all grantees designed the apprenticeship program to be compatible with their state's professional development initiative. In most of these states, apprenticeship occupies an explicit step on career lattice.

Comprehensive Systems

- **Including a range of providers.** Most grantees serve only child-care centers. Group homes and family providers are reported as being served in only four states and represent a very small proportion of the apprentice group. Most states accepted Head Start, although a few states intentionally excluded these centers because Head Start's part-time employees would not meet the 2000-hour per year on-the-job training requirement.
- **Including all age domains.** All age domains are being served. However, the only school-age apprentices who are participating are employed in centers serving other age groups, so they usually work full-time.
- **Diversity.** All of the states appear to be successful in making sure that their apprentices reflect the composition of their child-care workforce, even though there was little in the way of specific diversity planning. The states were less successful in building minority leadership in the initiative. For example, only a few states had minority members on the advisory committee.
- **Statewide capacity.** States that began with a statewide approach have an advantage in attaining broader reach. And this statewide focus has clearly yielded a larger number of apprentices. Nevertheless, it will be important to find out whether these advantages persist over time once the pilot states are able to broaden their programs. Further, it seems clear that financial resources are the major constraint on capacity.

Overall, it seems clear that Nevada is the state that has made the most notable progress toward sustainability and creating a comprehensive system. It is establishing a strong administrative structure in all areas. Further, there is a capacity to maintain, and even increase, leadership skills. The program is also widely distributed. The two major urban areas were served from the outset, and the state is steadily increasing its rural reach. And finally, the Child Care and Development Fund is paying for the program at a higher rate than the QCCI grant, which should facilitate further progress.

Among the second round states, Montana has made significant progress in most facets of its program and does very well on most of the indicators of sustainability and comprehensiveness. It has the largest number of apprentices of any of the second group of grantees. On sustainability, the state's very close partnership between the child-care and apprenticeship agencies appears to be a model of collaboration that enhances both its administrative capacity and the linkage to child-care professional development. Although final legislative approval was still pending at the time of the last site visit, the funds have been committed by the child-care agency. In addition, the state has enrolled many apprentices from its Native American tribal child-care and Head Start centers. South Dakota also has a similarly successful record regarding its indicators of sustainability and is moving to comprehensiveness by recruiting a substantial number of sponsors and apprentices, including many from its Native tribes.

The common thread among these states that are well along on the road to creating sustainable, comprehensive systems is that they each have a clear and unambiguous commitment to the apprenticeship as the principal method of providing skill and wage increases to their child-care workforce.

SUMMARY AND RECOMMENDATIONS

In reviewing the overall process of developing and implementing a child-care apprenticeship in the western states we found a consistent level of achievement. We observed that partnerships were central to the creation of the programs. And we found that there were good connections between the child-care system and the early childhood education departments of community colleges, both of which had a fairly long history of collaboration. We also found that connections with the apprenticeship system were quite effective, once the parties were able to learn one another's vocabularies. Apprenticeship officials from the states and DOL gave willingly of their limited resources to promote this

initiative. Nearly all the states implemented these partnerships to deliver effective training to workers.

However, despite the breadth and depth of partnerships, some important differences emerge in the extent to which the grantees are establishing sustainable, statewide systems. A few states recruited more widely and held a high proportion of the total number of apprentices. Although the other states made less progress towards meeting the goals of the initiative, there was, nevertheless, much to recommend in their approaches. These states each had—or were on the road to developing—a strong, professional development initiative in which the child-care apprenticeship would figure prominently. They made important decisions in their apprenticeship standards and recruiting strategies on how to strike a balance between setting high standards and encouraging the broadest possible participation of low-quality or low-paying centers. These accomplishments will likely yield rich payoffs once these states begin to apply them on a statewide basis.

Based on the findings throughout the report, we make the following recommendations regarding current and future policy on the initiative:

Recommendation #1. It is beyond the province of this evaluation to suggest any particular minimum wage level. However, we believe that formal debate on this issue is extremely beneficial to the states and the objectives of the initiative. Therefore, we recommend that each state include in its standards a minimum wage and a specific progression so that stakeholders in the apprenticeship and child care system will directly address the issue of increasing compensation, even if the short-term outcome of that debate is not to alter current market conditions.

Recommendation #2. We recommend that DOL requires each grantee to ensure that the apprenticeship project will fully coordinate with the state's professional development initiative. This is especially important for the states where the grantee is not agency responsible for the professional development initiative.

Recommendation #3. We recommend that DOL apprenticeship staff consider emphasizing a more flexible—as compared to a more regulatory—approach to developing standards and conducting oversight in helping to adapt the apprenticeship system to meet the needs of the child-care workforce. We believe that flexibility is consistent with DOL's other efforts to develop an effective marketing program for the registered apprenticeship system.

Recommendation #4. We recommend that future training and technical assistance on implementation issues emphasize the effectiveness of using personal recruitment methods.

We also recommend that apprenticeship officials continue their help with recruitment.

Recommendation #5. We recommend that apprenticeship officials provide technical assistance on designing effective on-the-job training.

Recommendation #6. We recommend that DOL consider stipulations in future grant solicitations to encourage grantees to increase diversity in the membership on apprenticeship committees and other forms of leadership, including leadership training. Such action should promote comprehensiveness.

Recommendation #7. We recommend that DOL require grant applicants to develop recruitment strategies that extend beyond immediate networks of centers that have already committed to the apprenticeship and demonstrate a clear path to comprehensive implementation. This recommendation is especially important in states using a pilot approach, where we think it is appropriate to have such grant applicants develop a transition plan to move from the pilot stage to a comprehensive system.

Recommendation #8. We recommend that DOL reach agreement with the grantees (and former grantees, if possible) on an appropriate set of data that will facilitate internal program evaluation by each grantee and external evaluation by DOL. Information on participant characteristics, pre-program work experience and credentials, program experience, and outcomes are vital.

Recommendation #9. We recommend that DOL consider a requirement in future grant solicitations that applicants identify sources of future funding once the grant period is over.

Recommendation #10. We recommend that DOL consider provisions in future grant solicitations to encourage tiered reimbursement strategies that link to the apprenticeship. We also recommend that any such tiered reimbursement plans provide technical assistance to promote access for lower-performing centers in poor communities.

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I. INTRODUCTION

Beginning in January 2000, the United States Department of Labor, Office of Apprenticeship, Training, Employer, and Labor Services (DOL), awarded 18-month grants to 10 states and the District of Columbia (D.C.) in order to create sustainable comprehensive apprenticeship systems for child-care workers under its Quality Child Care Initiative (QCCI), which intended to address significant quality and labor force issues in the child-care industry. Subsequent to the initial round of 11 grantees, DOL awarded grants to 21 other states in 2 additional rounds. A list of all grantees in the initiative with the start and end dates of their grants is in Exhibit I-5 located at the end of this chapter. Under this apprenticeship initiative, most of the grantees received QCCI grants of approximately \$350,000.

The Department of Labor contracted with Social Policy Research Associates (SPR) to describe and assess the progress made by the grantees in 12 western states in developing a comprehensive, sustainable apprenticeship system. Exhibit I-1 lists the states and the corresponding grant round that this report covers.¹

Exhibit I-1 Western Grantees

Round 1	Round 2
Colorado	Alaska
Iowa	California
Kansas	Montana
Nevada	Oklahoma
Washington	South Dakota

Research and Evaluation Associates (REA) of Chapel Hill, North Carolina holds a comparable contract for a process evaluation for the other grantees, which are predominantly eastern states. REA is preparing a separate report on those states in the first two rounds.

¹ A comprehensive table at the end of this section outlines all of the grantees that received a QCCI apprenticeship grant.

In addition to the process evaluation of these western states, SPR has also developed two additional evaluation products for both eastern and western grantees. The first is *Estimating Sustainability and Comprehensiveness in the Quality Child-Care Initiative*, an assessment of the achievements of the first 21 grantees in Rounds 1 and 2 in developing a sustainable, comprehensive system. The second is *Statistical Picture of Participants in the Quality Child-Care Initiative: Apprentices, Journey Workers, Sponsors*, a report containing descriptive statistics on the characteristics of the participants in the initiative—the apprentices, journey workers, and sponsors—for 21 of the 32 states that have actually begun implementing the initiative. Additionally, REA prepared a report explicating best-practice strategies for building a child-care apprenticeship system, based on the successful components in these same 21 grantees.

BACKGROUND TO THE INITIATIVE

Dramatic changes in the composition of the labor force since World War II have increased the participation of women in the labor market. By 2002, nearly 58 percent of women over the age of 20, traditional caregivers for children within the home, were in the paid labor force, compared to slightly below 31 percent in 1948.² Women now participate in the labor force at a rate just 14 percent below that of men.³ This participation rate, which has been rising steadily for over half a century, is likely to continue to rise. With women working outside the home in greater numbers than ever before, whether out of necessity or by choice, and no indication of men leaving the labor force (the percentage of male participation has held steady, ranging from 80 percent to 70 percent since 1948) the demand for child-care has naturally increased. In 1996, two-thirds of mothers with children under six worked outside the home. A recent estimate for 1998 places the number of children under the age of 13 with working parents at 30.4 million.⁴

² In a few of the states that SPR evaluated, the percentage of women in the workforce was higher still. In Colorado, for example, 67% of the female population was part of the state's labor force.

³ Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, Accessed on-line at <http://www.bls.gov/cps/home.htm#data>

⁴ Urban Institute, "Access to Child Care for Low-Income Working Families," Report to Administration on Children and Families, U.S. Department of Health and Human Services, 1999. Accessed on-line at <http://www.acf.hhs.gov/programs/ccb/research/ccreport/ccreport.htm>

At the same time that demand has increased, there is a growing recognition among child development experts and parents that child-care is a critical component of a child's early education. A growing body of research has consistently found that there are considerable *benefits to high quality early childhood education. Controlled studies have pointed to gains in basic skills and various indices of socialization and reductions in behavioral problems from high-quality care. These studies have also shown that good classroom practices contribute to developing language and math skills, while close relationships between adult providers and children support the development of social and behavioral skills.⁵ These benefits translate into positive community outcomes as well. For example, the Governor's task force on early childhood education in Oklahoma, one of the grantee states, found that investments in high quality early childhood education preempt future taxpayer costs associated with youth crime and adult social services, and diminishes the need for children to repeat primary and secondary school grades.⁶

Yet, despite the evident demand and the wide recognition of the value of high quality child-care, it has been very difficult for the child-care industry to provide high-quality care. The *Cost, Quality and Outcomes Study* reported that fewer than 15 percent of a sample of centers and family child-care sites in four states rated "good."⁷ Another recent study of child-care quality by the National Institute for Child Health and Development in 1999 estimated that only 9 percent of child-care in the United States was "excellent;" another 30 percent rated "good."⁸ In addition, few providers have met the accreditation standards of the National Association for the Education of Young Children, the leading professional organization in the early childhood education field.

One of the primary reasons child-care experts cite for the low quality of care is the low wages that child-care workers invariably receive. According to the Bureau of Labor Statistics, the average hourly wage in 2001 for all child-care workers was only \$8.91, and

⁵ Frank Porter Graham Child Development Center, University of North Carolina, Chapel Hill, "Executive Summary: The Children of the Cost, Quality, and Outcomes Study Go to School," June 1999.

⁶ Executive Summary, Governor's Task Force on Early Childhood Education, Oklahoma, March 2001, p. 23. Presented to Oklahoma Governor Frank Keating, December 21, 2000.

⁷ The states in this study were California, Colorado, North Carolina, and Connecticut. Each of these states is a QCCI grantee. California and Colorado are subjects of this report.

⁸ C. Booth, et al., National Institute for Child Health and Human Development, "Early Child Care Study," Washington, 1999.

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only \$7.57 for classroom aides. This compares to \$17.09 for a kindergarten and pre-kindergarten teacher. Fringe benefits such as health insurance are available to child-care workers only infrequently. Family care providers do far worse, earning an estimated \$3.84 per hour for an average 55-hour week.⁹ Benefits, such as health insurance, are rarely available to child-care workers.

In addition, low levels of compensation almost certainly contribute to low retention rates, which experts also believe are responsible for low quality care. The *National Child Care Staffing Study* found turnover rates to be very high; an average of 31 percent of all child-care workers left their jobs in 1997. In some of the grantee states in this study, this rate is significantly higher. For example, according to apprenticeship officials in both Nevada and Oklahoma, the turnover rate among child-care workers is approximately 45 percent statewide. In South Dakota, the state conducted a survey of child-care workers in the western part of the state, and found that the average turnover rate was around 60 percent. While it is difficult to compare these rates to other occupations or to other labor markets, the consensus among economists studying job tenure is that turnover is significantly higher than average for workers in lower-paying occupations.

Low retention rates also prevent workers from remaining in the industry long enough to acquire the formal and informal skills necessary to provide high-quality care. Moreover, there is little skill transference from experienced workers to those beginning their careers. Further, because of the transience of workers, both employees and employers are understandably reluctant to invest their resources in formal education or training to redress these skill deficiencies.

When most industries face low quality in their labor force because of low pay, high turnover, and training deficits, the normal labor market solution is to increase compensation until the labor market produces an adequate supply of qualified workers. Usually, many consumers are content to pay more for higher quality goods and services, thus providing increased revenue to offset the increase in compensation. However, the economics of the child-care industry are different from most industries. Despite widespread agreement about the importance of and need for quality child-care, many people who need child-care services have a limited ability to pay more than they already

⁹ Bureau of Labor Statistics (BLS) from the National Compensation Survey for 2001. Family provider data from BLS, contained in Center for the Child Care Workforce, "Current Data on Child Care Salaries in the United States." March 2000.

do. For parents who are themselves employed in low-wage occupations, the cost of high quality child-care is particularly prohibitive, and can, in some instances, make employment uneconomical. Additionally, third-party payers, like the states that provide subsidized care through the federal-state Child Care and Development Fund, recognize that a substantial increase in the cost of care will reduce the number of families that the program could help if appropriations remain the same. This would make waiting lists grow, and limit the overall accessibility of child care to low-income families.

DEVELOPMENT OF THE QUALITY CHILD CARE INITIATIVE

Child-care professionals, advocates, and other interested parties have long recognized these workforce issues and have called for increased resources and for better solutions to link increased compensation and enhanced skills in the child-care industry. In response, there have been substantial efforts by major federal programs and their state and local partners to increase quality among child-care workers. The Child Care and Development Fund now requires states to set aside at least four percent of their grant for quality activities. In addition, under the Head Start Act of 1998, Congress mandated goals for the qualifications of Head Start teachers.¹⁰

In further response to the clear need to improve quality in the child-care industry, the White House held a conference on child-care in 1997 to focus the nation's attention on the importance of quality child-care. One of the conference's primary goals was to stimulate potential solutions to the conundrum of low wages and low quality in child-care. DOL responded by proposing to adapt the model of registered apprenticeship to the unique characteristics of the child-care industry. The solicitation for grant applications for the QCCI summed up the expectations of the initiative:

As our society continues to evolve and demands are placed on parents to secure full time job/careers, the need for safe, affordable, available and quality child-care has been brought to the forefront. Utilization of the National Apprenticeship System can provide needed training for early care and education practitioners. High quality training has the potential to change the culture of the child-care industry from one dominated by

¹⁰ By 2003, 50 percent of all Head Start teachers nationally must have at least an associate's degree. And classrooms without degreed teachers must have a teacher with a Child Development Associate or equivalent credential. The Child Development Associate credential is issued by the Center for the Child Care Workforce. It has a well established curriculum, based on the National Association for the Education of Young Children standards, which is readily available at many community colleges.

low pay and high turnover to one of respected professional service. No longer would child-care be equated to baby-sitting.

West Virginia provided an existing model for a child-care apprenticeship program. The state's Child Care Development Specialist Registered Apprenticeship Program has been in existence since 1989, providing apprenticeship training to almost over 600 apprentices. Building on West Virginia's experience in applying the apprenticeship model to child-care, DOL expects that its initiative will improve the quality of care through parallel improvements in wages and skill levels that inhere in the apprenticeship model.

Several features of the national registered apprenticeship model are relevant to the child-care industry. First, and foremost, apprenticeship directly addresses low wages by establishing a wage progression between the apprentice and the journey worker levels. Second, the combination of practical, on-the-job training and theoretical classroom instruction works to increase the knowledge of child-care workers. Moreover, this combination of the practical and theoretical aspects of the child-care worker's job and the close relationship that can develop between apprentice and journey worker is appealing to people for whom theoretical classroom instruction presents serious obstacles. Third, because most apprenticeships are built on recognized national standards, they fit very well with other professional development efforts in the child-care industry. Finally, apprenticeship programs, by definition, link wage increases to skill acquisition. Thus, as apprentices' skills increase, so too does their pay. This relationship is at the heart of the attempt to increase the overall level of retention and quality in the child-care industry. The QCCI is believed to be the first national initiative to link permanent wage increases to college courses and systematic on-the-job training.¹¹

Registered Apprenticeship

The registered apprenticeship training method is a fusion of two training elements, practical experience and theoretical learning. DOL requires a minimum of 2000 hours of on-the-job training and 144 hours per year of related classroom instruction, though employers may require training beyond this minimum. The on-the-job training component requires structured supervision by a skilled and experienced journey worker.

¹¹ Observation by staff at Wheelock College, a leading provider of early childhood education teacher training. Wheelock College is the technical assistance contractor for QCCI. See later in this chapter for a discussion of its role in the initiative.

The related instruction, typically provided at a post-secondary institution, industry-based training center, or through correspondence, is designed to ensure that all apprentices have a good theoretical understanding of their profession.

Both on-the-job training and related instruction, which act as a basic framework for the training outline, guide the apprenticeship standards. The standards include, among others, the following provisions:

- A progressively increasing schedule of wages as the apprentice makes satisfactory progress in both related instruction and on-the-job training until wages reach at least 85 to 90 percent of the rate paid to the journey worker in the occupation.
- Proper supervision of on-the-job training in facilities that are adequate to train apprentices.
- Periodic evaluation of the apprentice's progress, both in job performance and related instruction and maintenance of appropriate records.
- No discrimination in any phase of selection, employment, or training.

Apprenticeship offers both employers and workers a number of advantages. For the employer, apprenticeship offers an opportunity to control the training by designing a curriculum that meets the organization's specific needs. And, since the employee is normally already employed, the employer invests in developing the skills of workers who are already familiar to the employer and to whom the organization is ready to make a further commitment. Concomitantly, the apprenticeship may reduce the excessive costs of recruitment, which some consider a major inefficiency in the high-turnover child-care industry. For workers, the apprenticeship provides an opportunity to enhance skills while earning a wage, assures increases in future earnings, and offers a reliable, portable, and widely recognized certification of skills. For both parties, the formal apprenticeship agreement provides a clear statement of mutual obligations and a procedure to resolve disputes over training issues.

Generally, in apprenticeship programs, individual employers, or an industry committee, design their own training based on their specific needs, leaving the principle role of the government to ensure that each program meets certain minimum requirements, and to register programs when they meet those requirements. Department of Labor staff are also responsible for promoting the apprenticeship method; providing technical assistance to employers, unions, and trade groups; and overseeing existing programs to ensure that they continue to meet standards throughout the country. In addition, in 30 states and jurisdictions, State Apprenticeship Councils and agencies—recognized by the

National Apprenticeship Act—are responsible for registering the apprenticeship and overseeing their quality. Five of the states covered in this report—Kansas, Nevada, Washington, California, and Montana—have State Apprenticeship Councils.¹²

Developing Child-care Apprenticeships

Federal Apprenticeship and Training Representatives note that it is often challenging to create a new apprenticeship program, and developing the apprenticeship standards for the child-care industry is no exception. The conceptual framework developed to guide this evaluation identifies a number of features that are necessary to create a sustainable and comprehensive apprenticeship program. Some of these are consistent with the features of conventional apprenticeship programs and others are unique to developing apprenticeships for child-care workers. Exhibit I-2 displays this conceptual framework.

The goal for each grantee is to develop a sustainable, comprehensive child-care apprenticeship program. A number of program features are needed to ensure the sustainability of any apprenticeship program include:

- An administrative capacity to manage the program
- Effective governance and support from elected officials and administrators of key child-care programs and stakeholders
- A training credential that is recognized within the industry for its high level of quality built on the twin components of apprenticeship, on-the-job training and related instruction
- Adequate funding.
- A comprehensive presence. A definition of such is discussed in Chapter IV.
- The ability to deliver measurable benefits to stakeholders, including providers, apprentices, parents, children, and the public agencies that fund, regulate, or deliver services.

While the registered apprenticeship model provides employers, workers, and child-care program staff with considerable flexibility to develop apprenticeship standards to meet their specific requirements, the creation of a sustainable, comprehensive system poses a number of challenges that are unique in the child-care field. One such challenge encountered by most of the QCCI grantees, is the participation of a large number of

¹² Currently, over 800 occupations have registered apprenticeships in a wide range of industries. However, about 75 percent of all apprentices are enrolled in joint apprenticeship programs in the unionized construction industry.

different stakeholders in each state. These stakeholders include the public agencies regulating the financing of child-care, education agencies providing training, and DOL and the state apprenticeship agencies. Each of these entities has a potential stake in the development and in the success of the apprenticeship system. In addition, employer and labor representatives—including family and center-based providers, professional associations, and unions representing child-care workers—might also participate. Within these broad categories, important specialized entities such as resource and referral agencies¹³ and Head Start Collaboration programs,¹⁴ which may be thought of as analogous to trade associations, may be a driving force or be major participants. Of course, not all of these potential groups or organizations are involved in each participating state.

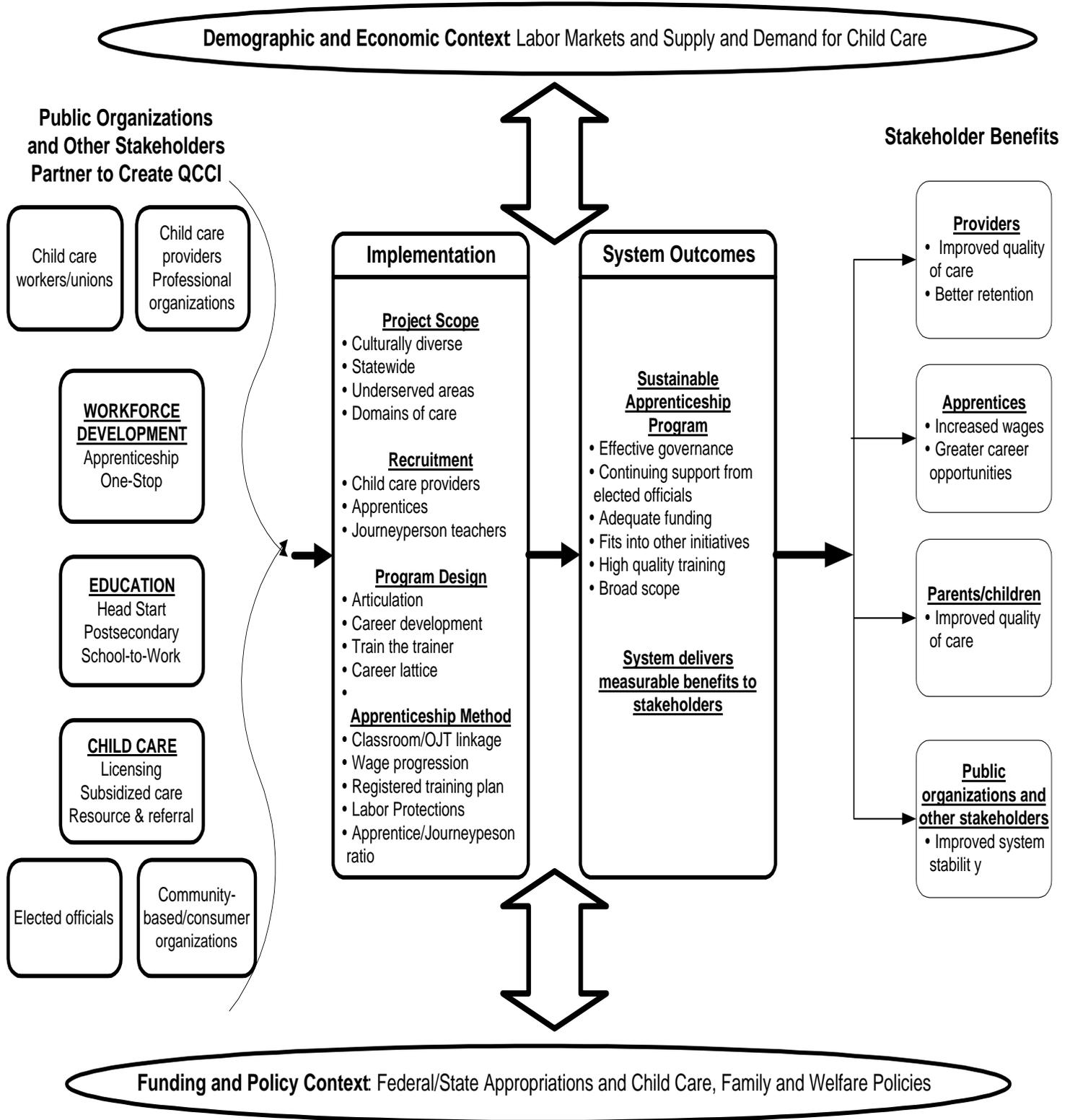
The fact that external organizations lead or participate actively in developing the child-care apprenticeship program, in contrast to the predominant role of the sponsoring employers in most apprenticeships, adds a layer of organizational complexity. Although this organizational complexity substantially complicates program development, the necessity of collaboration ultimately offers the prospect of a stronger and broader system. This is especially so where the leadership uses a diverse, collaborative model that encourages the participation of a diverse people, including minority ethnic and cultural groups, who are often excluded from child-care quality-improvement programs.

¹³ The resource and referral system is composed of local organizations, usually private non-profits or community-based, funded by the federal Child Care and Development Fund to provide training and technical assistance to providers and help to parents in finding quality care.

¹⁴ Head Start Collaborative provide training and technical assistance to Head Start providers through state quality set-aside funds and direct federal grants for quality initiatives. They are generally analogous to the resource and referral system for other forms of early childhood education.

Exhibit I-2

Conceptual Framework for BAT-Quality Child Care Initiative



Organizational complexity also creates additional obstacles. Sometimes, partner agencies do not have totally compatible goals. Further, stakeholders from the labor, social service, and education sectors often lack a common vocabulary, which makes it difficult for them to share and understand new information. For example, the apprenticeship standards—while dealing with common employer/employee issues such as a probationary period, right to a safe workplace, periodic review of performance, wage increases after skill gains, or non-discrimination—are couched in a framework that some employers might construe as limiting their rights.

There are several other requirements in implementing the apprenticeship model in child-care that typically do not exist in many of the industries that apprenticeship serves. First, with public agencies leading the project, apprenticeship leaders need to spend a considerable amount of time recruiting employers to sponsor the apprentice and the journey workers who supply the supervision and expertise. Second, with the grant objective that child-care apprenticeship systems be available in traditionally underserved areas, state and local planners need to devise techniques to assure that the apprenticeship is available to child-care employers and workers in rural, low-income, or ethnic and cultural minority communities.

Third, since the early childhood education profession encompasses a variety of occupational levels with different qualifications, the apprenticeship must fit into a broader framework of employee training and education. Most states have underway a professional development initiative to train child-care workers, improve their compensation, and improve overall quality of care. Thus, in order for the child-care apprenticeship to obtain any credibility within the early childhood education field, it must be compatible with the larger career initiatives for the child-care workforce in total. It should support, for example, the concept of a career lattice, along with several other key components. In a career lattice, a child-care worker can move vertically—from direct child-care provider to staff supervisor or center administrator—as well as laterally to jobs at resource and referral or regulatory agencies. Reciprocally, the broader professional development initiative needs to incorporate the apprenticeship standards to assure that workers obtaining apprenticeship training will have a recognized credential throughout the industry.

OVERVIEW OF STATE STRATEGIES AND APPRENTICESHIP APPROACHES

To begin the work of developing an apprenticeship system for early childhood education workers in each state, the grantees had to develop a general strategy to apply the apprenticeship standards to their individual situations. In this section, we provide an overview of common elements of the initiative—the organization and planning, standards development, linkages to other child-care professional development activities, recruiting strategies and financing—in the state strategies for developing and implementing the QCCI apprenticeship program. Within each element, the grant solicitation permitted the states to exercise substantial latitude in shaping their planned child-care apprenticeship systems so there is substantial variation among the states. This variation is the subject of the substantive chapters that follow.

First there were a number of stakeholders that came together to develop a grant application and plan the actual program. In some cases, there were a large number of partners representing a broad range of stakeholders and interests, while in other cases, the extent of partnership was modest. The partnerships in general turned out to be critical for both the planning and implementation phases of each grant and for the ability to sustain and spread the program to meet DOL’s sustainability and breadth goals for the initiative. Every grantee created an apprenticeship advisory committee that provided the essential industry input into the program. But the numbers of partners and relationships among them were highly variable.

The second variable element is the way they addressed the 22 mandatory federal apprenticeship standards. The standards provide the framework for the program, so the development of the specific standards for each grantee provided the opportunity for the partners to discuss such important issues as wages, qualifications of participants (apprentices, journey workers, and sponsors), and the design for the training. Thus, every state developed a specific wage progression that recognizes the skill attainments that apprentices make as they move from the entry level to the status of a skilled journey worker. However, the number of wage steps and the size of the wage progression represented key variables that each state would determine that reflected the applicable conditions in their state.

Third, as previously noted, we observed a strong relationship between the apprenticeship programs and the state child-care professional development initiatives. The opportunity for this relationship occurs in two ways. The first is that there is some support for the apprenticeship in each state through Child Care and Development Fund or

Head Start, and at times, there is support from both. The second is that the apprenticeship program is able in some cases to articulate well with other credentials and post-secondary degrees. Many grantees are linking their apprenticeship curricula directly with the Child Development Associate credential and are providing credit towards certificate and degree programs.

In addition, as part of professional development initiatives, virtually every state developed its apprenticeship program in alignment with an educational framework for training early childhood education workers developed by the National Association for the Education of Young Children. These frameworks are typically quite comprehensive, covering the three age-based domains of child-care—infant/toddler, preschool, after-school—and different organizational settings such as child-care centers, family care, and Head Start. All of the states are developing competency-based frameworks for training early childhood education workers, regardless of the workers' participation in the apprenticeship program. These frameworks will provide the basis for movement through the career lattice.

Grantees are also linking their apprenticeship programs with other compensation initiatives. For example, several states are specifically integrating, or planning to adopt and integrate, apprenticeship with the Teacher Education and Compensation Helps (TEACH) program, a program developed in North Carolina. TEACH shares some of the essential characteristics of the apprenticeship program in that it links compensation increases to skill gains.¹⁵ The connection between TEACH and apprenticeship is discussed in greater detail later in this report.

All of the grantees expressed interest in designing the apprenticeship to make it applicable in a variety of settings, from centers to family providers. However, the majority of apprentices and journey workers are now based in centers, where there is an employer-employee relationship that best suits the apprenticeship model, and where there are a sufficient number of existing employees to act as journey workers. Usually, centers have a greater scale of operations that enables them to provide supervision and back up care for the on-the-job training requirements and that generates enough apprentices to

¹⁵ TEACH is perhaps the most widespread of several programs espousing the general theory of linking increases in pay to increases in job skills, the same theory that is fundamental to the apprenticeship program. Compensation for increases in job skills under TEACH may take the form of a one-time award, or as a permanent wage increase.

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make it economical from community colleges to conduct the related classroom instruction. In a limited number of instances, states did register family providers as apprentices. The technical challenges and strategies of registering family providers, such as creating an employer-employee relationship and providing journey worker supervision, are discussed in greater detail in chapter III.

All grantees have conducted outreach and recruitment for a wide range of employer sponsors. All three age domains are typically represented, including some comprehensive centers where all three domains are served in one location. Apprenticeship employers include centers operated by many different organizations, both non-profit and for-profit from religious groups to government centers. However, no grantee incorporated, unlicensed family providers, individual providers working in a home and employed directly by a family or group of families, or neighbors and family members providing non-market care.

In designing programs that respond to these common themes, the grantees used a variety of different approaches to the planning, development, and implementation of the QCCI-apprenticeship program. At the outset of the grant, however, every state made critical decisions about the basic shape and structure of their respective programs, including what organization would take leadership of the project, whether to start as a pilot project or statewide program, and whether the initiative would originate in a child-care agency or an apprenticeship agency. Exhibit I-3 shows the grantee and the lead organization administering the project in each state. Seven of the ten grantees are early childhood education agencies—six are child-care agencies and one is a Head Start agency. The state apprenticeship agencies in two states received the QCCI grant, and one educational institution received the grant. On the project administration side, five of the grantee organizations contracted out program administration, while the other five administered the program in whole or in part themselves.

In examining how the grantees used their grant funds, it is important to note that all but one of the grantees used the bulk of their grant funds for implementation—that is, paying directly for participant costs such as related instruction—in addition to design and planning. California decided to fashion its child-care apprenticeship much more along the lines of its other apprenticeships. Instead of creating extensive partnerships and specific paths to implement the training, the state apprenticeship agency decided that it would create only the standards—the basic framework—for the program and let the

child-care centers, the sponsors use their own resources—or resources elsewhere available in the child-care system—to conduct the actual training.

Though, in general, every grantee established a similar apprenticeship program, the comprehensiveness of those systems is different. Comprehensiveness includes several variables, all directed at the extent to which the grantee has implemented an inclusive, statewide program. These variables include the geographic scope of the programs, the inclusion of both low and high-quality centers, the integration of both child-care centers and family care providers, and the extent to which components such as the career lattice and related instruction are part of the broader career development initiative. These variables and their impacts are discussed throughout the report.

Exhibit I-3
Organizations Leading the QCCI-Apprenticeship Program

State	Grantee	Project Administrator
Alaska	Department of Education and Early Development, Early Development Division	Grantee and local resource and referral agencies
California	Department of Industrial Relations, Department of Apprenticeship Standards	Grantee
Colorado	Division of Child Care, Department of Human Services	Triad Consolidated Child Care Pilot Program, and Red Rocks Community College
Iowa	Head Start Collaboration Office, Department of Education	Iowa Child Care and Early Education Network
Kansas	Child Care and Early Childhood Development, Department of Social and Rehabilitative Services	Butler County Community College
Montana	Department of Health and Human Services, Bureau of Early Childhood Services	Grantee, in partnership with state apprenticeship agency
Nevada	Office of Child Care, Welfare Division, Department of Human Resources	Washoe County School District
Oklahoma	Center for Early Childhood Professional Development, University of Oklahoma	Grantee
South Dakota	Department of Social Services, Office of Child Care Services	Grantee
Washington	Department of Labor and Industry	Clover Park Technical College

I. Introduction

States varied the geographic scope in which they initially implemented the program. Several states decided to implement apprenticeship in a pilot method, while others began a statewide program from the outset of the grant. For example, Iowa set up several local pilots in three specific regions within the state—two urban and one rural region. Similarly, Alaska, Colorado, Kansas, and Oklahoma established pilot programs. Washington, while nominally a pilot program, recruited extensively enough to ostensibly be a state-wide program, while states like Nevada, Montana, and South Dakota explicitly planned and implemented a state-wide child-care apprenticeship program.

A fundamental question that each grantee faced was whether to include any center into their programs regardless of quality or to include high-quality centers only. By focusing on high-quality centers, the grantees had the potential of making their program represent high-quality, i.e. all of their apprentices, journey workers, and sponsors would be examples of high-quality child-care, from the start of the grant rather than having to go through the long process of bringing every center up to that same level of high-quality. However, by excluding lower-quality centers, the grantees would run the risk of excluding those centers and providers that needed a structured professional development program the most. Moreover, lower-quality centers are often located in underserved areas of a community, which are precisely the areas that QCCI intends to serve. This quality question comes to the fore in program planning as well as in implementation connected to issues such as starting wages, wage progressions, and recruitment of journey workers and apprentices.

As previously discussed, another difficult question that every grantee faced was whether to include family care providers as well as child-care centers. The preponderance of grantees decided to include centers only, while two states, Montana and South Dakota included both, and one of the pilot areas in Iowa included family providers only. The exclusion of either centers or family care providers prevents a large number of child-care workers from obtaining the benefits of apprenticeship, and does not address the child-care industry in total. However, the inclusion of family care providers presents serious difficulties in adaptation of apprenticeship standards, and the creation of an appropriate apprenticeship working environment, as was previously outlined.

While all of these decisions speak directly to the comprehensive nature of the programs, the last variable also speaks highly to the sustainability of the programs. Sustainability is multifaceted, touching upon the administrative, governance, and financial aspects of the apprenticeship program. The inclusion of apprenticeship in the

state career lattice signifies a move toward administrative and governing sustainability. Such inclusion creates a permanent role for apprenticeship in the overall professional development efforts of the state. Also, when related instruction is part of a established child-care credentialing program, apprenticeship can act as a pathway to that credential, thus making the program both attractive to employees (who receive classroom training, on-the-job instruction, a wage progression, and a transferable credential at little or no cost) as well as to the state (the state's professional development initiative is enhanced by more training, all of which is coordinated and articulated). Virtually every state expressed a desire for apprenticeship to be included in the career lattice and articulated with a credential, however not every state has accomplished this.

While the costs associated with any apprenticeship program are traditionally born by the employers, financial constraints in the child-care industry, which are discussed periodically in this report, prevent child-care employers from doing this. States are using several different approaches to finance the three primary cost components present in any apprenticeship. The first primary cost is infrastructure (administration and governance), the second is the cost of training the participants (both on-the-job-training and related instruction and any incentives or supportive services), and the third is the employer-borne cost of wage progression apprentices are entitled to as their skills increase. All of the grantees have relied heavily on QCCI funds to pay for such costs. Obviously, it is imperative for these states to have adequate funding from other sources for apprenticeship to continue at the conclusion of the grant.

As of November 2002, the ten states reported a total of 857 apprentices and 510 journey workers in 351 center-sponsor sites, and 19 family providers. Exhibit I-4 displays the distribution of apprentices, journey workers, and sponsors by state. The relatively large numbers reported by a few of the states above reflect their attempt to implement a statewide program from the start of the grant.

Exhibit I-4
Number of Apprentices, Journey Workers, Sponsors by State

	Apprentices	Journey Workers	Center Sponsors	Family Providers
Alaska	33	21	21	
California	0	0	0	0
Colorado	128	35	25	10
Iowa ¹⁶	40	22	10	9
Kansas	54	48	63	
Montana	116	105	44	
Nevada	136	91	92	
Oklahoma	84	56	19	
South Dakota	80	51	26	
Washington	186	81	51	
Total	857	510	351	19

TECHNICAL ASSISTANCE TO THE GRANTEEES

DOL ensured that the QCCI grantees would have access to a substantial amount of technical assistance. First, the evaluation contractors and DOL held a start-up conference for each grantee group; conferences were held in 2000, 2001, and 2002 to discuss overall project goals and objectives and to listen to each state’s plans for creating a child-care apprenticeship program. Second, DOL worked with child-care agencies to explain how the apprenticeship system works and helped extensively with the development of standards, recruiting, and other tasks. In addition, states with a state apprenticeship agency or council received an extra level of help from these organizations. Third, the evaluation contractors subcontracted with the Institute for Leadership and Career Initiatives at Wheelock College to provide the grantees with technical assistance on early childhood education.

The two evaluation contractors and Wheelock College collaborated in designing the framework for technical assistance. Wheelock provided common events for all grantees, including national conference calls, group events at national early childhood conferences, and an e-mail list to share ideas and best practices. Wheelock staff also conducted at least one site visit to each state and maintained telephone contact with all states throughout the grant period. Fourth, members of the evaluation staff identified technical assistance needs during the course of evaluation site visits and telephone contacts with the states; the evaluation staff passed information about these needs on to Wheelock

¹⁶ Data from Iowa is from March 31, 2003.

College or on to DOL. In addition, evaluation and technical staff prepared several technical assistance papers on internal evaluation and on sources of financial support.

OVERVIEW OF THE REPORT

This report analyzes the progress made by ten western QCCI apprenticeship grantees in the planning and application of apprenticeship principles to the particulars of their state child-care industry. The cornerstone for the report is the data collected during a series of site visits and telephone calls made periodically to each grantee over the last two years. The overall objective of the first round of site visits was to get an understanding of the grantee's project plans, organizational partnerships and other relationships, and start-up activities. The second round of site visits focused on grantees' progress in developing apprenticeship standards, as well as recruiting employer sponsors, journey-workers, and apprentices, with a particular eye on the state's move toward sustainability after the grant period.¹⁷ During these visits, we spoke with local apprenticeship committee officials, administrators, local BAT officials, instructors, child-care centers directors, apprentices, and journey workers, among others. In addition, we continue to gather information by telephone and e-mail from states, even after their grant periods have ended.¹⁸

Chapter II of this report discusses the context for implementation and describes how the grantees worked to create a framework for the implementation of a child-care apprenticeship program. We look specifically at the major factors of the political context, the networks within the child-care systems, and relationships with the apprenticeship system. The operation of these factors generated the grant applications and began the planning for the project once grants were awarded. We pay particular attention to the professional development initiative in each state. The apprenticeship either came out of this initiative or was closely aligned with it. The chapter then moves into a discussion of how states designed apprenticeship standards, emphasizing key issues such as wages and the ratio of apprentices to journey workers. The adequacy of the

¹⁷ Three rounds of site visits were made with the first group of grantees. Two rounds of site visits were made to the second group of grantees. SPR found that two site visits, properly timed, provided sufficient data to document the planning, implementation, and sustainability of the programs.

¹⁸ Some states have applied for no-cost extension, so have extended the time originally allotted for them under the grant.

apprenticeship standards is especially critical since it will guide the further development of the apprenticeship program after the grant period.

Chapter III discusses how the grantees actually implemented the project. Here, we look at how centralized project staff or local apprenticeship committees—typically composed of sponsors, resource and referral agencies, Head Start providers and Collaboratives, and other interested parties—conducted the critical tasks of recruiting participants and arranging for both the on-the-job training and the related instruction. The chapter then reviews how the grantees served child-care workers and sponsors in low-income, ethnic minority, and rural communities that have not generally enjoyed good quality child-care or had a limited access to quality-improvement and training programs. The chapter concludes with a discussion of financing the apprenticeship, reviewing both costs and income.

Chapter IV reviews the impact of planning and implementation on the prospects for each grantee to develop a sustainable, statewide child-care apprenticeship. These prospects are based on the specific indicators we developed to assess the comprehensiveness and sustainability of a program. We start by reviewing how the pilot and statewide implementation models used in the ten states would expand their reach. We then discuss how the states expected to develop a sustainable system, including an infrastructure—administrative capacity and governance—and plans to finance an ongoing system. The chapter then examines the “bottom line” of a sustainable system: the ability of the program to meet the needs of key stakeholders. In this section, we report observation by key stakeholders on the benefits of the program. The chapter concludes with an overall assessment of the progress the states have made in reaching QCCI’s goals of a sustainable, statewide child-care apprenticeship.

Chapter V provides conclusions and recommendations based on the evaluation findings.

NOTE ON TERMINOLOGY

Throughout this report, we strive for consistency and simplicity in our use of terminology. Thus, we use the term “child-care” for its brevity in lieu of the similar and arguably more accurate term “early childhood education.” Because this report was commissioned by the Department of Labor, we have relied more heavily on certain terms from workforce development in preference to comparable terms from the child-care

industry. For example, we use the term “journey worker” to describe the person who supervises the apprentice’s on-the-job training rather than “mentor-teacher.”

Consistency also guides us to use a common nomenclature for institutions and programs that typically have different names in different places. Wherever possible, we have tried to use a common term as long as it conveys a clear understanding to the reader. For example, all the states have programs or projects to develop a common framework for child-care worker training. For this, we use the term “professional development initiative”—a specific term used in some states—throughout the report to describe these efforts. Similarly, some public, postsecondary institutions are technical colleges, but we use the generic term, “community college.” Also, we generally use “state apprenticeship agency” if favor of “state department of labor.”

Exhibit I-5
QCCI Apprenticeship Grantees, First Round and Second Round
Apprenticeships Operated by DOL or State Apprenticeship Council (SAC)

<u>First Round</u>			<u>Second Round</u>			<u>Third Round</u>		
<u>DOL States</u>	<u>Start Date</u> ¹⁹	<u>End Date</u>	<u>DOL States</u>	<u>Start Date</u>	<u>End Date</u>	<u>DOL States</u>	<u>Start Date</u>	<u>End Date</u>
Colorado †	05-00	06-02	Alaska †	05-01	02-03	Idaho	06-02	12-03
Indiana	05-00	06-01	Arkansas	05-01	06-03	Illinois	06-02	12-03
Iowa †	05-00	09-01	Oklahoma †	05-01	04-03	Mississippi	06-02	12-03
			South Dakota †	05-01	08-03	North Dakota	06-02	12-03
			Tennessee	05-01	08-03	West Virginia	06-02	12-03
						Wyoming	06-02	12-03
<u>SAC States</u>			<u>SAC States</u>			<u>SAC States</u>		
District of Columbia †	05-00	12-02	California †	05-01	08-03	Delaware	06-02	12-03
Kansas †	05-00	06-01	Connecticut	05-01	08-03	Maryland	06-02	12-03
Nevada †	05-00	06-01	Maine	05-01	02-04	Massachusetts	06-02	12-03
New Hampshire	05-00	09-01	Montana †	05-01	12-03	North Carolina	06-02	12-03
New York	05-00	06-02	Rhode Island	05-01	12-03	Pennsylvania	06-02	12-03
Vermont	05-00	12-02						
Washington †	05-00	12-01						
Wisconsin	05-00	03-02						

† Indicates the grantees evaluated for this report
 SAC = State Apprenticeship Council

¹⁹ Start dates are standardized for each group. Actual dates varied slightly.

II. PLANNING THE APPRENTICESHIP

This chapter discusses how the first 10 western grantees planned their apprenticeship programs, and how they moved toward program implementation. We begin the chapter by highlighting particular contextual factors that created the foundations upon which each grantee built its apprenticeship program. In particular we examine the political, organizational, and existing agency partnerships as contextual factors in the planning phase. Naturally, there are important differences in approach among the grantees; we intend to capture these variations along with the general themes.

In the second section of the chapter, we move from contextual factors to a discussion of the linkages between the child-care apprenticeship and the child-care professional development initiative that was in place in each state. Each state had at least begun to plan a professional development initiative before their receipt of the QCCI grant, and this has had an important influence across all states on the planning and implementation of the apprenticeship program. Although we found that the professional development initiatives in each state were fundamentally similar, the varying maturity and robustness of these initiatives affected apprenticeship in different ways.

Developing standards, the framework for any apprenticeship, was instrumental in expressing the linkage to the professional development initiative. The standards also direct vital aspects of program implementation. Thus, in the third section of this chapter, we examine the process of standards development and thus the planning decisions. Among the planning decisions were several that affected critical quality and accessibility issues, such as the minimum wage and wage progression, the ratio of journey workers to apprentices, and how apprentices would receive credit for prior experience.

The chapter concludes by discussing important challenges that emerged during the planning stage and the strategies implemented to overcome those challenges, and with a brief discussion on how the grantees moved toward implementation, which is the subject of Chapter III.

POLITICAL CONTEXT OF QCCI PLANNING

All of the QCCI grantees had a political environment that supported reform in the child-care workforce. This was the essential context from which the states applied for the QCCI grants. These political activities reflect a widespread public and political recognition that there are serious deficiencies in the child-care workforce and related problems with the overall quality of care. In many states, the governors and legislators were responding to long-term advocacy work from the key stakeholders in the child-care system—advocates and researchers, professional associations, resource and referral agencies, and administrators of the publicly-funded child-care programs. In some states, influential business and foundation executives were also involved to help with funding or to influence the course of state legislation or other regulatory action. These activities were quite varied, but overall they suggest a favorable political setting for improving child-care quality in general and establishing a child-care apprenticeship.

Nearly all the states had some measure of support from elected officials and were able to mobilize stakeholders in strong efforts to improve the welfare of children in general and child care in particular. Many of the states enacted legislation or provided substantial budget increases to child-care professional development. Blue-ribbon panels and task forces helped to galvanize stakeholders and mobilize public support. In addition, there was substantial degree of support from elected officials. Most Governors expressed some concern over the level of quality in the child-care industry and provided some leadership in obtaining legislation or state funding for quality activities. Alaska's political support for its professional development initiative was perhaps the widest and deepest. The Governor has created an executive level Children's Cabinet—as have several other governors, and created a Children's Trust to provide additional resources for child welfare issues. He also designated the head of the state's professional development initiative as a political appointee, providing high-level political input into professional development initiative activities. A legislator has even introduced a bill to provide health insurance to every child-care worker in the state. And, finally, political influence reached all the way to the federal budget. The state's senior senator, the chair of the Senate Appropriations committee, obtained a \$7.8 million special earmark to fund the state's professional development initiative in addition to its regular allocation from the Child Care and Development Fund.

Exhibit II-1 summarizes the key activities undertaken in each state prior to the application for the QCCI grant.

**Exhibit II-1
Key State Commitments to Improve Child Care, Prior to QCCI Grant**

State	Action or Commitment
Alaska	The Governor pushed for the creation of a “Children’s Trust,” which brought community and business leaders together to improve the welfare of children. The Governor also created a Children’s Cabinet to coordinate executive-level child-care policies. The State Legislature is currently working on a bill to provide health insurance to child-care workers.
California	The State adopted by referendum a tax on tobacco that has generated substantial sums of money for a host of child-welfare activities, including child care. The Legislature enacted tax credits for parents and an expansion of the role and function of local resource and referral agencies. Extensive work has been done on compensation initiatives at the county level.
Colorado	The state made a major commitment to reforming child-care with several substantial reorganizations of child-care services. The legislature had enacted the Consolidated Child Care Pilot Program, which consolidated technical assistance and services. To deal with professional development and financing, the state created two policy advisory bodies: the Professional Development Advisory Council and the Business Commission on Child Care Financing. The latter developed a privately financed compensation initiative.
Iowa	The Governor appointed a task force to examine the state’s early childhood education policies and funding for child-care. The task force developed a three-year plan, which was adopted by the legislature, to establish a high quality child-care and early childhood education system. This framework was part of the governor’s budget proposal for 2001.
Kansas	The Governor—known for his personal interest in child-care and early childhood education—and the legislature had launched several major initiatives for children. They had increased state funding for children’s programs from \$11 million in 1998 to \$19.5 million in 1999 and earmarked tobacco lawsuit settlement money for the Children’s Trust Fund. In addition, the governor had created a Children’s Cabinet in the Executive office to administer the Trust Fund and coordinate early childhood education policies.
Montana	Political support for child-care is much more of a “grass-roots” issue in the state. Extensive support for professional development has occurred through advocacy by professionals and educators in the early childhood education departments of the state’s colleges.
Nevada	The Governor consistently carried on child-care and early childhood development programs and policies created by his predecessor. He also increased funding for such programs.

Exhibit II-1 (Continued)

Key State Commitments to Improve Child Care, Prior to QCCI Grant

- Oklahoma The Governor assembled a task force to study the need and impact of professional development in the child-care industry. The study found critical needs. The state child-care agency, in response, created several professional development programs through the University of Oklahoma's College of Continuing Education.
- South Dakota The Governor has expressed interest in apprenticeship because he believes it will be a cost-effective method for improving child-care quality. The state has a comprehensive childhood welfare initiative, including healthy parenting, and other components in addition to child care.
- Washington In 1998, the Governor created the Early Learning Commission to identify gaps in child-care programs and to focus attention on early childhood education. The state's first lady and the wife of Microsoft founder, Bill Gates, who donated \$10 million to the Early Learning Fund, jointly chaired the Early Learning Commission. The state has also adopted several child-care compensation and skills initiatives.

However, not every grantee was able to translate generalized political support into concrete actions. In a few states, elected officials did not actively support child-care professional development because they felt that investments in child-care quality were inimical to the promotion of direct parental care of young children. In Colorado, for

Political Support Varied.

Every state had some form of political support for child-care and the apprenticeship program. Every Governor expressed some concern over the level of quality in the child-care industry. However, not every grantee was able to translate generalized political support into concrete actions.

example, the general political hostility to government regulation undermined support, even within the child-care community, for extensive professional development. Finally, it is important to note that most of the planning for QCCI and other child-care professional development occurred during the good economic times of the late 1990s when states had strong revenue streams to promote a variety of quality activities and a strong feeling of optimism. Our site visits and discussions with grantees during 2002 when the economy throughout the country was suffering found that

state revenues were seriously reduced and many child-care quality activities were in jeopardy. Consequently, our respondents were a good deal more pessimistic about the prospects of political and budgetary support.

While the degree of support from elected officials was tenuous, political and organizational support from key stakeholders in the child-care industry for workforce professional development and—the QCCI in particular—was consistent across all states. Thus, in most states, the application for the QCCI grant emerged from the professional development initiative that was already underway. For example, in Kansas the QCCI grant team involved the same group of stakeholders, led by the child-care agency, that was responsible for the professional development initiative. In Iowa, the state’s Head Start Collaboration Office is funding the professional development initiative as well as serving as grant recipient for QCCI. And, in Oklahoma, the Center for Early Childhood Professional Development, created as part of the state’s professional development initiative, is the QCCI grant recipient.

There were also some direct links between researcher-stakeholders associated with the professional development initiative and the application for the QCCI grant. The connection was perhaps closest in Colorado, where a researcher from the University of Colorado at Denver who had participated in national research on child-care was a member of the QCCI grant application and design team. Another example, in Nevada, was the state social-services agency, which contracted with a research and advocacy organization for information on child-care workforce compensation; this research served as the basis for the state’s QCCI application.

Linkages to welfare reform were less successful. Only two states, Colorado and Nevada, explicitly linked child-care initiatives prior to apprenticeship with welfare reform. State officials believed that the anticipated entry of many parents into the workforce would increase the demand for child-care. In addition, these states hoped to improve the quality of available child-care by creating a favorable career path to child-care jobs for those entering the labor force from welfare. In Colorado, the Consolidated Pilot Programs used TANF funds to support the child-care professional

Montana—Example of Delayed Services. For many years, various organizations in Montana have worked to improve the quality of child-care in the state. The state’s professional development initiative encompasses these efforts. Out of this context a few key people within the state’s apprenticeship division became aware of a national push to increase child-care opportunities within the context of welfare reform. On the idea that people moving out of the welfare system would increase the demand for child-care as well as create a greater need to train child-care workers newly entering the industry, Montana developed its own apprenticeship style child-care program. However, the program enrolled only a handful of participants. But, their work served as a basis for the state’s subsequent QCCI grant application.

development initiative. And, Nevada purposefully located its first child-care apprenticeship office in the Welfare Division's Reno Professional Development Center to encourage links between that state's welfare reform initiatives and the child-care apprenticeship program. This link between apprenticeship and welfare reform, however, was not established in any of the other grantee states.

The final linkage element was within the apprenticeship system, which placed a major role in encouraging states to apply for the QCCI grant. Apprenticeship officials from DOL and the State Apprentice Councils were particularly active in encouraging several states to apply, and some even helped shape the applications. In Washington, for example, federal staff notified state apprenticeship officials of the upcoming solicitation and provided technical assistance to the state during the application process. In Kansas, the State Apprenticeship Council's program director was one of the key members of that state's QCCI grant team.¹

ORGANIZATIONAL CONTEXT OF QCCI PLANNING

In this section, we review the characteristics of the organizations that were actively involved in planning the child-care apprenticeship projects under the QCCI grant in each state. First, we look at the grant recipients that led the initiative and oversaw its progress. Second, because several grantees subcontracted project management to third party organizations, we look at the organizations that were responsible for day-to-day project planning and program administration. Finally, we look at the ways that the grantees and program administrators brought in organizations to act as partners in planning and development.

Grant Recipients

The organization designated as the recipient of the QCCI grant varied across the ten states that SPR reviewed. The majority of the state grantees are state child-care agencies. One grantee is the Head Start Office of the state education agency, while another is a unit of the state university that

Different Types of Grantees—Different Advantages. The organizational type of each grantee turned out to be crucial in conferring certain advantages and certain disadvantages in the initial phases of planning and development of each state's program. Moreover, the degree to which the grantee could leverage the expertise of other organizations in planning and development proved to be critical.

¹ The role of federal staff in grant applications is discussed in more detail in the apprenticeship partners section of this chapter.

has contracts from the child-care agency for technical assistance. Two grantees are state apprenticeship agencies. The selection of each agency type as the grantee generally confers upon the apprenticeship programs certain unique advantages, and some disadvantages, as described in the four following sub-sections.

Child-Care Agencies. In most states, child-care agencies typically license child-care centers and administer federal grants from the Child Care and Development Fund. The selection of the child-care agency as the grantee of the apprenticeship program provides a strong and coherent organizational connection to other publicly funded child-care programs, particularly to the quality set-asides in each state's Child Care and Development Fund grant. The quality set-asides in these states have played a key role in supporting the QCCI during the grant period and in sustaining the program afterward.²

Education Agencies-Head Start. State education departments are also key players in the child-care field because they often manage the Head Start program and its quality initiative, Head Start Collaboration, and in some cases are responsible for managing a portion of the postsecondary education system. DOL expected that Head Start would find the apprenticeship very useful and be involved in apprenticeship planning. This expectation was driven by the Congressional mandate that 50 percent of all Head Start teachers have two or four-year degrees by 2002, and DOL believed that apprenticeship would provide threshold training to the degrees. But despite the importance of professional development, Head Start appears to have been an under-utilized partner in the planning and development of the apprenticeship program. Among the 10 states, Iowa was the only state in which Head Start played a pivotal role. Its Head Start Collaboration office was the QCCI grantee, and has been initiating the state's professional development initiative. In addition, Head Start leaders and practitioners were instrumental in organizing the apprenticeship in two of the three local pilot areas in Iowa. In only four other states—Alaska, Montana, Oklahoma, and South Dakota—did the Head Start Collaboration play any significant role in developing and planning the grant and the apprenticeship design. The limited evidence available on this question suggests that Head Start had its own resources available.

Apprenticeship Agencies. Apprenticeship-agency grantees were expected to develop standards quickly because they understood the apprenticeship method and the

² There is a discussion of the funds available for sustaining child-care apprenticeships in Chapter IV.

role that standards play in the program. However there were substantial differences among the two state-apprenticeship agency grantees, California and Washington. In Washington, the apprenticeship agency itself played a limited role, but it contracted out the design and operation of the grant to a college that was quite familiar with both child-care and apprenticeship issues. The Washington grantee was able to move through the planning phase quickly. In California, on the other hand, the apprenticeship agency retained all the design and planning work. Despite the experience with apprenticeship, the state was very slow to develop partnerships and create its standards.

Project Management

Five grantees have kept project management in whole or in part within the grantee organization. In these states, either sufficient inter-organizational relationships were already present, there were enough staff to work at least part-time with the apprenticeship program, or the grantee felt that keeping administration in-house best suited their plan for the program. The remaining five grantees decided to contract out the project management aspect of apprenticeship. Generally, the reasons given were staff shortages and the understanding that outside organizations would provide the grantee with the contacts and promotional skills needed to operate the apprenticeship program. Regardless of which path a grantee took, each had to select a coordinator who typically took on the following duties:

- Work with apprenticeship system representatives to develop the apprenticeship standards.
- Work with educators to develop a curriculum or identifying existing courses of study that would be appropriate for the apprenticeship
- Ensure that the apprenticeship would fit in with other child-care credential and diploma programs.
- Conduct the implementation tasks of recruiting and managing the training.

We observed several factors that were instrumental in selecting a project manager. Location in an area with large numbers of potential sponsors and apprentices as in Nevada and Kansas was important. In Nevada, the child-care agency grantee selected the Washoe County School District—the state’s second largest school district. Kansas selected a community college in the area of the state’s largest city. The second factor is experience with child-care professional development, as in Washington and Nevada. There, the respective project managers were already playing important roles in child-care professional development. In Nevada, the Washoe child-care director was president of

the state unit of the National Association for the Education of Young Children and had excellent contacts with educators and center directors in the state. In Washington, the state apprenticeship agency contracted with Clover Park Technical College in Tacoma, which delivers training to existing apprenticeship programs in child-care and other fields. The project manager is familiar with both the child-care content and the apprenticeship method. She is also deeply committed to the project and continued as the volunteer state coordinator even though she retired from the college.

Among the states that retained project management, existing organizational strength within the child-care agency was decisive. South Dakota reasoned that its child-care agency was one of a few, if not the only, organization within the state with adequate resources to develop and implement the program. The agency had also already developed the state's professional development initiative, and had worked to achieve articulation between the initiative and the Child Care Development Associate credential. Montana felt that it was quite well prepared for project management because of its extensive work with the professional development initiative and apprenticeship standards before the grant.

Organizational and Professional Relationships

In addition to these contractual relationships between the grantee and the project management organization, grantees also found it beneficial for program design to develop partnerships among the child-care agencies, professionals, and educators. Although the specific organizational relationships differed, forming some kind of ongoing organizational and professional relationship was a common factor among virtually every grantee. Two types of organizational relationships appeared to be particularly successful: (1) an organizational arrangement in which most of the child-care functions were housed in a single organization and (2) the development of a network between child-care practitioners and advocates and educators responsible for training child-care workers.

Partnerships are Critical Just as the type of the grantee organization conferred certain unique advantages to their planning process, the type and number of organizational partnerships also offered a critical contribution to the planning and development of the grantee's apprenticeship program.

As previously discussed, most grantees have all their basic child-care system functions—licensing, subsidy, and professional development—in the child-care agency. These states, where the grantee was the child-care agency, were able to draw on the full range of public child-care resources to plan the QCCI program. For example, several

II. Planning the Apprenticeship

states were able to draw on funds from the Child Care and Development Fund to supplement the QCCI grant. In addition, the apprenticeship was readily incorporated into the state's professional development initiative and linked to other functions within the agency, such as licensing and tiered reimbursement policies (discussed later). The states in which the grantee was not the child-care agency itself seemed to have experienced more difficulties in coordinating the apprenticeship with other child-care professional development.

The second type of arrangement, a network between child-care professionals and educators, was perhaps most evident in Nevada. The initial project manager in that state personified a network hub. She held a leadership position in both the practitioner and education communities. She was the founder and president of the Nevada Association for the Education of Young Children and was an active member on the state's Child Care Advisory Committee. On the education side, she is director of early childhood education for the state's second largest school district. She also formerly chaired the University of Nevada-Reno's Early Childhood and Education Department. As a result of her background and experiences, she was able to bring both practitioners and educators into the planning process for the apprenticeship program. The child-care agency grantee also provided substantial encouragement to this network.

In Oklahoma, the QCCI program administrator is head of the child-care technical assistance unit of the state's most important educational institution. She also has strong ties to the child-care community as the administrator of other early childhood professional development programs. As an instructor, she established strong relationships with many child-care practitioners, who were former students.

Iowa also has both types of networks at the local level, but these networks were largely absent from state-level QCCI planning. The state's integrated child-care agency decided not to play a role in planning. The state also has networks that link child-care educators and practitioners, but these networks were not particularly influential during the planning phase because of the more localized nature of Iowa's pilot approach.

Colorado has the benefit of both consolidated organizational linkages and the development of a close relationship between practitioners and educators. The state has a small group of people from the administrative agency, non-profits, practitioners, and academics with both research and teaching credentials who work together on all child-care issues. They form the core of the state's Professional Development Advisory

Council, which was a driving force behind the consolidated child-care pilots and the professional development initiative, as well as the QCCI program.

Partnerships with Apprenticeship and other Workforce Development Agencies

For almost all of the states, the apprenticeship model was completely new to child-care when DOL solicited proposals. As a result, despite the extensive networks and partnerships, there were two serious obstacles for the grantees to overcome in the planning process: adapting the apprenticeship model to fit the requirements of the child-care industry and getting the child-care industry to learn about, and commit to, the key features of the apprenticeship program. Virtually every grantee wanted to establish an effective working partnership between the child-care agencies, and DOL or SAC staff. Because there has not been a historical connection between the two groups, people in both areas of expertise needed to develop new relationships and to learn an entirely new vocabulary.³

Apprenticeship

State and federal apprenticeship officials were uniformly helpful in explaining apprenticeship requirements and the reasons behind those requirements, as well as, in some cases, providing help with the grant applications themselves. State and federal officials regularly counseled local committees and center directors on compliance with regulations and how to register their specific programs. In general, the grantees stated that the support received from DOL and state apprenticeship officials was invaluable to the development of the program. In Kansas for example, the State Apprenticeship Council program director served as an advisory member of the apprenticeship committee to guide the committee in the design of an apprenticeship system. In Alaska, the state 's DOL apprenticeship director took a substantial role in that state's grant application by reviewing the state's first unsuccessful grant application and identifying the changes needed to make the application successful. He continued to be very active in helping the advisory committee develop standards and negotiate with the University of Alaska over related instruction.

³ Several states among the ten western grantees, including California, Colorado, Kansas, and Washington, had previously experimented with limited and isolated child-care apprenticeship programs. The programs in California, Colorado, and Kansas are defunct. The chief benefit of these programs seems to have been to inform the states about the fragility of such a program. Washington's older apprenticeships are the only ones still operating, and they have remained distinct from the QCCI apprenticeship.

II. Planning the Apprenticeship

We observed no differences in the extent or form of technical assistance provided in support of QCCI planning between states that had only a federal presence and states with both a federal program and a State Apprenticeship Council. However, there were two distinct approaches used by the apprenticeship agencies. The first is an approach in which the apprenticeship staff indicated that they would be very flexible in accepting standards that the industry wanted. The second is a more regulatory approach in which the apprenticeship staff emphasized consistency and sought a greater measure of conformity to other apprenticeship programs.

The flexible approach was most visible in Iowa where DOL staff worked extensively with the local apprenticeship committees to develop standards that would be useful and manageable for sponsors and apprentices in those areas, while at the same time meeting federal requirements. In both the Waterloo and Northwest Iowa areas that SPR visited, DOL staff assisted local committees to develop their standards. Even though DOL staff knew that the standards were imperfect, they accepted them anyway, stating that the goal was to get the apprenticeship started and that they could make adjustments after the program was up and running.

In contrast, DOL's Colorado office emphasized a somewhat less laissez-faire approach. The state director also had a strong commitment to QCCI, participating as a member of the advisory committee for the child-care apprenticeship and helping with marketing and providing technical assistance. Nevertheless, he was also concerned about compliance with apprenticeship's regulatory requirements, which he thought were a good predictor of long-term program success. He felt, for example, that the slow pace of the pilot site in submitting the signed sponsor agreements did not bode well for the future of the apprenticeship. He feared that paperwork problems reflected deeper issues, perhaps a lack of understanding of the apprenticeship training method on the part of sponsors. In his experience, several local apprenticeships that had similar difficulties in submitting the required documentation eventually foundered. He was also concerned about how the project would secure a future source of funding for related instruction. In response to these concerns, he planned to conduct monitoring visits to promote compliance with paperwork requirements, consistency across sponsors, and conformity with the standards.

Workforce Development

Since the apprenticeship system is an integral part of the public workforce development system, DOL officials had some expectation that there might be a close connection between QCCI and the state and local workforce boards that govern the One-Stop centers created under the Workforce Investment Act. Several grantees made specific efforts to link to the One-Stop system, but only two states were successful. In Nevada, the partnership is mutually beneficial. The apprenticeship program refers child-care workers who need other employment services to One-Stop centers, while the One-Stop centers refer job seekers interested in child-care training to the apprenticeship program.

In Alaska, there has been successful collaboration at both the state and local levels. The State Workforce Board participated directly in the development of the QCCI application and agreed to provide a \$50,000 grant from state Workforce Investment Act reserve funds to supplement the QCCI grant to extend the project beyond its 18-month term. In addition, the Juneau Local Workforce Board approved the child-care apprenticeship as an eligible training provider. This action will permit the use of local Workforce Investment Act training funds to pay for related instruction and other training costs. The local board noted that the existence of an apprentice's job will raise that local area's Workforce Investment Act placement-performance measure. Other local boards in Alaska and elsewhere drew a different conclusion. Despite the expected increases in placement rates, these other local boards concluded that the low wages in the child-care industry would hurt their performance-earnings measure, and they did not approve the QCCI program as an eligible training provider. In South Dakota, approval of the QCCI as an eligible provider is still pending. The Pierre One-Stop-center director recommended approval, contending that the low wages inherent to the child-care industry would not hurt that area's performance measures. However, the Local Board has yet to approve the program.

Partnership with One-Stop System. According to one Nevada official, the close partnership between Nevada's WIA One-Stop system and the state's apprenticeship program developed into a virtual employment agency. However, it appears that such a close relationship is somewhat unique among the grantees.

The Iowa grantee included staff from the state's workforce development agency on its planning committee at the beginning of the project. Apprenticeship leaders felt that the workforce system could help with links to School-to-Work and Tech-Prep programs

and provide English-as-a-second-language instruction to apprentices with limited English proficiency. However, after a few meetings, all parties agreed that they were unlikely to realize such expectations in the near term, and the workforce development staff dropped out of the planning process.

INFLUENCE OF THE PROFESSIONAL DEVELOPMENT INITIATIVE ON QCCI PLANNING

Nearly all of the 10 grantees were already involved in a broad movement to elevate the professionalism and quality of care provided by the child-care workforce, generally known as a professional development initiative. These initiatives are comprehensive efforts to establish standards, to provide clear paths for career advancement and mobility, and to create programs that increase skills, wages, retention, and quality of care.

Professional development initiatives typically have the following components:

- **Core competencies** establish the knowledge, skills, and abilities that child-care workers should possess at different levels of the career lattice. A competency-based framework for the training system allows local flexibility and yet provides for consistency and measurable quality. In all 10 states, these competencies are based on standards developed by the National Association for the Education of Young Children.
- **Career lattices** provide logical career paths for workers, both upward and laterally, based on achieving the core competencies required for each position.
- **Articulation** of training curricula allows child-care workers to take classes for one credential or degree and have that academic work recognized by institutions providing the next higher credential. For example, the apprenticeship's related instruction should provide credits for an associate degree at a community college and a bachelor's degree at a four-year institution.
- **Workforce-improvement programs** synthesize the other components of the professional development initiative and link workforce-quality improvements to improvements in quality of care. These are typically programs that link compensation to increases in skills, such as the apprenticeship.

Link to PDI is Important.
The relation of the apprenticeship program to the overall scheme of the state's professional development initiative appears to be a strong indication of the state's ability to sustain and expand apprenticeship.

Establishing a clear linkage to the professional development initiative in general and to these particular components is one of the key apprenticeship planning tasks.

Core Competencies

The foundation of each professional development initiative typically is a set of core competencies. The competencies provide, in the words of a Kansas brochure promoting its professional development initiative, a basis for child-care professionalism:

- Knowledge and experience required for the delivery of quality care.
- A foundation for teaching decisions and practices.
- An understanding of child growth and development. Child-care workers should understand how children acquire language and creative expression and develop physically, cognitively, and socially.
- Standards or expectations for each of the above competencies to support the professionalization of the early childhood education field.

The competencies, based on materials developed by the National Association for the Education of Young Children, are in effect, the industry’s skill standards. Thus, the use of core competencies has been quite consistent with the general emphasis in most apprenticeship programs to adopt industry standards that enable a certificate of completion to be a portable, widely recognized credential. Montana’s core competencies, which are fairly representative of other grantees, are displayed in Exhibit II-2.

**Exhibit II-2
Montana’s Core Competency Topics**

Health, safety and nutrition	Family and community partnerships
Child growth and development	Program management
Environmental design	Curriculum
Child guidance	Professionalism
Observation and assessment	Personal attributes and characteristics

Cultural and developmental diversity are embedded in each competency

These competencies provide the framework for the apprenticeship, facilitating credentialing and assessing staff skills, making credentials portable, and allowing post-secondary schools to develop curricula to support professional development. In each case where competencies were prepared before the apprenticeship grant, the apprenticeship based its competencies on that pre-existing set. For example, Washington’s competencies were

Competencies are the Foundation. The NAEYC core competencies are the foundation for child-care staff training in the apprenticeship and in other programs. They facilitate portability, curriculum development, and articulation between credentials and between educational institutions.

II. Planning the Apprenticeship

based on a Skills Standards Project for Early Childhood Education sponsored by the state Board of Community and Technical Colleges. The project defined the necessary skills for child-care providers, thus creating standards for the state's professional development initiative. The QCCI project manager then hired a consultant to use the competencies as the basis for organizing and specifying the state's apprenticeship standards and curriculum.

Career Lattice

The career lattice describes the multiple career paths or levels available to a worker. A worker moving from one level to another must have the cumulative knowledge and skills of the new level and those from the former level. In addition, some lattices had expected wage levels set at each step, which workers could expect in recognition of their increased skills.

The lattice is intended to be comprehensive and describe movements laterally to other jobs or positions within the child-care industry, such as supervisory and administrative roles within centers or administrative agencies, as well as upward movement through a career ladder in the classroom line, such as from apprentice to journey worker. However, we found that the primary emphasis is actually narrower, focusing on the ladder and not the lattice. This emphasis is understandable because it addresses one of the key factors in the quality dilemma, high turnover among classroom workers.

Apprenticeship, with its dedication to improving skills and increasing wages, works well with the career ladder structure. In the states where the QCCI grant emerged as part of the existing professional development initiative, participation in the apprenticeship offers a specific way for a worker to progress in the lattice. All but one of the states placed the apprenticeship either directly in the career ladder or made the apprenticeship's requirements functionally equivalent. Oklahoma, which had designed its lattice well before the apprenticeship program began, is planning to integrate it with the apprenticeship. This inclusion signifies an important commitment to the apprenticeship by the state professional development initiative.

Exhibit II-3 displays several examples of the training required for the various levels of state lattices.

**Exhibit II-3
Career Lattice Ranks**

<u>Alaska</u>	<u>Colorado</u>	<u>Kansas</u>	<u>Washington (Apprenticeship only)</u>
Basic Certificate (2 levels)			
Child Development Associate—Year 1 of apprenticeship	Child Development Associate—Year 1 of apprenticeship	Aide (Child Development Associate—Year 1 of apprenticeship)	Child Development Associate—Year 1 of apprenticeship
Journey worker	Journey worker	Teacher assistant (Journey worker)	Journey Worker
Associate’s degree	Associate’s degree	Teacher associate (Associate degree)	
Bachelor’s degree	Bachelor’s degree	Teacher (Bachelor’s degree)	
Master’s degree	Master’s degree	Advanced teacher (Masters and doctoral degrees)	
Doctoral degree (not available in state)	Doctoral degree		

The use of multiple levels that characterize all the child-care career ladders stands in sharp contrast to the structure of apprenticeships in other industries, such as the building trades, that typically use a career ladder with two steps: an apprentice and a journey worker. The only exception to this among QCCI grantees is Washington’s career lattice. Reflecting its apprenticeship origins and its independence from the child-care career system, Washington’s lattice has only these two levels.⁴

Regardless of the number of levels, the western states have the Child Development Associate credential as the first rung, which recognizes the importance of the Child Development Associate credential in the child-care industry. The training for this credential typically comprised year one of the apprenticeship, and many apprentices whom we interviewed confirmed that they were pleased at being able to get the credential

⁴ Washington does have a specialized third level, Educational professional. However, this classification is only available for centers in their K-12 sites.

through their participation in apprenticeship. Washington and Montana were the only states that did not fully integrate the Child Development Associate certificate. Although these states included the Child Development Associate requirements into their curriculum, Washington did not pay for the examination and materials and Montana required the apprentices to submit paperwork on their own.

Articulation: Establishing Equivalencies among Different Training and Credentialing Systems

The process of establishing equivalencies between different training and credentialing systems is generally known as articulation, which is the glue that binds a decentralized training system together. Before the professional development initiative, there was no rationalized system that established parity among different classroom training venues and various credentialing requirements in the child-care field. Workers seeking advancement frequently had to take classes that repeated content covered under a different system because course requirements at schools often differed or the content did not fit together. For example, an Oklahoma respondent reported that she had to repeat some classes she had previously taken during her associate-degree work.

Thus, another key element of the professional development initiative was to ensure that training curricula integrated smoothly across credential requirements and from one school to another.

Apprenticeship designers in all the states recognized this problem and ensured that the apprenticeship incorporated the limited staff training required for center licensing and used the Child Development Associate curriculum as their first year of training.

Many respondents stated that the creation of a widely accepted, well articulated credentialing system would encourage the education system to standardize its course offerings and make class credits both cumulative and transferable. In general, there had been success in the articulation of courses and credentials at the lower end of the training system by the time the grantees received the QCCI grant. As a result, the grantees were generally able to build their apprenticeship curriculum around existing state-mandated training requirements for licensing, the Child Development Associate, and the two-year early childhood education degree. Of course, slight variations or modifications existed to

Articulation with Other Credentials. All the states recognized that in order for apprenticeship to be successful, the program needed to ensure that the journey worker credential would include progress towards state licensing requirements and the Child Development Associate Credential

meet unique local needs. However, the critical points in the training program were generally standardized.

Several factors helped articulation of training requirements at the lower levels of the career lattice in addition to the use of the Child Development Associate curriculum. First, widespread adoption of the core competencies clarified training objectives for the educational institutions. In Colorado, for example, the professional development initiative worked with the state education department to base all early childhood education courses at the secondary and community college levels on the core competencies. This collaboration led to clear articulation of training content across all courses offered at both the high school and community college levels. Second, even if there were not a statewide framework, the close professional relationships that flourished between local educators and practitioners enabled community college and apprenticeship leaders to subordinate any narrower concerns to the broader objective of building the profession. Moreover, apprentices could have all their related instruction count toward an associate's degree because the apprenticeship courses were generally drawn from existing community college early childhood education course catalogs.

Subsequent articulation with four-year colleges, however, is proving to be more challenging. Respondents noted three types of articulation problems with the four-year schools. First, those colleges are far more focused on theoretical knowledge than practical experience, and therefore, are less interested in providing credit for practical experience that plays such a large part in the Child Development Associate credential, the journey worker certificate, and even many Associate's degrees. Second is the absence of close personal and professional relationships between local child-care practitioners and faculty at these educational institutions. The four-year schools are usually geographically distant, and their faculty members do not work as frequently with practitioners as do community college faculty. Third, in some states, these schools also enjoy greater academic and political independence, and thus, their curricula are less subject to influence from local elected officials, practitioners, and administrative agencies. In Colorado, for example, only a single four-year college in the Denver area accepts all the community college credits. Thus, it is no surprise that 80 percent of Red Rocks Community College students who continue beyond the associate level transfer to this college.

In Alaska, which has no community colleges, articulation takes on a very different complexion. The University of Alaska offers associate degrees for a number of apprenticeship programs, but it considers such degrees as terminal and does not accept

any of its own credits for four-year degrees. Academic officials feel that recognizing apprenticeship training would diminish rigorous academic standards and reduce the value of their four-year degree in early childhood education. At the time this report was written, the grantee and the DOL state director were still negotiating with the university to recognize some credits, but had not reached a successful result.

Workforce Improvement Programs

The professional development initiatives have created programs that consolidate the components of the professional development initiative toward tangible benefits for stakeholders. Like apprenticeship, these programs link skill gains to compensation increases. Of these programs, Teacher Education and Compensation Helps (TEACH) is the most prominent. TEACH requires contributions and commitments from external program funders, workers, and employers, although the specific designs can vary. The funder pays for a scholarship to support worker training. The employer compensates the worker with either a raise or a bonus after the worker completes the training, and the worker agrees to continue working for the employer for a specified period of time after training is completed. A major difference between TEACH and apprenticeship, however, is that apprenticeship assures permanent wage increases, while TEACH can use a one-time bonus.

Three states, Colorado, Washington, and Oklahoma, were operating TEACH during the evaluation period, and two others, Iowa and Kansas, were planning on introducing the program. All of these states expected to coordinate TEACH with the apprenticeship by co-enrolling apprentices in TEACH and using TEACH funds to pay for related instruction. One child-care center director in Oklahoma stated that she felt TEACH was more attractive to potential apprentices than the apprenticeship program because her workers perceive a bonus as more valuable than a small increase in hourly wage, and they still receive training. In contrast to the TEACH states, Nevada has no plans to implement TEACH because the apprenticeship program looks to be a more powerful tool than TEACH in reaching the state's child-care workforce improvement goals.

Washington has another program in addition to its version of TEACH to consolidate its professional development components. The state developed an Early Childhood Education Career Ladder Project that provides wage increases, health insurance, and paid leave to child-care workers who complete training in the field. The Career Ladder project is funded using welfare reform and Child Care and Development

Fund money and involves all child-care centers receiving state subsidies. Although there was no co-enrollment with apprenticeship at the time of the site visits, the apprenticeship made its wage standards fully compatible with the Career Ladder, which we discuss in the section on Developing Apprenticeship Standards. In contrast, California also has several compensation initiatives, but none of these was linked to the QCCI apprenticeship. Most of these programs operate as a relatively small scale, serving only a limited number of workers.

Tiered Reimbursement Programs

Several states have implemented a tiered reimbursement plan that incorporates elements of the professional development initiative. Tiered reimbursement plans provide higher payments from the subsidized child-care program to centers that meet stipulated quality standards that often include staff education and training. Although none of the programs explicitly require compensation increases for child-care workers, most states expect that centers would use most of their increased subsidy payments to finance training and wage increases.

The planned tiered reimbursement program in Alaska is exemplary in that it has extensive training requirements for all staff and provides an important place for the apprenticeship certificate. Thus, the program represents a major effort by the state to deal with the quality/pay child-care dilemma by linking increased payments directly to worker skill attainments and levels of child-care work experience. The emphasis on training is displayed in Exhibit II-4.

**Exhibit II-4
Tiered Reimbursement in Alaska
Excerpts of Training Requirements for Centers**

Star Rating	Staff Training Requirement	Director Training and Work Experience	Subsidy Increase
★	Minimum training required for licensing	12 semester hours in early childhood education	0%
★★	All staff receive at least 30 hours of training annually plus the minimum training for licensing	CDA	2
★★★	25% of staff have at least 20 hours of early childhood education credit 75% of lead staff have completed half of CDA requirements	Journey worker + 1 year	5
★★★★	50% of lead staff have CDA	Journey worker + 3 years	8
★★★★★	100% of lead staff with CDA 50% of all staff have completed half of CDA requirements	Journey worker + 5 years	15

At the three-star level and above, the journey worker certificate plus various amounts of work experience qualifies an individual to be a center director. These centers would receive from 5 to 15 percent additional subsidy. The system is designed to provide the largest subsidies to the four- and five-star centers that must invest substantially in the qualifications of their staff and director.

DIVERSITY IN PLANNING AND ORGANIZING THE INITIATIVE

As we noted in the Chapter I, DOL is strongly committed to promoting diversity in all apprenticeships. In addition, the core competencies in the child-care industry recognize that quality care demands that workers must deliver care in a culturally sensitive way for both parents and children. Thus, it would be very beneficial to quality to ensure that the planning for the apprenticeship reflects the diversity of the workers it proposes to train and the communities it will serve. In addition, diversifying the leadership of the apprenticeship is expected to broaden political support for the initiative.

Three states, Alaska, Montana, and South Dakota, reported that they took explicit steps to increase involvement of their Native American communities in the planning stages by including minority representatives among the members of the advisory committee.

DEVELOPING APPRENTICESHIP STANDARDS

Apprenticeship standards provide the essential framework for all registered apprenticeship programs. They are normally incorporated into a formal agreement between the sponsor and the apprentice laying out mutual expectations and the plan for training. Once the standards are registered with the apprenticeship agency, participating employers are assured of a path to the improvement of their workers' skills, and apprentices are assured of a clear and reliable career progression. Federal regulations require that all registered apprenticeships meet at least 22 standards, including the following key standards:⁵

- At least 144 hours per year related instruction to provide apprentices with knowledge in technical subjects related to their trade.
- Full-time on-the-job training, normally 2,000 hours per year.
- Maintenance of appropriate records.
- Proper supervision of on-the-job training with adequate facilities to train apprentices.
- No discrimination in any phase of selection, employment, or training.
- Outline of work processes that coordinate the overall training.
- Progressively increasing schedule of wages.
- A grievance procedure to resolve disputes over the apprenticeship agreement.
- Periodic evaluation of an apprentice's progress in on-the-job training and related instruction.

Typically, the first decision an apprenticeship program makes in developing apprenticeship standards is whether the standards should be applied consistently throughout the program or whether participants should have the ability to adjust the standards to address local conditions. For the child-care apprenticeship, this issue was particularly important because of the fact that child-care centers are quite diverse.

⁵ 29 CFR Part 29.5 accessed at http://www.doleta.gov/atels_bat/characte.asp

II. Planning the Apprenticeship

Two states—Colorado and Iowa—considered allowing local variation. Colorado’s state advisory committee initially planned to allow local communities to develop their own standards. But the issue became moot when only one local area expressed interest. Iowa used an entirely local planning model, under which state standards are designed to serve as a point of departure for local communities to write their own standards. The remaining states registered statewide apprenticeship standards, although all allowed for some local variation, particularly with respect to curriculum and wage issues. These two segments of the standards required more flexibility because community college curricula often differ and wages had to be tailored for each person.

Once the project managers or advisory committees made this basic structural decision, they were ready to flesh out their standards on the key topics of on-the-job-training, related instruction, and wage progression. In developing the framework they could take advantage of their experience with the professional development initiative since these topics addressed the same underlying issues. Wage progression was relatively uncontroversial because every stakeholder realized that the entire initiative would be pointless without it. However, familiarity with similar concepts did not make it easier for apprenticeship planners to resolve some of the other key standard issues. They faced challenges in deciding the minimum starting wage and the ratio of apprentices to journey workers. Resolution of these issues went to the core of the child-care workforce problem. In the remaining portion of this section, we discuss examples of how the different states resolved several easy and challenging standards issues.

Wage Progression: Easy Issue

Wage standards are one of the fundamental building blocks in any apprenticeship. At entry, apprentices typically have a base wage, which may be industry-wide or set by individual employers or union contracts. Then, as the apprentices demonstrate satisfactory progress in the training, they receive progressively higher wages at set

Nevada—Case Example of Changes in Standards. Even though a program may seek substantial consistency in its use of apprenticeship standards, they need not be static. In Nevada, the child-care apprenticeship program initially followed the State Apprenticeship Council requirement for participants to have a high school diploma. However, because the state’s community college programs in early childhood education does not require a high school diploma for entrance, the standard is potentially excluding participants from the program. Thus, the child-care apprenticeship coordinator is seeking to revise the standards to permit non-high-school graduates to participate.

intervals until they have reached the full performance or journey level at the completion of the training. Thus, the wage standards speak directly to the key goal of QCCI, simultaneously increasing worker wages and their skills.

Alaska is the only state that is using the wage progression to raise wages to a desirable target. The state set its journey worker target wage at the statewide average, which is currently \$13.86. All sponsors are expected to establish a sufficient progression to reach at least 90% of the target by the completion of the apprenticeship. In addition, local labor markets for the three urban areas could set higher local targets.⁶ The state is using its QCCI grant to facilitate the transition to this higher wage by paying the wage progression and expects that sponsors will later on pay this wage from the extra funds that they receive from the state's planned tiered reimbursement program.

With nearly everyone connected to the child-care industry agreeing that there should be a link between increased skill and increased wages, defining the wage progression was not a very difficult issue. Although planners expected some resistance from potential sponsors who had a limited means to pay for the progression, all agreed that there was no point to QCCI if there were no wage increase. Thus, all the state standards provided for a wage progression.⁷

Self-employed, family-provider-apprentices were an exception to the wage progression. Without an employer to pay the increase, family providers hoped to increase their fees. However, some Northwest Iowa family providers were skeptical of their ability to raise fees since some of their parents would likely resist any increases and some earned too little to pay any increases. Thus, the project planned to provide a \$500 stipend to these apprentices at completion in lieu of the wage increase.

⁶ The survey found a \$14 average wage in Fairbanks, but sponsors were unwilling to sign up. In response, the local committee decided to lower the wage target to \$12 to encourage more lower-paying centers to participate.

⁷ However, there was one set of standards that provided for an exception to the wage progression standard. In the Northwest Iowa pilot site, most apprentices did not have a guaranteed wage progression at all because they were self-employed family providers or worked at non-sponsoring centers. This is an anomaly in the overall system, though, as every other grantee has a wage progression explicitly in their standards.

Minimum Wage: Challenging Issue 1

Far more troubling to project administrators, local committees, sponsors, and employees was where to set the minimum wage for child-care workers. This challenge directly reflected the basic issue in the industry. That is, because wages for many child-care workers are so low to begin with, even with a wage progression, they might not reach a level that would improve retention and thus quality of care. Several states directly addressed this issue in their standards by establishing a minimum starting wage. However, such a minimum wage would exclude child-care workers at the lowest wage levels—arguably those most in need of the program—from its benefits because their employers would not be able to meet a higher starting wage level, much less a wage progression. Such an exclusion would likely fall disproportionately on centers in minority and low-income communities.

Washington decided to go ahead with a minimum wage because of a broad political commitment to increasing child-care wages. The state legislature had already created the state's Early Childhood Education Career and Wage Ladder program, which was explicitly designed to increase child-care wages and fringe benefits. So, it was relatively easy for the apprenticeship leaders to approve a minimum that was consistent with the Wage Ladder. This commitment produced a tight linkage between the two programs. For example, the Career and Wage Ladder had established a \$7.00 wage for a starting worker with a high school diploma and an \$8.00 wage for a starting worker who had 30 credits of early childhood education. The apprenticeship standards created a parallel track for an entry-level apprentice. The entry-level worker would receive a starting wage of at least \$7.00 and would progress to \$8.00 upon reaching the journey worker level. Exhibit II-4 displays the linkages between the two Washington programs.⁸

These standards permit limited flexibility for the apprenticeship coordinator and employers to modify these wage scales to respond to local conditions on a case-by-case basis because the wage ladder is lower in some areas of the state. Any such reductions could not go below the state's general minimum wage of \$6.72 (as of January 2001).

⁸ These figures are taken from the time of the site visits in 2000. Since that time the state has revised all the Career Ladder wage levels upward to reflect changes in the cost of living and increases in the state's minimum wage, which stands at \$7.01 as of January 1, 2003.

**Exhibit II-5
Wage Levels in Washington**

Career Ladder	Journey Worker	Minimum Starting Apprentice Wage
Child-Care Assistant/Associate I Entry Level	\$8.00/hour	\$7.00/hour
Child-Care Site Coordinator/Associate II	\$10.25/hour	\$8.25/hour
Education Paraprofessional ⁹	\$14.00/hour	\$11.20/hour

Nevada, by contrast, included its lowest-wage workers. Project leaders initially sought to have apprentices begin at a \$7.00 per hour wage level, with a progression in four equal steps to \$8.00. However, the leadership received complaints from some lower-paying centers and decided that establishing higher wage levels would preclude low-wage employers in both urban and rural areas from participating. They felt that including the lowest paid workers in the apprenticeship program would lead to a greater overall wage gain across the industry as a whole than would limiting their focus to the higher-paid workers. As a result, Nevada’s standards established a low minimum wage of \$6.00 per hour, allowing nearly all centers to participate. But the project managers encouraged individual centers to pay wages above the minimum.

Quality Dilemma.
Adopting a minimum wage underscored a difficult quality issue: Is it better to have lower standards in order to include the lowest-paying centers, which might make the program appear lower in quality but serve the neediest centers and workers? Or is it better to keep standards high in order to assure the credibility of the program, even if it tends to focus the program on the relatively better-funded centers?

In some states, starting wages for apprentices were even lower than those in Nevada. In South Dakota, for example, the project’s leaders did not set minimum wage because an employer-driven program should allow employers to set their own wage levels. Similarly in Kansas, some centers set a starting wage at the federal minimum

⁹ As previously noted, this level is only available in child-care centers operated by the state’s public school system, i.e. in K-12 sites.

wage level of \$5.15. Even with the state's wage progression of \$1.50, the statewide journey-wage standards would only reach \$6.65. The relatively low wage standards set in Kansas appear to reflect the views of participating center directors, who felt that the industry's low wage scale was not likely to be solved through the apprenticeship alone. Center directors saw low wages in the child-care industry as a much longer-term problem, the solution to which could only come from a substantial infusion of outside money.

In summary, the experience of these states in developing wage standards highlights the difficulty that the industry faces in increasing wages to levels that will solve the industry's workforce problems. For the most part, apprenticeship planners left actual wage levels to the ongoing operation of the child-care labor market. In states that did not raise wage levels in their standards development process, employers will explicitly set the wage levels and progressions in their individual apprenticeship agreements. Moreover, even in some of the states that established minimum wage levels, the exceptions for low wage areas or individual employers effectively left most existing low-wage levels intact.

Apprentice–Journey–Worker Ratio: Challenging Issue 2

One of the hallmarks of the apprenticeship training method is that experienced employees work side-by-side with apprentices, usually in a non-supervisory relationship, to pass on knowledge of their craft during on-the-job training. An essential component of the quality of that training lies in the ratio of apprentices to journey workers. Thus, the federal regulations require that standards establish a ratio that promotes quality, yet is realistic for the industry. In adapting this general regulation to their particular standards, states could choose a one-to-one ratio that is traditional in most apprenticeships. This would emphasize quality training by increasing the intensity of on-the-job-training instruction. However, many states expected that there would be a shortage of qualified journey workers under two conditions. First, some centers would not be able to have more than one apprentice if the ratio were set at one-to-one. Second, some states that were expecting to use traveling journey workers because some centers had nobody qualified to supervise the on-the-job-training. These sites would also need higher ratios to make the traveling arrangements economical. The absence of qualified journey workers is most evident in the weakest centers and the application of a very low ratio—with its attendant higher quality—would likely exclude such centers. Thus, in making this decision, project leaders were effectively deciding between quality and inclusiveness, much like the debate over the minimum wage.

Four states established ratios of one to one, though two of the states allowed greater ratios if necessary. Thus, these states would expect maximum quality but could enroll sponsors that did not have a sufficient number of qualified employees to provide the implicit high-quality supervision that a one-to-one ratio offered.

Other states increased the ratio because most potential sponsors lacked qualified people to serve as journey workers. Six states established higher ratios. Iowa was the most permissive, with its state-model standards allowing a ratio as high as four to one, though local areas may have smaller ratios. Project leaders in Iowa inverted the quality argument. A high ratio, they contended, would allow centers to select only their most qualified staff for the journey worker position. Using only these better-trained workers would more than compensate for the reduced supervision time they might be able to give to each apprentice.

DURATION OF THE PLANNING PROCESS

Some of the states accomplished all their planning (from the time grant funds were available to the completion of standards) in fairly short order and were ready to move on to implement their program. The states with the strongest interest in the apprenticeship generally were fastest to complete the planning period. Nevada completed its planning in less than two months, and Montana even had its standards completed before the grant because of earlier interest. By contrast, two states took a year or longer.¹⁰

Several states in the first grantee group attributed their lengthy planning period to procurement issues, and political and organizational constraints. In Iowa, for example, the education-agency-grantee had few resources to support its contractor and the state's child-care agency was unwilling to participate in the planning process. The state also received the smallest grant and sought to husband its resources carefully. Two other states faced delays because of design issues. Alaska took almost a year to complete its standards for several reasons. First, the state established a very ambitious agenda for its extensive professional development initiative (funded, as discussed above by a special Congressional appropriation) that had a longer time frame than the DOL grant. Second, the state grappled directly in its standards process with the very difficult quality issue of raising the minimum wage substantially. And finally, the extensive negotiations with the University of Alaska over related instruction also contributed to the delay. California took even longer. It

¹⁰ The median duration was about 5 months.

suffered greatly from lack of familiarity with the child-care system. Its apprenticeship agency staff sought to develop knowledge of the child-care industry without much direct help from child-care partners. This learning curve greatly delayed the standards. Further, its advisory committee met only infrequently and was not well structured to provide ongoing policy direction to the staff.

MOVING TOWARD IMPLEMENTATION

As described in this chapter, the western states had a number of similar experiences in planning for the child-care apprenticeship. All the states benefited from a favorable environment that provided a strong foundation for applying for the grant and the subsequent planning. There already existed a broad base of political support, a strong network of child-care agencies and educators, an active professional development initiative, and technical assistance from the apprenticeship system. The states also faced the same fundamental workforce problems. Thus, the basic designs that emerged from the planning period were structured along the lines that DOL intended. Perhaps most heartening was the relatively easy establishment of the wage progression standard. The uniformity on this issue suggests that the grantees accept the fundamental premise of QCCI to increase workers' pay and skill levels at the same time.

Despite this broad commonality, variations emerged in two important planning areas; 1) the linkage to the professional development initiative and 2) how standards were developed to address quality-inclusiveness issues. First, regarding professional development, there was substantial variation in the extent to which the apprenticeship is linked. Montana and South Dakota, for example, have very tight linkages with a clear place for the apprenticeship as the principal form of entry-level training. Nevada, which had no pre-existing professional development initiative, is beginning to develop a comprehensive professional development initiative starting from its apprenticeship. This greatly facilitated the path to quick implementation. By contrast, Oklahoma and Colorado did not design an exclusive spot for the apprenticeship. Rather, in those states, it was one of a menu of choices for practitioners. As we shall see in the next chapter, these states implemented the program somewhat more slowly.

Regarding standards, perhaps the most important variation in apprenticeship designs among the states lies in the different choices they made in setting the critical quality-related standards. They could set wage standards low in order to include the weaker centers or high, which excludes weaker centers.

Several states considered setting a minimum starting wage at a high enough level to encourage the lowest paying centers to increase their entry wages. Proponents of higher minimum wages argued that the wage progression, by itself, would not serve the purposes of the initiative because the lowest-paid workers would remain at unacceptably low wages, even after completing the program. However, in the end, only one of the grantees, Alaska, set its minimum wage standards at a level that challenged current wage levels in the industry; the majority of the states elected to leave their minimum starting wage levels low enough so that virtually all centers could participate without increasing wage levels. These states concluded that they should not exclude even the lowest-paying centers because the workers at those centers had perhaps the greatest need for the apprenticeship program's benefits—for example, portable certificates of skills and experience that they could use in seeking better jobs. But, by setting a low minimum wage, effectively providing inclusiveness, there is a danger that a wage progression might not reach a high enough level to adequately address the quality conundrum.

It is important to note that this debate about how to establish quality occurs not only in setting apprenticeship standards but also elsewhere in the professional development initiative and even throughout the industry. Thus the general question becomes: Should programs, such as the apprenticeship, that aim to increase quality of care, be offered immediately to the weakest child-care centers? Or, should these centers be assisted in achieving some intermediate quality standards before being allowed to participate in a workforce quality program? In Chapter III, we examine a number of implementation issues that raise these very questions.

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III. IMPLEMENTING THE INITIATIVE

INTRODUCTION

In this chapter, we explore (1) how the grantees actually began to build their child-care apprenticeships based on the plans, standards, and the professional development initiative, and (2) how these programs operated in the early stages of implementation.

In general, there were two dimensions that greatly affected the implementation of the apprenticeship program. The first dimension was whether the program was implemented at a statewide level or piloted in limited geographical area to test out the program before full statewide implementation. As illustrated in Exhibit III-1, just over half of the states used a pilot approach. Generally, statewide programs recruited a greater number of sponsors and apprentices in a shorter period of time.

**Exhibit III-1
Implementation Sites**

<u>State</u>	<u>Implementation Approach</u>	<u>Sites</u>
Alaska	Pilot Centralized with local network	Anchorage, Juneau, and Fairbanks, comprising the majority of the state's population
California	Pilot	Nine counties, covering northern and southern California [no implementation actually has begun].
Colorado	Pilot Centralized with local network	Jefferson, Gilpin, and Clear Creek Counties in the Denver metropolitan area
Iowa	Pilot Local network	Davenport (medium size city) Waterloo (medium size city) Northwest Region (small, rural communities)
Kansas	Pilot Centralized with local network	Butler County (Wichita metropolitan area) for initial implementation, then expand to areas where demand exists
Montana	Statewide Centralized	All areas of the state are included; rural areas are supported by a correspondence course
Nevada	Statewide Centralized	All areas of the state
Oklahoma	Pilot Centralized with local network	Ten counties in the central Oklahoma, including Oklahoma City

III. Implementing the Initiative

State	Implementation Approach	Sites
South Dakota	Statewide Centralized but with sponsor discretion	All areas of the state are included; rural areas supported through internet and video conferencing courses
Washington	Statewide Centralized	Areas served by eight community colleges in all regions of the state

The second dimension that greatly affected implementation was the extent to which their program emphasized centralized or local responsibility. That is, some programs had more centralized responsibility, in which the program staff were critical to the success of the program and invested more time in designing, implementing, and managing the program. Under a centralized system, a coordinator has the main responsibility to carry out and support the program. In contrast, some programs emphasized local systems in which volunteer stakeholders formed local committees to carry out and support the program. The local groups, while having to follow the basic standards, such as of number of hours in on-the-job training and the type of related instruction, were often given the authority to customize the program to meet their needs, particularly as it related to the management and implementation of the on-the-job training.

Montana, Nevada, and Washington had a more centralized model relying heavily on project staff to recruit participants and arrange for educational institutions to provide the related instruction. The use of a centralized implementation model reduced the time that it took to begin implementation, thus allowing these states to serve more apprentices under the grant than other states during the earliest implementation period.¹

Alaska, Colorado, Kansas, and Oklahoma, all of which piloted the apprenticeship program, developed an implementation model that relied more on local networks of centers, resource and referral agencies, and community colleges to refine the design, recruit participants, and deliver training to meet local needs.

Two states, South Dakota and California, combined localized and centralized methods. South Dakota's state staff developed tools for the on-the-job training curriculum, but they left the decision of whether to use of these tools up to each center. California, which had not yet implemented its program, plans to use its regular apprenticeship to recruit sponsors, but the sponsors will need to rely on local child-care networks to obtain the related instruction.

¹ See Exhibit I-4 in Chapter I.

Iowa adopted the most localized model with virtually complete local discretion and control. In this case, the state-level partners developed a general set of apprenticeship standards that each local apprenticeship committee was invited to customize to meet local conditions. Under this model, local networks of stakeholders carried out all the tasks associated with implementing the apprenticeship—from developing locally tailored apprenticeship standards, to recruiting participants, to developing training curricula and arranging for the delivery of related training. In the two local areas we visited, the development of effective local implementation networks was facilitated by strong personal and professional relationships that already existed among the key local partners.

Using these general models and approaches, the grantees took up the specific tasks to implement an apprenticeship system: recruiting participants (the sponsors, journey workers, and apprentices) and providing the actual training. We also discuss how the grantees financed their initiatives—including costs and revenues. We conclude this chapter by describing efforts made to build diversity into the project to ensure that the child-care apprenticeship would be available to sub-groups of sponsors and workers who often have less access to other child-care quality and workforce development programs.

RECRUITING PROJECT SPONSORS, APPRENTICES, AND JOURNEY WORKERS

Regardless of the general approach, each grantee had to recruit sponsors, apprentices, and journey workers. Some grantees already had obtained initial commitments from potential sponsors at the time they had prepared their QCCI grant applications. However, even those employers and industry workers who had previously indicated interest in the program often required further efforts to familiarize them with the details of apprenticeships and secure their continued commitment to the project.

Below, we first discuss the participation goals established by the grantees and how these goals shaped recruitment strategies. Then we discuss sequentially the varied practices used to recruit sponsors, apprentices, and journey workers.

Overall Recruiting Emphasis

Early in the design of their projects, grantees typically made several key decisions that significantly shaped participation goals for their child-care apprenticeship systems and had important implications for recruitment practices. Project leaders needed to answer questions about the types of participants they wanted:

- **Types of providers.** Should the project include a broad range of provider types, from individual family providers to group homes (definitions vary, but generally these are larger family providers with employees) to centers, or a narrower range of providers? Centers themselves can range in type from national, for-profit chains to local, community-based organizations. Should the project target the full range of center types or a narrower segment within that range? A related question was whether to serve unlicensed group and family providers in states that permitted such care.
- **Types of workers.** Should part-time workers in Head Start and after-school care participate, even if the apprenticeship duration in those workplaces would have to increase?
- **Age domains.** Should the project include providers of care for some or all of the age domains: infant/toddler, pre-school/Head Start, and school-age/after-school?
- **Setting quality standards for sponsors.** Should the QCCI project establish minimum quality standards that centers must meet in order to participate in the apprenticeship program?
- **Setting quality standards for journey workers.** Should the project require journey workers to meet certain quality standards in order to supervise apprentices? Should journey workers themselves undergo mentor training (discussed in Chapter II)?

We discuss each of these key decisions in turn.

Types of Providers. Typically, the first decision about participation goals revolved around what type of providers the apprenticeship program should serve. All of the states decided to emphasize center-based care. Only Montana and South Dakota served group homes and one pilot area in Iowa and the local Colorado site focused on family providers. Many of these states wanted to focus their efforts on designing the basics of the program, and focused on child care centers before expanding it to accommodate group or family providers. One reason, grantees often explained, was the additional costs of hiring journey workers for on-the-job training. In Nevada, the apprenticeship was also redundant for family providers because this group already had a professional development program. The apprenticeship program could simply refer interested family providers to the established resource. Montana and South Dakota served group home providers that had a qualified journey worker on site. Uniquely, the Northwest Iowa pilot designed the program for family providers, and not child care centers. Targeting family providers was believed essential because there were few centers in this very rural area.

The states were uniform regarding types of centers and licensing. None made any distinction, for example, between for-profit national chains or local community-based centers. All required licensing, including group and family providers to assure a minimum level of safety.² Iowa, which licenses family providers, limited its program to licensed providers. South Dakota, which does not license its family providers, was unable to serve family providers.

Types of Workers. The second major decision was whether to include Head Start and after-school programs that often employ part-time staff. This decision generated considerable variation among the grantees. At one end of the spectrum, Colorado and Nevada did not recruit any Head Start centers as apprenticeship sponsors. In those states, apprenticeship officials advised against recruiting Head Start centers because they operate with only part-time workers. These officials were concerned that part-time workers, who could not meet the 2000-hour-per-year standard, would take too long to complete the program and would increase drop-out rates. Other grantees accepted Head Start centers. Since Head Start officials were instrumental in the apprenticeship effort in Iowa, they designed the program to include Head Start from the beginning. Other grantees did not experience as much involvement from Head Start, but accepted Head Start centers nonetheless.

Part-Time Workers and Drop-Out Rates. Registering part-time workers, especially those in Head Start and school-age programs, was seen as problematical by several states because of the longer time to complete the program increases the drop-out risk.

The states that included part-time centers varied in their definition of part-time. Most of those states that accepted Head Start centers, used a 30-hour per week minimum, the typical hours of operation for Head Start Centers. However, Alaska allowed centers that were open as few as 20 hours per week to participate. As a result of these time requirements, none of these states had providers that were solely after-school programs. Several states had apprentices who worked with after-school children, but they worked full-time because they were housed in centers that had multiple age domains and therefore were open longer hours.

Age Domains. The third program-shaping decision that grantees made was whether they would seek participation from providers serving all age domains. All the

² Unlicensed centers are rare or non-existent, so licensing was not an issue for that type of provider.

grantees reached the same conclusion that workers from all age domains should be included.

Setting Quality Standards for Sponsors. Setting an appropriate quality standard for sponsors is another example of a critical quality-accessibility tradeoff, like the standards issues of the minimum wage discussed in Chapter II. Here, the grantees varied considerably, as Exhibit III-3 summarizes.

**Exhibit III-3
Quality of Providers Recruited by Apprenticeship Program**

<u>High quality providers</u>	<u>Low quality providers</u>	<u>No preference</u>
California	Nevada	Oklahoma
Colorado	Alaska	South Dakota
Iowa		Washington
Kansas		
Montana		

Five states explicitly use quality criteria in recruiting. The Northwest Iowa pilot site established the highest standard, limiting participation to accredited centers. The Iowa committees contend that non-accredited centers could not provide excellent training, thus lowering the value of the journey worker credential.³ Colorado's Triad program emphasizes centers that are participating in its quality activities through its resource and referral and education functions. Kansas and Montana both allow only centers that have well-trained journey workers.

The other states took a neutral stance or explicitly targeted lower-quality providers. The neutral states felt that staff development and quality improvement efforts on the part of any provider, regardless of initial level of quality, would benefit the system as a whole. Providers are generally accepted as long as they are licensed, could provide both an apprentice and journey person, and are willing to commit to the apprenticeship standards. Nevada and Alaska, however, felt that serving low-quality providers would result in greater quality improvements for the overall child-care system. Nevada wanted to serve providers most in need of training. In Alaska, targeting these providers was consistent

³ Although there was no comparable requirement for family providers, the explicit objective in the Northwest Iowa pilot was to help providers prepare for accreditation from the National Association of Family Child Care.

with the basic thrust of its professional development initiative, which reserved the highest incentives in its tiered reimbursement program to encourage the lowest-quality providers to enter the quality-improvement system.

Recruiting Sponsors

Central to most apprenticeship recruiting plans is to first obtain the sponsors, who, in turn, recruit the other participants—the apprentices and journey workers. Most of the states did exactly this. There are, however, important differences in the overall recruitment strategies and specific tactics, which frequently varied according to the size of the geographical area. But a few states reversed the pattern, first recruiting potential apprentices and then going to their employers to become sponsors. We discuss these approaches in the section on recruiting apprentices.

Recruiting Strategies

Local Networks. The methods used to recruit sponsors and apprentices in the pilot states heavily relied on personal contacts within pre-existing networks. At one end of the spectrum, Colorado and Iowa took advantage of pre-existing relationships and recruited among centers that were already active in other professional development initiatives. Likewise, Alaska, Kansas, and Oklahoma pilot projects relied heavily on personal contacts and word of mouth; however, they also spent concentrated effort in recruiting from a broader market. In Oklahoma, most of these efforts were in the form of presentations within the child-care industry, such as during conferences and other large meetings. Kansas used this same strategy, but also utilized the mailing lists of the two local resource and referral agencies, and mailed informational packets to all child-care centers in a 20-county region.

Personal Recruiting Is Essential. Personal contact with potential sponsors and apprentices was clearly the most effective method of recruiting, regardless of other efforts or factors.

Marketing Tactics. The projects that began with a statewide implementation approach were faced with recruiting providers across a large geographical area. In each state, this challenge resulted in the use of mass marketing tactics, followed by personal contact. For example, the project managers of Nevada and Washington initially mailed printed flyers to center directors and placed articles in the newsletters of resource and referral agencies and advocacy organizations. They also arranged for project partners to make presentations at professional conferences. However, the project managers in both states noted that these efforts were useful, but not sufficient. They then turned to face-to-face recruiting efforts. For example, the Washington project manager's recruitment

success rate dramatically improved after she began to make personal visits to center directors at their centers. The Nevada project manager and the regional coordinators also reported that personal visits to center directors were critical for successful recruiting.

Projects also occasionally targeted larger child-care providers, which if recruited, would lead to a large influx of sponsor centers, apprentices, and journey workers. For example, in Washington, the project recruited three different providers, each of which had multiple facilities across the state. These resulted in close to 20 apprentices from each of the provider groups. In California, the grantee's staff were in communication with large providers at the San Francisco airport and two hospitals. They also met with a statewide organization that manages 150 centers.

The federal apprenticeship staff played both direct and indirect roles, in recruiting sponsors. First, DOL or state apprenticeship council staff often had to help the child-care staff understand apprenticeship, so the latter could effectively explain apprenticeship concepts during recruitment efforts. Second, the federal apprenticeship staff worked directly in recruiting. In Nevada, for example, DOL apprenticeship staff and QCCI coordinators traveled as a team to child-care centers.

Response to Recruitment Efforts

Overall, our respondents reported that center directors responded favorably to recruitment efforts, with a high percentage agreeing to become sponsors. The most important factor that influenced center directors to participate was their expectation that participation in the apprenticeship program would decrease turnover. The Iowa and South Dakota project managers made precisely this argument to center directors, suggesting that they could finance the apprenticeship's wage progression by using the funds saved from reduced costs for recruiting and training new employees.⁴

Excellent recruiting strategies and tactics notwithstanding, some center directors turned down the opportunity to participate as sponsors. We found three general types of objections. First, some centers were not able to commit to the wage progression that was required as part of the apprenticeship program. Either the directors were not convinced that they could afford the wage increase, or they did not have direct control over wages

⁴ South Dakota used a workshop, "Calculating the Cost of Turnover," developed by Wheelock College staff outside the QCCI Project.

because the center was part of a larger institution, such as a hospital, with its own wage system.

Second, some center directors were concerned about their management rights. The project manager at the Colorado pilot site noted that some of the center directors who objected to the affirmative action and grievance-procedure requirements in the apprenticeship standards feared that these requirements would compromise their ability to manage their centers without bureaucratic interference.

Third, some center directors were skeptical of the potential for change through apprenticeship. For example, project leaders in Kansas noted that some center directors did not participate in the apprenticeship program because they felt that the wage increases offered under by the apprenticeship were too small to solve their basic workforce problems. Our respondents suggested that this latter group of directors had a more pessimistic outlook and a narrower perspective on the child-care system than directors who decided to participate. The pessimists feared that it was fruitless to invest in training even though the apprenticeship program was paying for many of the costs of the program. Colorado experienced similar resistance. Some directors in the Triad pilot area feared that the turnover rates among child-care workers were so high that they would still be unlikely to retain their trained workers, even if they were able to offer workers a wage increase for participating in apprenticeship training.

In contrast to the pessimists, other project staff and center directors faced the same circumstances, yet reached a more positive conclusion about the value of apprenticeship training. For example, a sponsor in Nevada felt that even if apprentices left their centers after completing the training, there would still be benefits to the centers from quality improvements that occurred during the training. Several other center directors noted the benefit to the child-care system as a whole. A director said that she would go forward with the apprenticeship-training program, even if its effect would be to siphon off trained workers towards the higher paying jobs in Head Start and elementary education. If this

Optimistic Center Directors Were Receptive to the Apprenticeship.

Center directors, who were generally the key recruiting target, differed in their response to recruiting efforts. More pessimistic directors tended to refuse to participate because they felt that efforts to improve wages and skills were insufficient to solve the child-care workforce dilemma. They were also worried that better trained workers might leave their employ. More optimistic directors, by contrast, felt 1) that even small wage gains were important and 2) that training, regardless of retention at a particular center, was a net positive benefit to the child-care system.

migration were to occur, she was still optimistic because there is now a training system to elevate worker skills and quality of care at all levels of the educational system.

Recruiting Apprentices

Consistent with the methods of many apprenticeship programs, sponsors typically recruited apprentices from their current workforce. In contrast, some projects recruited individual child-care workers separately, while others used both approaches. Below we describe both recruitment approaches.

Sponsors Recruit Apprentices

Nearly all states emphasized recruiting apprentices from among the employees of the participating sponsors. Using this strategy, the project administration first recruited sponsors, and then asked the sponsors to select apprentices. However, sponsors varied in how much managerial control they exercised in the selection of apprentices. There were three general roles that sponsors played in screening or selecting individual participants.

First, some center directors did not play an active role in screening or selecting individual participants. They announced the program to all workers, for example, by posting a flyer or informing one or more employees about the opportunity and then letting the information spread by word-of-mouth. Individual employees then made the decision about whether to apply for the apprenticeship. These directors were comfortable with self-selection of apprentices because they felt that the program was beneficial to the center, regardless of which employees decided to participate.

Second, directors actively selected apprentices. Because the initiative was able to subsidize only a limited number of apprenticeship slots (most often one or two per center), these directors wanted to be involved in selecting apprentices who were most appropriate for training or whose participation would most benefit program quality. Interestingly, directors had different assumptions about which workers would be most valuable to have as apprentices. One director in Washington encouraged more experienced workers to sign up for the program. The director reasoned that once they completed their training, they would be more effective as journey workers in mentoring more junior employees and would thus yield greater overall quality increases at the center. Similarly, some of the participating directors in Kansas felt that employees who were already taking college courses would be the most suitable apprentices. In contrast, two center directors in Iowa and Nevada felt that offering the training to less skilled workers would yield the greatest overall increase in the quality of care within their

centers. For example, the Iowa director, whose governing board wanted to improve staff qualifications, offered the apprenticeship slots to the staff with the least amount of training. In Nevada, a director selected a Mexican-born worker with limited English proficiency, whom she felt would personally benefit most from participating in the apprenticeship. Although she was concerned that language limitations might be an obstacle to successful program completion for this individual, the director believed that the individual's participation was important to further the center's goal of having a bilingual staff.

Third, Alaska also let center directors select potential apprentices. However, the local resource and referral agencies that managed the program had to confirm the selection to ensure that the potential apprentice had the basic skills to complete the curriculum.

Grantees Recruit Apprentices

Another recruiting strategy used by projects was to recruit directly child-care workers who might be interested in becoming apprentices through existing education networks. This external recruiting, one DOL respondent indicated, is relatively common in programs like child care where the impetus for the apprenticeship comes from third parties rather than from employers directly. One local site in Iowa and the entire state of Montana used this strategy as the primary method of recruitment. Several other states also used variations of this method.

In Montana, the apprenticeship program administrators and partners directly recruited child-care workers who might be interested in becoming apprentices. Professors of the early childhood education courses recruited their students and program administration sent flyers to Child Development Associate training participants. Once a potential apprentice expressed interest, the program administrator then sought sponsorship from the center director, who employed the potential apprentice. Kansas and Washington supplemented their sponsor-based recruiting with this method.

Three states, Washington, Kansas, and Nevada, target secondary-school students. The Reno area school district, which coordinates the QCCI for the state, is establishing a pre-apprenticeship program in the Reno area for high school students. This pre-apprenticeship will articulate with the postsecondary training, allowing these high school students to move directly into apprenticeship training as soon as they graduate from high school. In Kansas, the community college that manages the QCCI project planned to

distribute information about the QCCI child-care apprenticeships to high school students when they visited the campus during Tech-Prep visitor's day.

And finally, in Northwest Iowa, three individuals who were employed at unaccredited centers applied to participate in the apprenticeship program. Because the local committee had decided that only accredited centers could provide on-site training to apprentices, these individuals were connected to on-the-job-training at an accredited Head Start center, which provided them with the same type of external on-the-job training supervision that family provider apprentices received.

Directly Recruiting Apprentices from Welfare-to-Work and One-Stop Systems

Some projects also considered recruiting apprentices from outside the existing child-care workforce, especially at the outset of the project. Several different outreach strategies were considered. One strategy targeted outreach to welfare recipients seeking to increase their workforce participation. Enrolling welfare leavers in child-care apprenticeships appeared to be a very attractive strategy because welfare reform simultaneously increases the demand for child care and seeks to increase work effort among welfare recipients. Two states, Colorado and Nevada, planned to conduct such targeted recruitment, but only one was successful.

In Nevada, the welfare-to-work and apprenticeship offices were co-located in Las Vegas, resulting in a mutually beneficial relationship. The co-location helped reduce the amount of time required to recruit apprentices, and simultaneously helped welfare-to-work recipients find a position more easily. The same office placement is planned for Reno. In Colorado, the apprenticeship program intended to recruit 20 percent of its pilot apprentices from welfare-to-work. But no recruiting occurred because welfare administrators believed that child-care salaries could not provide sustainable incomes for welfare leavers.

Several states tried to recruit new individuals through linkages with the One-Stop system emerging under the Workforce Investment Act. Only Nevada was successful in developing a strong connection. In Nevada, the apprenticeship program manager developed a close relationship with the staff of the One-Stop system. The One-Stop staff called the apprenticeship program daily to refer people who were in need of work. The apprenticeship program manager then found positions in the child-care industry for the referred persons, and simultaneously encouraged them to join the apprenticeship program.

Recruiting Journey Workers

In a mature apprenticeship system, the regular operation of the program yields trained journey workers who can, in turn, supervise the training of additional workers. Employers can make the supervision of apprentices a part of the regular duties of their more experienced workers. In an emerging program, on the other hand, sponsors and project managers need to pay careful attention to recruiting provisional journey workers who have knowledge, experience, and an ability to train fellow workers, the subject of this section.

Supply and Sources of Journey Workers

In general, the supply of well-trained, experienced child-care workers is limited, and the problem is more acute in centers with high turnover. The western states tried several strategies to address this deficit:

- Loosen the standards so that a journey worker could have two or three apprentices (discussed in Chapter II).
- Use a center director as a journey worker. This was generally frowned upon because of potential conflicts between the peer-to-peer relationship that apprenticeship uses and the managerial relationship that inheres in a center director's position.
- Reduce the qualifications (discussed below).
- Hire external journey workers who would visit the work site periodically to supervise on-the-job training. Three states used external journey workers.
 - The Northwest Iowa pilot site had to recruit external journey workers because it was training two types of non-employees: family providers and workers who were not employees of a sponsoring center (the local committee decided to operate the program only at accredited centers). To serve family providers, the committee recruited journey workers from its panel of experienced resource and referral consultants as well as staff from accredited Head Start centers. To serve the apprentices from non-sponsoring centers, the committee used Head-Start-center staff.
 - Colorado also used external journey workers to provide a greater measure of consistency in the program, even though some of its centers had staff qualified as provisional journey workers.
 - South Dakota used a combination of external and internal journey workers improve the quality of the onsite mentoring activities.

Education and Work Experience

A key part of recruiting provisional journey workers was to decide on education and work experience requirements. All the projects wanted well-qualified provisional journey workers with training and work experience. Six of the ten states set specific requirements regarding the amount of work experience that journey workers must have in an early childhood setting. The amount varied depending on the state. Several states (Alaska, Colorado, and Kansas) required two years of working experience. The Northwest Iowa local pilot had much higher expectations and required the journey workers to have at least five years of experience. The other states offered sponsors more flexibility. Thus, three states required experienced journey workers, but did not specify the number of years of work experience. South Dakota provided a list of factors for center directors to consider when selecting journey workers, including commitment to the child-care profession and possession of advanced child-care skills.

High Qualifications for Journey Workers. Establishing strong qualifications for provisional journey workers was a wide concern, although states differed substantially in their methods. Some states set high education and work experience qualifications. A few states felt that the best approach would be to use external journey workers.

In addition to work experience, the child-care apprenticeship also required education credentials that were roughly equivalent to the apprenticeship certificate. For example, Alaska, Oklahoma, and Washington required that journey workers have a Child Development Associate credential or an associate's degree. Several states required that journey workers have education that surpassed the Child Development Associate, such as Kansas, which required a Child Development Associate credential plus 20 hours of college credit in early childhood education.⁵

However, some projects were concerned that there would not be enough journey workers if education standards were too high. Thus, Montana explicitly lowered its educational requirements for provisional journey workers below the level that will occur when apprentices complete the program to prevent a journey-worker shortage. However,

⁵ The Kansas journey worker requirement is more than the 12 credit hours that the state requires for an individual to become a center director. State officials and the project manager debated whether to lower the journey worker standard to 12 credit hours, citing the incongruous situation that might occur if a center director was not qualified to supervise an apprentice during on-the-job-training. Nevertheless, they decided to maintain the higher standard to promote quality in the training.

now that apprentices are nearing graduation, the state is considering increasing the education requirements for provisional journey workers.

As with work experience, some states wanted provisional journey workers with good education qualifications but decided to offer sponsors more flexibility. Iowa and South Dakota did not set specific statewide academic qualifications. Instead they required journey workers with academic training that was grounded in the theoretical aspects of early childhood education. One other state, Alaska, allowed the sponsors to nominate the journey worker, but final approval remained with the resource and referral agency that administers the local projects.

IMPLEMENTING ON-THE-JOB TRAINING AND RELATED INSTRUCTION

Once the three principal participants in an apprenticeship—sponsors, apprentices, and journey workers—were in place, training could begin. An apprenticeship calls for two coordinated training components: on-the-job-training and related instruction. This combination permits trainees to learn both theoretical and practical aspects of the occupation. The standard duration of a program is 2000 hours of on-the-job-training per year (the equivalent of a full-time job) and 144 hours of related classroom training per year. For the child-care apprenticeship in the western states, all the states except Washington and Oklahoma used a two-year program with 4000 hours of on-the-job-training and 288 hours of related classroom training. Washington sought to accommodate part-time workers with two shorter programs. There is a 2000-hour, one-year program that is equivalent to the Child Development Associate with 144 hours of related instruction; its two-year program has 3000-hours of on-the-job-training and 288 hours of related instruction. The project manager expected that these programs would take one and a half and two years respectively. Oklahoma also has a one-year program with 2000 hours of on-the-job training.

On-the-Job-Training

After designating a cadre of journey workers who could supervise on-the-job training, implementing on-the-job training required three further steps. First, project managers and sponsors had to consider whether to train journey workers in the mentoring skills that they would need to work effectively with apprentices. Second, they had to design curriculum for each of the on-the-job-training components, and third, they needed procedures to oversee on-the-job training and ensure its consistency across sites. Each of these steps is detailed below.

Training Journey Workers

All but one of the states implemented or planned a structured training for journey workers to achieve consistency and build the quality of on-the-job training. These programs were based largely on mentor training that is well established in the early childhood education field. The training programs required that the journey workers meet from 6 to 20 hours to learn about the program and mentoring strategies.

Many of these states developed the curriculum specifically for the apprenticeship program. For example, Washington hired a consultant to adapt the TEACH mentoring modules to the apprenticeship program.⁶ This linkage to TEACH proved to be a very efficient way for the apprenticeship program to coordinate with the state's professional development initiative. Washington's project manager also got the state's child-care training registry to agree that journey-worker training would meet the state's in-service training requirement for lead teachers. In Nevada, the project manager and regional coordinators personally trained all journey workers. In addition, community colleges approved this curriculum, so journey workers could receive college credit for their efforts. As another example, Kansas is planning to develop a journey-worker training program based on the Wheelock College mentoring curriculum.⁷

Mentor Training Is Common. Formal training for journey workers was almost universal. Many states were building on existing professional development efforts to use more skilled and experienced child-care workers to mentor their newer colleagues.

Other states took a slightly different approach to journey-worker preparation. Instead of creating new training, they built on existing mentoring efforts under their professional development initiatives. Most advanced were Colorado and Montana, which has been training experienced teachers as mentors for several years before the apprenticeship program. Colorado's mentoring curriculum was based on models provided by the Center for the Child Care Workforce and the military child-care system. The state expected to add a train-the-trainer curriculum specifically to help journey workers supervise on-the-job-training portion. Montana's curriculum was delivered through a training network of six organizations across the state and funded by the Child Care and Development Fund.

⁶ See Chapter II under "Professional Development Initiative" for a discussion of TEACH.

⁷ Wheelock College, widely recognized as the leading institution in the country for early childhood education, provided technical assistance to all grantees through subcontracts with the evaluation firms. Its mentoring curriculum is very widely used in the field.

Many states also held periodic training with the journey workers after the initial orientation training. For example, Oklahoma, in addition to its six-hour introductory training, holds monthly two-hour training sessions for journey workers.

Developing On-the-Job Training Curricula

As part of the on-the-job training, the states had to develop curricula that would guide the journey workers and apprentices. The curricula were commonly developed with Department of Labor staff using the Department of Labor’s Child Care Development Specialist work process schedule and the Child Development Associate competency standards.

Most of the states had fairly rudimentary outlines for their on-the-job training curricula. The curricula generally outlined the topics during on-the-job training, paired with the number of hours for the training segment. All other states had very similar requirements, with minor deviation in category descriptions and number of hours. Colorado’s curriculum, which is representative of the others, is outlined in Exhibit III-2.

**Exhibit III-2
Colorado’s On-the-Job Training Curriculum Categories**

Topic	OJT Hours
Orientation and Safety	50
Health and First Aid	600
Administration and Procedures and Policies	150
Child Nutrition and Hygiene	600
Child Development Observation and Training	600
Child Supervision	800
Activity Supervision and Direction	600
Consultation Techniques (staff and parents)	600
Total Hours, All Topics	4000

The rudimentary nature of the on-the-job-training content meant that this component effectively relied more heavily on the procedures of the particular employer than on the general core competencies. This reliance makes it easier to establish the on-the-job-training in the short run, but may reduce the portability of the skills in the long run if employer practices vary widely, as some apprenticeship officials feared.

Supervising On-the-Job Training

As part of the supervision for on-the-job training, each state had to determine (1) how the on-the-job hours would be tracked, (2) whether they would set specify contact requirements between journey workers and apprentices, and (3) how they would ensure consistency in delivering the on-the-job training. Each of these issues is described below.

The first decision was how the on-the-job training hours would be recorded. To track hours, the states use DOL's standard apprenticeship one-page timesheet. Some respondents suggested that the apprentices and journey workers were pleased with the tracking system, citing its simplicity. Apprentices and journey workers also frequently explained that the structure of the timesheets helped remind them about the different focus areas for the on-the-job training. Others pointed out that the tool was not so easily applicable to the child-

care setting. For example, in the span of an hour, an apprentice could conduct activities related to first aid, nutrition and supervision, each of which falls under different categories. Strategies for recording hours varied and seemed to be inconsistent within programs, usually determined by the apprentice or journey worker with little guidance.

OJT Design Rudimentary.

On-the-job-training design was rudimentary. The curriculum was simplified and supervision was generally limited. There was greater emphasis on counting the requisite hours than on extensive experiential learning. The lack of detailed structure probably meant that there was a greater emphasis on the employer's particular

The second decision related to active supervision of on-the-job training was whether minimum contact-hour requirements would be established. Six of the ten states developed these requirements for the supervision of apprentices. For example, Colorado required 6 contact hours per month between apprentices and designated journey workers, while Kansas established the much more stringent standard of 15 contact hours per week. The Kansas advisory committee decided, in conjunction with the State Apprenticeship Council, to create closer supervision of apprentices, much like that which occurs in other apprenticeable occupations. The requirement for 15 contact-hours per week of direct supervision of apprentices is intended to accomplish this objective. Some states simply left this issue up to each sponsor; our visits to centers suggest that there are widely varying numbers of contact hours.

To help ensure that apprentices and journey workers had actual contact hours even if they worked in different rooms, Alaska provided funding to the centers to cover one official contact hour per week. Colorado and Northwest Iowa, which relied on hired

external journey workers, were limited in the number of contact hours because of cost. Regardless of requirements or the type of journey worker used, in practice, there was wide variation in the number of actual contact hours because of staffing patterns, physical layout of centers, the level of experience and the relationship of each journey worker and apprentice.

The third major decision was how the apprenticeship program would ensure consistency in on-the-job training from site-to-site. As the DOL state director in Colorado explained, consistency across sites would be a critical factor in the viability of the child-care apprenticeship program because there were so many employers involved already. He thought that the problem would intensify later once the apprenticeship got beyond the pilot stage. States developed several strategies to encourage consistency across sites. South Dakota's tool to help the journey workers document the apprentices' professional growth throughout the on-the-job training was the most comprehensive. The tool lists the date of observation, comments on how the apprentice was meeting the competency, a numerical rating, and suggestions for improvement.

Northwest Iowa also developed a series of supervisory forms and rating sheets for journey workers to use in documenting apprentices' progress. Other states also used staff to check on the progress of the journey workers and apprentices, and provide guidance to improve the on-the-job training. For instance, Montana's apprenticeship coordinator made visits to the centers.

Nevertheless, there are some important issues of quality and effectiveness that may raise sustainability questions in the future as the programs mature:

- Although most states stipulated an instructional plan based on the core competencies, it appears that far greater emphasis was placed on learning the particular procedures and knowledge required by each sponsor.
- The amount of supervision was often limited by the structure of the child-care industry.
 - Many apprentices worked in a different room from a journey worker, so there were typically very limited opportunities for direct supervision
 - A number of states used external journey workers to supervise on-the-job-training, and their opportunities for supervision are essentially limited by high cost.
- Preparing journey workers (mentor training)
- Overseeing a highly decentralized system (assuring consistency).

Related Instruction

The grantees made relatively rapid progress in developing the related instruction component of the training. In contrast to on-the-job-training components, which largely had to be created from scratch, the related classroom training components could often be adapted with only minor modifications from existing courses. Projects used varied approaches to realize six key aspects of related instruction: (1) selecting a delivery system; (2) developing training curricula that are based on accepted industry standards; (3) linking the apprenticeship training to the statewide child-care credentialing system; (4) determining whether and how to integrate the delivery of apprenticeship training with delivery of child-care training to other students; (5) scheduling training at times compatible with apprentices' work hours; and (6) coordinating related instruction and on-the-job training. These issues are discussed below.

Related Instruction Was Effective. Related instruction was relatively well developed. It was well articulated because nearly all states used the Child Development Associate curriculum for the first year of instruction. Most states used their public postsecondary education system to provide the related instruction so credit was generally available, facilitating upward articulation towards an associate's degree. There was, however, a less favorable climate for articulation with the four-year schools.

Selecting a Delivery System. In most of the western states, community colleges provided the related classroom instruction. Two factors made them so important. First, community colleges were already integral members of the local child-care network, as a result of their participation in resource and referral and local Head Start collaboration services. Second, some community colleges were also quite familiar with apprenticeship systems because they are a source for related instruction in many programs and may actually manage apprenticeship programs. For example, in Washington, Clover Park Technical College operated nine apprenticeship programs in addition to its child-care apprenticeship.

Three states utilized four-year colleges and universities. Because the early childhood education courses were already established at four-year institutions, Montana delivered all of the instruction at four-year colleges and universities. Other programs were designed so four-year institutions taught some, but not all, of the related instruction. South Dakota does not have community colleges, so apprentices obtained the Child Development Associate credential through the resource and referral network in year one, and then took the remaining courses at four-year institutions.

Two states, Oklahoma and Alaska, relied on delivery mechanisms outside of the college system. In Oklahoma, the majority of apprentices took related instruction from a network of consultant-educators who were already delivering the Child Development Associate curriculum. In Alaska, the related instruction was delivered by the resource and referral system, which provides very cheap and flexible training.⁸

The teaching institutions also benefited from their participation in child-care apprenticeship programs. Participation by apprentices in classroom training increased the student head count, helping early childhood education departments and teaching organizations meet minimum enrollment targets required for all classes.

Developing Curricula Based on Accepted Industry Standards. Several factors shaped the curriculum for related instruction and made it relatively easy for participating colleges and organizations to provide training to child-care apprentices. First, the community colleges and four-year institutions had in place curricula that were generally based on the national or state core competencies and could easily adapt its course offerings to the particular apprenticeship requirements. Second, in many local sites, the community colleges and other teaching organizations were already delivering training for the Child Development Associate credential, so the curriculum for the first year of related instruction was largely complete and required relatively little additional design work.

Although there were some differences in sequencing and how topics were combined, the essential content of these curricula did not vary greatly among the states. The curriculum from Red Rocks Community College in Colorado in Exhibit III-3 is reasonably representative of curricula used in the other states.

⁸ See Chapter 2 for a discussion of difficulties with obtaining training from the University of Alaska.

Exhibit III-3
Sample Curriculum for Classroom Instruction:
Red Rocks Community College, Colorado

Courses	Hours of Instruction
Year 1	120
Introduction to Early Childhood Professions	
Early Childhood Professions Lab	
ABC's and 123's of Children with Special Emotional Needs	
Professional Caregiving Basics	
Year 2	180
Child-care Practicum I	
Guidance Strategies	
Curriculum Development: Methods and Techniques	
Child Growth and Development	
Child Growth and Development Lab	

Organizing Delivery of Related Instruction. Although there were several factors, described above, that made it relatively easy for the western states to develop related instruction for their apprenticeship programs, there remained a number of organizational issues that the local apprenticeship partners still had to resolve.

One issue was the rate that community colleges should charge the apprenticeship program for the related instruction. Some community colleges apparently receive a smaller subsidy from their district or state for occupational training than they do for other classes. From these colleges' perspective, the delivery of apprenticeship training requires higher tuition payments to compensate the college for the reduced subsidy. One community college in Washington, for example, did not want to offer the child-care apprenticeship's related instruction because the apprenticeship program's standard tuition reimbursement was less than the college's normal rate for vocational classes. In this case, the apprenticeship project manager eventually persuaded the college to reduce its rates substantially and support the apprenticeship training as a community service.

Also related to overall cost was the decision about whether to hold separate classes for apprentices or serve them in integrated classrooms alongside other early childhood education students. For colleges that have more stringent minimum class-size requirements, the delivery of related instruction typically was integrated with the rest of the college's early childhood education program. For example, Iowa Lakes Community College in Northwest Iowa has a policy requiring all classes to have at least 10 students. This policy, in combination with the college's relatively unrestricted enrollment requirements, effectively dictated the integration of apprenticeship instruction into its general early childhood education programs. Several educators noted that it appears to be mutually beneficial to serve apprentices in integrated classrooms, where the apprentices can share their work experience with younger students. These students, in turn can share study skills with the apprentices, who typically have been out of school for a number of years.

In contrast, several teaching institutions decided to offer separate classes specifically for apprentices. Red Rocks Community College in the Triad pilot site in Colorado served a large number of apprentices, so the college could offer some courses specifically for apprentices. The community colleges in the Kansas pilot site and in Nevada combined integrated and separate classroom approaches. These colleges integrated the general classes, but they offered specialized classes or small seminars geared to address the specific educational needs of apprentices.

Scheduling Training at Times that Are Compatible With Work Schedules. In addition to deciding whether the classes would be integrated or separate from non-apprenticeship students, decisions were made about the scheduling of related instruction. Most of the teaching organizations adjusted the timing of courses by offering them in the evening or on weekends so apprentices could more easily attend. One unique method was used in the Triad site in Colorado. The community college developed a modular approach, with some portions of the classroom instruction delivered to apprentices at the work site during the children's nap time in a few centers with many apprentices. These courses were adapted to sponsor requirements and the specific educational needs and learning styles of those apprentices. Several states also provided a variety of distance learning options so that working apprentices could more easily access training. For example:

- Projects in Alaska, Iowa, Kansas, Nevada, and South Dakota took advantage of existing state-run interactive video networks to offer their courses at satellite locations.

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- Montana created an Early Childhood Rural program, in which students complete modules sent through the mail, then meet on three weekends.
- Colorado, Nevada, and South Dakota offer course work over the Internet.

Coordinating Related Instruction and On-the-Job-Training. At the time of the site visits, only half of the states had developed mechanisms for coordinating the two components of the apprenticeship into a unified training program. Some states, such as Iowa and South Dakota, utilized homework assignments as a tool for applying theory in the child-care setting while Montana emphasized the practical application of learning in laboratory classes. Colorado and Nevada had more specific coordination mechanisms:

- Individual plans that encompass classroom training and on-the-job-training (Colorado and Nevada).
- Videos that explain how to apply theoretical knowledge to certain specific classroom issues (Colorado).
- Apprentice journals on the relationship between classroom training and on-the-job-training with periodic seminars to discuss their experiences (Nevada)

Regardless of formal methods, the apprentices and journey workers interviewed by Social Policy Research staff often commented that they saw direct application of the related instruction to the work setting.

BUILDING DIVERSITY INTO THE INITIATIVE

The QCCI initiative required grantees to describe how they could make quality child care training available to ethnic minorities and residents of low-income or rural communities. Thus, each state developed a plan, which included outreach and recruiting strategies to ensure that the apprenticeship would attract participants with a diverse background. This included recruitment efforts targeted at program participants. In addition, grantees also frequently encouraged diversity by making curricula accessible to different cultures and to people with limited English proficiency or basic skills deficits.

Diversity through Recruitment

Recruiting a diverse apprentice group was relatively easy, and all states reported that the proportion of minority apprentices met or exceeded the minority proportion in their respective child-care workforce. However, five western states made special efforts to include Native Americans. For example, Montana's Head Start Collaborative helped aid the recruitment process by introducing the program coordinator to the directors and other staff of tribal child care centers. DOL apprenticeship staff in at least two states

provided technical assistance to grantees on developing affirmative action plans and suggested ways to bring the tribal centers into the apprenticeship program. In Oklahoma, the recruitment of three Head Start agencies on reservations has resulted in a mutually beneficial arrangement. The apprenticeship program benefited by increasing the number of minorities and the Head Start agencies benefited by receiving additional training needed to achieve performance standards.

Several states worked hard to assure that their programs would be accessible to apprentices in rural areas. The Northwest Iowa pilot emphasized participation by family providers, who represent the predominant mode of child-care delivery available in the rural parts of that state. Kansas, with a rural geography similar to that of Iowa, is also hoping to serve family providers once the apprenticeship is well established. Washington, Montana, Nevada and South Dakota have also actively recruited in rural areas and have signed up sponsors and apprentices in rural centers.

Recognizing that many child-care workers have limited English proficiency, two states are considering plans to recruit Spanish-speaking child-care workers. Iowa hopes to reach these workers through public and community-based outreach organizations. Washington is establishing an apprenticeship program for migrant and seasonal farm workers with participation by Spanish-speaking provisional journey workers and community college staff.

At least three states are coordinating efforts to help potential apprentices build their basic skills in preparation for joining and successfully completing the program, often a problem for minority child-care workers. For example, Nevada offers special seminar classes to help ensure that persons with low levels of literacy in English (both native and non-native speakers) will not be excluded from the program. Likewise, the state of Montana has a program in which child-care workers can enroll if they are not ready for the college-level apprenticeship program. Although this program is not funded by QCCI, the QCCI program coordinator manages both programs. This arrangement helps ensure that the child-care workers get placed in a program suitable to their education level.

Diverse Apprentices, Less Diverse Leadership. A diverse apprentice group was recruited in most states. This is generally attributable to the fact that the child-care workforce is more diverse than the labor force as a whole. Relatively few efforts were made to diversify the curriculum or to involve minority group members in the design and planning of the apprenticeship.

Diversity through Curriculum

In addition to recruiting a diverse group of participants, programs encouraged diversity through the related-instruction curriculum in several ways. The instruction was modified to help retain those with different learning styles and backgrounds. The instruction was also designed to teach apprentices about other cultures.

States helped apprentices succeed in the related instruction by accommodating different learning styles through a variety of teaching methods. South Dakota went as far as to put the apprenticeship program text books on tape. This was originally conducted for a student who was severely dyslexic, and the tapes are now accessible to all students through the library system.

Several other states made efforts to make the training materials accessible to non-English speakers. For example, Colorado's state community college system translated the introductory course for early childhood education into Spanish during the 2002 fall term through a distance learning option. South Dakota now has bilingual Child-Development-Associate credential assessors who provide the cumulative oral exam during the first year of the apprenticeship program in the Lakota language.

In addition to modifying the curriculum to reflect diverse backgrounds, the related instruction was designed to teach about different backgrounds. For example, South Dakota established a class specifically directed toward understanding Native culture as it pertains to child care. Program administrators also brought in Native American community leaders to the classroom to facilitate this learning process. Several years ago in Montana, cultural and developmental diversity was embedded in each of the competency areas from behavioral guidance, to health and safety, to family and community partnerships. Program staff felt that diversity is now a natural part of their curriculum, rather than something extra that they try to include.

FINANCING LOCAL APPRENTICESHIPS

Another implementation challenge faced by each of the pilot states was how to finance the development of child-care apprenticeship systems. The states needed to develop a financial strategy that was consistent with their overall approach to implementation. For example, states with a more centralized infrastructure needed to support staff salaries, and those with less centralization could emphasize participant-related costs. In this section, we describe both these cost model and the revenue sources that to pay for those costs.

Cost Model

In implementing a child-care apprenticeship system, we observed three types of costs:

- **Administration costs.** This category includes the costs of supporting the apprenticeship administratively. They directly or indirectly support the project's participants.
 - Planning activities, including developing standards, linking the apprenticeship to the professional development initiative, and developing curriculum.
 - Implementing activities, including recruiting, negotiating sponsor agreements and register apprentices, ongoing technical assistance, and oversight.
- **Programmatic participant-related costs.**
 - Related instruction costs for tuition and fees, books and materials, and any remedial training or tutoring in basic skills to help apprentices succeed in college courses.
 - Stipends paid to apprentices for participating in or completing training; stipends to journey workers for taking on additional duties; stipends to center directors.
 - Costs of journey-worker training.
 - External journey worker costs, including compensation to external journey workers.
 - Payments to centers to hire substitutes when training requirements caused workers to be absent from the regular classroom.
 - The cost of supportive services—such as transportation or child care—provided to participating apprentices as part of the program.
- **Employer-born participant costs.** Employers must pay the wage progression as the apprentices attain additional skills.

This child-care cost model is radically different from the typical apprenticeship cost structure. Only administrative costs are likely to be similar. In other apprenticeships, the employer pays for related instruction and any training costs for journey workers. There are usually no external journey workers, stipends or substitutes.

Administration Costs. The balance between these broad types of costs tended to reflect the general approaches to apprenticeship implementation and the total funds available, including both QCCI and external funds. States with a more centralized approach tended to use more of their grant to pay staff for key planning and implementation activities. For example, in Nevada, the bulk of QCCI grant funds were

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allocated for the salaries and benefits of project staff, including the project manager, two regionally based apprenticeship and training coordinators, and administrative support. Washington, which also used a more centralized approach, emphasized infrastructure costs, including consultants to ensure that the apprenticeship coordinated with supplement a project staff of one (project manager). However, the Washington grantee—because of familiarity with apprenticeship—was able to get its standards development completed very rapidly, so a greater proportion of its grant was available for participant-related costs than in Nevada.

The states that used pilot and more decentralized approaches, which emphasized a greater role for local committees and other volunteers, tended to use a greater proportion of their grants for participant-related costs than the states using a more centralized model. One exception was California, in which all the funds were devoted to the design of the apprenticeship system. This state will likely spend little or no funds on participant-related costs, relying heavily on the sponsor resources, public funds for child-care professional development, and an annual state appropriation that pays for related instruction for all apprenticeships.

Programmatic Participant-Related Costs. By far the largest component of every grantee's budget went to pay for programmatic participant-related costs. Exhibit III-4 displays the average annual participant-related costs that each state incurred.

**Exhibit III-4
Average Annual Participant Cost**

	Total Cost Per Apprentice⁹
Alaska	\$2400 ¹⁰
California	Not Applicable
Colorado	\$2500
Iowa	\$4000
Kansas	\$700
Montana	\$3500 ¹¹
Nevada	\$3600
Oklahoma	\$3000 (2000-hour program)
South Dakota	\$3500
Washington	\$3000 (3000-hour program)

Participant costs range from \$700 in Kansas to \$4000 in Iowa, with much of the range attributable to the cost of tuition for related instruction. We look in more detail at participant-related costs below.

In each of the western states, the largest share of direct costs were incurred for related instruction, usually in the form of full tuition paid to local community and four-year colleges. Costs among the teaching organizations varied widely, reflecting very

Program Designs and Tuition Affect Costs.

The cost of programs varied substantially according to program design (for example, whether the state paid incentive stipends) or the costs were high (for example, related instruction from the public postsecondary education system were relatively high

⁹ Total cost per apprentice is an estimate provided to illustrate the overall magnitude, rather than the precise amount, of spending. There are likely significant differences in how states estimated how their costs fit into this cost model. Entries are rounded to the nearest hundred.

¹⁰ Alaska's payment of the wage progression, which averaged \$1760 per apprentice per year, is not included because it is normally an employer-borne cost.

¹¹ For Montana, \$3,500 reflects the inclusion of stipends for apprentices and sponsor centers. After the first year, these stipends were discontinued, resulting in an estimated \$1,200 per apprentice.

different cost structures and different levels of subsidy from the state or local district. For example, tuition at Iowa Lakes Community College was approximately \$2500, whereas tuition charged by Butler County Community College in Kansas was \$600. This wide variation in tuition accounts for most of the variation in the total cost per participant.

Stipends. Most states paid some type of stipend to participants—sponsors, apprentices, and journey workers, either as incentives to participate, tokens of appreciation, or to compensate the recipients for some extraordinary cost.

- **Apprentices.** Two states provided stipends to apprentices.
 - The stipends ranged between \$100 in Nevada and \$450 in Montana per semester of participation. Montana, however, dropped its stipend because it cost too much, without hurting its recruiting.
 - Two states also provided apprentices with financial incentives such as membership fees for apprentices to join the National Association for the Education of Young Children.
- **Journey workers.** Five of the eight states with on-site journey workers provided journey workers with stipends. Usually these stipends were described as a token of appreciation, and generally ranged from \$100 to \$300 per year, depending on the state. South Dakota, whose program success relied heavily on the journey workers and sponsors, paid the journey workers \$100 per month (\$1,200 per year) for this added responsibility. Washington and California, reflecting their apprenticeship heritage, did not pay stipends to journey workers and contended that journey workers have an obligation to share their knowledge and experience with apprentices.
- **Sponsors.** Four of the western states provided centers with stipends as an incentive to participate in the program. Stipends ranged from a total of \$400 in South Dakota to \$1,000 in Alaska. After the first year of the program, Montana and South Dakota dropped these stipends, also without hurting their sponsor recruiting.

Journey-Worker Training. Most states invested in journey-worker training. As described previously, in some states, this training was specialized to prepare provisional journey workers to take on supervisory tasks. Colorado indicated that its journey-worker

training was \$864 per journey worker.¹² Nevada's training was more expensive, at \$1,377, but resulted in college credit for the journey workers.

External Journey-Worker Cost. Three states hired external journey workers. South Dakota's external journey workers helped monitor the program and provide support to the on-site journey workers. The apprenticeship programs in Colorado and the Northwest Iowa pilot did not have on-site journey workers. Rather, the program solely relied on the efforts of external journey workers to carry out the on-the-job training. Northwest Iowa paid for substitute teachers to fill in for their family-provider and non-sponsored apprentices to cover their child-care responsibilities when they were absent due to scheduled on-the-job training at another site.

Substitutes. Colorado paid centers for substitute teachers to fill in for apprentices who were attending limited, related-instruction sessions "on the clock" at individual job sites. Employer/sponsors covered the wages paid to apprentices during "on-the-clock" training sessions. Northwest Iowa also paid for substitutes when family providers and non-sponsored center apprentices attended on-the-job-training sessions at the Head Start center.

Supportive Services. Several projects planned to use project funds to pay for supportive services. For example, Colorado provided up to \$660 for supportive services such as child care and transportation. The Northwest Iowa pilot also budgeted funds to pay for the travel costs of self-employed apprentices and apprentices working for non-sponsoring centers—who had to travel to Head Start centers for on-the-job training. The project also provided funds to reimburse the travel costs of the external journey workers at the Head Start centers who, in turn, had to travel to meet with family providers and apprentices working in non-accredited centers.

Employer Borne Participant Costs. The one cost that employers had to bear was the wage progression. As their apprentices increased their skills, the apprenticeship standards required that their wages increase according to a schedule agreed on in the particular sponsor agreement. In some agreements, this was a percentage wage increase set to reach the target wage, while in others, there was a fixed amount. Most of the states

¹² A Wheelock College technical assistance staff member estimates that such training typically costs between \$500 and \$950 at a college, depending on the college's cost structure and the number of credits.

required four increments, with increases coming every six months for the standard two-year programs.

There were two exceptions to employer responsibility for wage increases. In Northwest Iowa, the project paid a stipend every six months in lieu of a wage increase to apprentices who did not have a guaranteed wage progression because they were a family provider or they worked at non-sponsoring centers. Alaska also paid the wage progression for all of the apprentices, although centers will be responsible for the wage increase in the future. The state expects that the newly instituted tiered reimbursement system will provide centers with enough funding to help alleviate some of the future financial burden.

Revenue Sources

Unlike most apprenticeships, where the employer-sponsors pay for all or most training costs, child-care employers have such limited resources that there was little discussion of having them pay for the training. Rather, the child-care apprenticeship projects relied heavily on DOL grant funding. Almost all of the western states paid for most of the apprenticeship training costs from their QCCI grants. But nearly all of the states tapped other funding sources, the most important being Child Care and Development Fund. Colorado, Kansas, Oklahoma, Nevada, and South Dakota were each able to tap these funds to pay for several direct types of participant-related costs, allowing them to

Money Is Hard to Find. Finding the revenue to pay for the program is the most challenging of all implementation activities. Several states had to change their designs (typically reducing or eliminating incentive stipends). There were rarely sufficient funds to provide all the activities or to assure that the training could be offered as widely as there was demand.

enroll additional apprentices. In Montana and South Dakota, Child Care and Development Funds were used to pay for part of the project manager's salary because they also worked on other child-care related programs. Similarly, in Alaska, the grantee contributed funds to pay for 50 percent of the project manager's salary through a special federal appropriation to pay for the state's professional development initiative in early education.

The TEACH program has also been an important source of funding for training apprentices.¹³ In Colorado and Oklahoma, apprentices were co-enrolled in TEACH, which pays for the related instruction, including tuition, books, and other materials. This funding source is expected to be similarly important in other states that are developing TEACH programs. Washington, which was in the process of expanding its TEACH program from a limited pilot to a statewide program, at the time of our site visits, expected to use the same approach, as will Iowa and Kansas, which are both still in the planning stage. At the outset, TEACH funds typically come from the Child Care and Development Fund or foundation grants.

Another expected source of funds in Alaska was the Workforce Investment Act. But Alaska was the only state to receive such funds. The State Workforce Investment Board agreed to provide \$50,000 in state reserve funds. However, is considering rescinding its grant because the state is now running short of funds to support the One-Stop System. One local workforce board approved the QCCI as an eligible training provider.

Two states relied on local funding sources to supplement the DOL grant:

- Washington encouraged participating community colleges to take advantage of a state-authorized lower rate for apprenticeship training. This rate effectively created an in-kind contribution from the colleges.
- Each of the Iowa pilot sites used Empowerment funds that the state legislature had appropriated for a variety of social and educational programs benefiting young children. Both the Waterloo and Northwest Iowa pilot sites drew on these funds to help support some participant-related costs during the QCCI grant period.
 - Waterloo defrayed some costs of related instruction.
 - Northwest Iowa paid for the extra costs incurred for substitutes and journey workers as a result of serving family providers and non-sponsored apprentices.

The other important fund source is the Pell grant program that pays for costs at many postsecondary schools. Two states, Kansas and Montana reported systematic use of Pell grants by their colleges. It seems likely that colleges in other states are using these grants for apprentices who meet the attendance and income requirements.

¹³ TEACH normally works on a cost-sharing formula, whereby the program pays for 75 percent of training costs; the sponsor and the participant pick up 15 and 10 per cent of training costs, respectively.

III. Implementing the Initiative

In some cases, external funds were available to pay for specific types of costs. For example, Colorado, Oklahoma, and Nevada used larger portions of their grant to pay staff salaries, but were able to leverage other program funding to pay for some of the costs of implementation. Iowa also brought in some additional money, but it needed less to pay for its limited implementation with a smaller number of apprentices. Alaska, South Dakota, and Montana used other sources to pay for 50 to 75 percent of the project managers' salaries, so that more QCCI funds could go towards tuition and apprenticeship stipends. In Kansas, the approach was shifting from staffing costs to participant costs, reflecting the reduced reliance on the QCCI grant. California is expecting that sponsors will provide or identify other sources of funding to pay for related instruction. Among the expected sources is a state appropriation dedicated to pay for apprenticeship tuition at community colleges and local education agencies. Tuition at the state's community colleges is currently on \$11 per credit, so any external money can go very far.

Sponsoring employers needed to find additional revenue to cover their costs for the wage progression. Project managers indicated that most sponsors expected to pay for these increases out of normal operating revenue. Some center directors had already set aside funds for wage increases, regardless of the apprenticeship. Several QCCI project managers indicated that center directors would pay for the increases out of costs that they would save by reducing turnover and thus, reduced recruiting and training costs.

CONCLUSIONS ABOUT IMPLEMENTATION

As we see from the preceding material, the western states made considerable progress in the early stages of implementation. Thus, in conclusion, we summarize what we have learned from the initial implementation experiences and identify issues that need additional study.

Organizational approach. In general, there were two dimensions that greatly affected the implementation of the apprenticeship program. The first dimension was whether the program was implemented at a statewide level or piloted with limited geographical area. As illustrated in Exhibit III-1, over half of the states used a pilot approach. Generally, statewide programs recruited a greater number of sponsors and apprentices in a shorter period of time.

The second dimension that greatly affected implementation was the extent to which the program emphasized centralized or local responsibility. Under a more centralized approach, program staff members were critical to the success of the program and invested

more time in designing, implementing, and managing the program. The centralized system had an established structure to the program that the local centers or outside organizations were to carry out or support. In contrast, some programs emphasized local responsibility. These localized programs maintained that the success of the program was the responsibility of the local centers or outside organizations that could customize implementation to reflect local conditions. The local groups, while having to follow basic requirements, such as of number of hours in on-the-job training and related instruction, were often given the authority to recruit and customize the program to meet local needs. Each of these approaches has benefits and liabilities, but it is still too early to assess their relative merit.

Recruiting. In general, the methods used to recruit sponsors varied and were frequently dependent on the size of the geographical area. Pilot states, which generally recruited from limited geographical areas, often heavily relied on personal contacts. In contrast, statewide projects, which generally covered much larger geographical areas, generally used mass mailings through existing education networks, followed by in-person meetings.

Training. Nearly all of the states used a two-year program with 4000 hours of on-the-job-training and 288 hours of related classroom training. The related instruction was delivered predominantly through the public postsecondary education system, which generally had established child care curricula that could quickly be modified for the apprenticeship program. The on-the-job training was less developed, and there were few efforts to link the theoretical and practical components of the training.

Diversity. The grantees had substantial success to date in enrolling minority group members as apprentices but were less successful in recruiting minority journey workers. Several Grantees also encouraged diversity by making related instruction accessible to people of different cultures and with limited English proficiency or basic skills deficits. Some instruction also incorporated cultural diversity—an important element of the core competencies.

Financing. Costs varied extensively among the grantees for a number of reasons. Some grantees used approaches that used more administrative costs that were relatively expensive in the short run but will likely be cheaper as recruitment increases and those costs are spread over a larger number of apprentices. There were important differences in the extent to which grantees relied on stipends to participants for incentives or other

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purposes. And finally states and local sites faced significant differences in the cost of related instruction purchased at postsecondary educational institutions or from the resource and referral system.

On the revenue side, almost all of the western states paid for most of the apprenticeship training costs from their QCCI grants. But nearly all of the states tapped other funding sources, the most important being Child Care and Development Fund, which was used to help pay for participant-related and administrative costs in some states. TEACH was also an important source of funding in some states.

How these procedures, strategies and tactics, relationships, and financial arrangements play out in the future as the states try to build sustainable, comprehensive systems, is the subject of the next chapter.

IV. SUSTAINABLE, COMPREHENSIVE SYSTEMS

INTRODUCTION

In the two previous chapters SPR reviewed state progress in planning a framework for the apprenticeship program and in early implementation. But DOL's overall goal for the QCCI was, in fact, for the grantees to build on their planning and early implementation experience to create a sustainable, comprehensive, apprenticeship system for child-care workers that addresses the labor-force problems bedeviling the child-care industry: low wages, short retention periods, and inadequate skills leading to low quality care for children. In this chapter, we review the prospects of the 10 western states in reaching these goals.

The DOL goals and the conceptual framework for the study (presented in Chapter I) suggest two fundamental research questions:

- **Sustainability.** Do states have the organizational and financial capacity to carry out the basic functions of the apprenticeship and maintain a viable program after the QCCI grant ends?
- **Comprehensive systems.** Do states have the capacity to deliver the program widely to early education employers and workers throughout the state?

From these questions we then developed an analytical model with specific indicators of sustainability and comprehensiveness by which we can evaluate the specific steps and processes that the western grantees have taken.¹

DEVELOPING SUSTAINABLE CHILD-CARE APPRENTICESHIPS

We begin this chapter with a discussion of several key indicators responsible for the sustainability of the child care apprenticeship program. Results from our site-visit analysis suggest that there are a variety of different components responsible for creating a sustainable and comprehensive child-care apprenticeship program after the QCCI grant ends. We examine processes, strategies, and partnerships that retain the key elements of

¹ This model and the indicators was also applied to all 21 states, both eastern and western, that received grants in the first two QCCI rounds of funding in 2000 and 2001. The results are included in a companion report for DOL entitled "*An Assessment of Sustainability in the DOL Quality Child-Care Initiative.*"

the apprenticeship model and adapt those methods successfully to the unique requirements of the child-care industry.

It is important to distinguish sustainability from effectiveness or any other issue of program quality. We define sustainability as the ability of an organization—or group of partners together—to maintain the program at some minimum level. These are the specific organizational and financial requirements, without which it would be difficult to maintain a functional program. But we make no estimates about whether these steps meet any uniform standard of quality, have a net positive impact on worker training or child-care quality outcomes, provide training at reasonable cost, or express some other measure of effectiveness.

To aid in the analysis, we have identified the following indicators for sustainable programs and will detail each throughout the chapter:

- **Administration:** All apprenticeships need some administrative capacity to manage the program on a day-to-day basis.
 - **Staff support.** Some staff capacity is necessary to recruit new participants, keep track of participant progress, and provide support to advisory panels or other leadership bodies.
 - **Data.** An integral part of administering any training program is collecting data on worker characteristics (age, race, sex, previous work and wage experience), their progress in the program, and any outcomes (wage levels, retention and skill attainment). Data is a key input for the other administrative functions.
 - **Evaluation:** A sustainable program requires some systematic analysis of the training process so that managers can build on strengths and remedy weakness in the program.
- **Governance:** Any ongoing program needs leadership and decision-making capacity to revise broad policies so that it will continue to be responsive to industry conditions. As an industry-based training program, the apprenticeship requires consultative direction and oversight from sponsors and other stakeholders, typically through an advisory committee. And, because the child-care apprenticeship is so dependent on external public funding and support, it is critical for the program to obtain ongoing support from elected officials, state and local agencies.
- **Standards.** Standards are the framework for all apprenticeships, and these must be responsive to the needs of the apprentice and sponsor or specifically to the needs of family child care providers. For sustainability, a system must be able to maintain the currency of the standards and adapt them to changing conditions in the industry. Since

all the states have standards, and there was little interest in revisions at this early stage of development, we have omitted any discussion of standards as a sustainability indicator.

- **Training.** Apprenticeship training is composed of two learning methods: related instruction, in which an apprentice learns the theoretical aspects of the craft and on-the-job-training, in which the apprentice learns the practical aspects of the craft and how to apply the skills to the requirements of the sponsoring employer. The training should be built on industry-wide skill standards.
 - **On-the-job-training.** Federal standards require that apprentices work full-time (2000 hours per year) and follow a curriculum based on industry skill standards. Part-time work is allowed if the program establishes such work.
 - **Related instruction.** Federal standards require at least 144 hours of related instruction per year. This training needs to be accessible, available at reasonable cost, and provide the necessary skills that employers require. Also, at the low end, the related instruction must build on (or articulate with) the training available for the Child Development Associate credential, which is almost universally recognized as the first step in training. At the high end, it must be credit-bearing so that a journey worker can earn associate, bachelor, and even higher degrees without duplicating classes.
- **Financial Capacity.** Obtaining the funds to pay for the costs of the program—the participant-related costs as well as maintaining the administration of the program is widely considered to be the most challenging of all the sustainability elements.
- **Collaboration with professional development initiatives.** All states have recognized the child-care workforce dilemma and have developed programs to address that dilemma. We contend that a sustainable apprenticeship must be connected to these initiatives in order to gain acceptance from potential sponsors and workers and access to funds. Especially important is placing the child-care apprenticeship on the states carrier lattice.
- **Meeting the needs of the key customers.** Our conceptual framework and common sense tell us that the major test of any program, and the key to sustainability, is that it meets the needs of its customers. These are the direct participants—the apprentices, journey workers, and sponsors—and the parents and children who are the end customers for quality child care. Regarding the direct participants, we interviewed them during all of our site visits and they were uniformly supportive of QCCI. However, most of these visits were conducted relatively early in the process so the participants had neither sufficient duration in the program nor the

perspective to comment on the efficacy of the program. Regarding the parents, we were only able to obtain secondary comments about their views from the direct participants. And these were very sparse because most centers did not have any systematic method of informing parents and gathering their feedback. Thus, because of limited information on the customer response, we omit any further discussion of this key sustainability indicator.

We discuss each of these indicators in turn.

Administration

Staff Support

While certain administrative components of the program are carried out by state or federal apprenticeship officials, just as they do for many of the other 800 registered apprenticeships, those officials have limited time and resources to spend specifically on the child care apprenticeship program. For that reason, nearly all of the states designated a project coordinator who was responsible for ongoing marketing, recruitment, monitoring, tracking apprentices' progress in completing training, issuing apprenticeship certificates, among other duties, during the grant period. Most states recognize the importance of these functions and elected to retain the position as an element of a sustainable program. All these states sought to retain the incumbent who had built experience during the grant period.

Among the western states, Nevada has the most formidable and permanent administrative structure. There are two professional development centers for the apprenticeship and other child-care professional development in both Reno and Las Vegas and a regional coordinator in the rural eastern part of the state. The project is still managed by the Washoe County School District, but eventually the child-care agency hopes to turn administration over to an independent, non-profit organization.

Leadership Is Important.
Succession and leadership development, often overlooked in a young program, may be quite important for long run sustainability.

The importance of permanence and leadership development for the coordinator function is highlighted by the Washington experience. The state had the largest number of apprentices of any state—eastern or western—during the grant period. The coordinator was very aggressive in marketing the program and signing up participants. However, the coordinator retired, and there has not been any regular replacement. While the coordinator continues to volunteer a few hours per month to manage the program, her

reduced time has dramatically affected the state's recruitment efforts. The state's reports show that the number of apprentices is dropping, reflecting completions and no new recruits. By contrast, the Nevada program has also been successful in institutionalizing staff leadership skills so that it can survive turnover. The original coordinator has given way to a successor brought up from the ranks and the regional coordinators are being groomed for future leadership roles.

In most of the other states, where the workload for the apprenticeship cannot justify a full-time position, sustainability for administration is aided by collaboration with other programs. In such states, the apprenticeship program shares staff with other components of the child-care professional development initiative. The Alaska and Montana coordinators, for example, spend about half of their time on non-apprenticeship activities. In Iowa, the apprenticeship coordinator was expected to also administer the TEACH program once it comes on line. The part-time status reflected both the low level of apprenticeship activity and the difficulty of paying for a full time coordinator. In Colorado, the local coordinator at the community college provides other workforce training services through the college's resource and referral function. In most cases, the real limitation on staff support is financial, which is discussed below.

California, an apprenticeship-agency grantee, took a different approach. The state observed the sustainability difficulties of the first-round states and concluded that the difficulties of creating a separate position and paying for it were too great. Thus, the apprenticeship agency hired two regular staff members who would be involved in all apprenticeship activities but with special responsibility for promoting the child-care apprenticeship. The agency would retain these jobs through its regular staffing plan, and thus the state would retain ongoing administrative capacity. However, the efficacy of this arrangement has yet to be tested since the state had not yet implemented its program.

Data about the Apprenticeship Program

The federal and state apprenticeship programs collect only minimal information about apprentice characteristics, program progress, and completions. Most grantees thought they needed more detailed information about the characteristics of program participants, their progress through the program, and outcomes to manage the program. Richer data could also prove quite valuable for internal program assessment or external evaluation. Seven states western states developed their own informal data sets. Oklahoma's internal apprenticeship database is among the most comprehensive, collecting information about apprentice and journey worker characteristics (gender, age,

and race and age), apprentice program progress (wages, classes and on-the-job-training hours), and credentials received (Child Development Associate or apprenticeship certificate). At least five states, including some states with apprenticeship-only-data systems, benefit from broader data collection efforts linked to the state professional development initiative. These states have data sets on participant characteristics, training and credentials obtained, and a few have wage information also. Colorado's professional development registry is among the most comprehensive, capturing information on characteristics, wage and work experience, and training and credentials received. Regrettably, there is no standardization of information collected by the different states that might facilitate national research on the apprenticeship.

Evaluation

Some form of evaluation—ranging from surveys to informal analysis of a program's internal operation to formal external process analyses (documenting the progress of the program) or impact studies (estimating whether the program itself is responsible for reaching policy objectives)—is essential to a sustainable operation so that project leaders can build on strengths and address weaknesses in the

Rich Data is Essential for Program Management. Data that is shared with the professional development initiative may be richer, strengthen the relationship to other child-care workforce programs, and may offer comparative data for future evaluative work.

program. Four grantees went beyond basic tracking and sought formal evaluations of the child-care apprenticeship program. The evaluations were used to uncover areas of program strength and weakness, as well as identify strategies for program improvement. For example, South Dakota conducted two surveys and systematically analyzed the results. The first apprentice survey gathered information on their knowledge, skills, attitudes, behavior, wages, progress, and program experiences. This survey, in combination with other information, revealed that the delivery of the on-the-job training was not as consistent as the project staff desired. This resulted in the hiring of five external journey workers to monitor and support the efforts of the on-site journey workers. South Dakota's second survey focused on the use internet-based courses, which were often difficult for apprentices since they generally had little prior experience with computers. As a result, the project created a basic-computer skill workshop for apprentices.

Three other states contracted with external evaluators for either a process evaluation or an impact evaluation. Oklahoma has the most extensive evaluation, hiring an external evaluator to 1) gather demographic, education, and work experience information about participating journey workers and apprentices, 2) conduct a pre- and post-survey with journey workers and apprentices, 3) develop case studies in rural and urban locations, and 4) maintain phone contact with all participating center directors, journey workers, and apprentices. This will be followed by an outcomes-based evaluation of the related instruction. Colorado contracted with a state university research institute for a process evaluation of the apprenticeship pilot and used the results to improve the quality of the training. Nevada has planned an impact evaluation through its state university, but this has not yet occurred.

Governance

Unlike many larger-scale 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 can provide important endorsements for child-care quality 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, educators, resource and referral agencies, and practitioners are often key members of the advisory committee that helps to shape the program.

Support from Elected and Appointed Officials

Political support is critical because child-care quality resides 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. As we noted in Chapter II, 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 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. In recent years, efforts to strengthen K-12 education have taken center

stage in many states. In at least one state, critical attention of the child-care administrator was diverted by child protection issues that were making headlines in the state's newspapers at the very time that the apprenticeship was seeking in future support. Even within the general scope of child-care workforce quality, there are other initiatives stakeholders such as tiered reimbursement or TEACH that attack the same problem and attract attention of public officials and other stakeholders.

The general economic setting for the program is also a very influential factor in sustainability. The planning for the apprenticeship programs largely occurred during an economic expansion, with the grant awards actually 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 are 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.

Within the realities of the economic cycle and potential public-policy competition, grantees worked extensively to build political visibility and support. For example, Washington's project manager served on the governor's advisory committee on child care and met periodically with the governor's child-care advisor. The Iowa project manager, who is director of the state's major child-care advocacy organization, met regularly with legislators and key policy officials in the state agencies controlling Head Start and the Child Care and Development Fund. She also met with business lobbyists to build support for professional development, including apprenticeship program.

Program Timing Important. The timing of program development—in both economic and political cycles—can be a critical factor in sustainability. The QCCI was conceived during a relatively favorable economic and political climate, but is seeking a sustainable presence under far less favorable conditions.

Other states maintained important political relationships through their professional and advocacy links. For example, Nevada's project manager is also the head of the state's Association of Education for Young Children and this position allowed her to influence stakeholders throughout the state. The Nevada apprenticeship staff has also developed partnerships with the workforce development network, the university and

community college system, VISTA, AmeriCorps, and the welfare-to-work offices. Each played an important role in the development, delivery, and funding of the apprenticeship program.

We also saw evidence of important business support in a few states. In Nevada, the state's hotel and casino industry was very supportive of the apprenticeship. That large industry, with its round-the-clock operations, has a strong interest in building good quality child care, especially in those facilities that can operate on a 24-hour basis. In Colorado, Oklahoma, and Washington, important business interests are supporting child-care quality improvements, in general and some of this support may spill over to the apprenticeship in the future.

State-Level Advisory Committees

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. Specifically advisory committees in a sustainable environment can revise standards where necessary and improve training curricula

Most of the western states have active advisory boards with good representation from public officials, resource and referral agencies, educational institutions, and some had practitioners present as well. Head Start is present in those states that include Head Start in the program. To help ensure that the program meets the needs of the participants, Alaska also has apprentices and journey workers on the committee in addition to sponsors. Nevada's advisory board also had journey workers and apprentices, but the program discontinued the practice on advice from its State Apprenticeship Council. Other states, such as Oklahoma, have periodically invited participants, such as journey workers and sponsor center directors, to attend advisory board meetings. Three states with large Native American populations, intentionally included Native representatives on their committees to ensure that the program would reflect Native perspectives and values. Among the latter group, Alaska specifically formed its committee to include a Native representative at the outset.

Another key element in a sustainable advisory committee is to coordinate activities with the state's professional development initiative. Thus, in at least seven states, there was overlapping membership between the advisory committees for the apprenticeship and the professional development initiative. In some cases, this relationship was modest with only a single overlapping seat, but in other cases, such as Alaska, Colorado, Kansas, and Nevada there was extensive overlap and the apprenticeship was generally more integrated with the other components the professional development initiative.

Advisory Committees Play Major Role.

Advisory committees are central to the sustainability of the child-care apprenticeship. Committees must have linkages to the key support elements, both political and practitioners, and ensure that the standards and other program elements are responsive to the specific needs of sponsors and workers. Local committees may be especially helpful in adjusting the program to local conditions.

Local Advisory Committees

In addition to their state-level advisory committee, three states, Alaska, Nevada, and Iowa developed local advisory committees to help improve the fit between the program and particular needs of local sponsors and workers. Iowa project leaders, who have the most localized design of all the states, believe that local advisory committees are more compatible with variation in the state because:

- Geographically, the center emphasis in urban Waterloo would not be very relevant in rural Northwest Iowa, which has few centers and relies on family providers.
- Educationally, local committees could develop curricula by working with their community colleges, which were governed locally and usually resist standardized curricula. These committees could also take advantage of close personal and professional ties between the early childhood education department in each college and the local resource and referral and Head Start Collaborative groups
- Financially, a local committee would be in a better position to obtain funds from locally-controlled pots of state block grants for children.

Standards

Sustainability for the standards requires that grantees be in a position to revise their standards in response to changing conditions in the industry. Most of the states felt that they were still in the initial phase of implementation and expected to work with their original standards. They had only recently made important decisions regarding basic

structure and some addressed quality issues like wage levels, ratios, and provisional journey worker qualifications. So, there was little interest in re-opening these issues. Only Nevada made a slight change in its standards, permitting apprentices who were not high-school graduates because its community-college system did not require a diploma to take its classes and obtain a degree. Thus, the issue of preparedness to adapt the program to emerging conditions in industry is premature and is not a relevant factor in sustainability at this time at this time.

Training—Related Instruction

Apprenticeship, of course, 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 during early implementation. Thus, we focus on related instruction as an element of sustainability.

Related instruction has two principal sustainable characteristics. First, there should be clear connections to core competencies from the National Association for the Education of Young Children that underlie the professional development initiative in all states and effectively form the industry skill standards so that individual postsecondary schools or other training providers can use to tailor their particular courses. And second, the curriculum should fit in—or articulate with—other courses so that apprentices can build on previous training and be well positioned for further academic work in the field.

Most of the states developed the related instruction curriculum by utilizing the child-care training systems already in place. This included community colleges, four-year college institutions, and other teaching organizations, such as resource and referral. Many of the grantees met with these institutions to review and update the curriculum so that it met the standards of the apprenticeship program. Generally, little modification to the curriculum was required, since nearly all commonly based their curricula on widely-accepted National Association for the Education of Young Children competencies. States were also greatly aided in the first year curriculum by coordinating their course lists with the requirements for the Child Development Associate credential. In all cases, the quality and capacity appears to be very sustainable.

In the eight states that are using public postsecondary instruction, the courses will typically articulate with the college requirements for associate and higher degrees. This is a very important requirement for the child-care industry for two reasons. First, as part

of the education system, child care places high value on educational credential attainment. Second, because low worker-skill levels are widely understood as the root of low quality, it is very important for workers to obtain the knowledge that is available through advanced education. Two states—Oklahoma and Alaska—are delivering their instruction through non-credit mechanisms that appear to be quite effective in meeting the competency requirements of sustainability but their courses do not articulate with further training. Alaska is exploring credit options for its related instruction through its resource and referral system and is also striving to reach agreement with its public university to have the college deliver related instruction in the future.²

Financial Capacity

Our respondents uniformly indicated that the financial capacity to carry on the program is by far the greatest challenge of all the sustainability issues. At the time we gathered information for this report, only half the states—Colorado, Kansas, Montana³ Nevada, and South Dakota—have solid funding commitments beyond the grant period. This funding issue for the child-care apprenticeship differs from most other apprenticeship programs, where all the costs associated with worker training and increased wages are typically born by the employers who sponsor apprentices, either individually or through a trade association or an industry-wide training trust. But as we noted frequently throughout this report, the current economics of the child-care industry discourage financing from employers in the industry. The nature of these costs is detailed in Chapter III, but the ways in which states plan to cover these costs after the grant ends is the subject of this section.

Financial Capacity Is Critical.

Financial capacity is the single most challenging element of sustainability. It directly affects several other elements such as administration. It also affects directly affects comprehensiveness because recruitment is typically dependent on the ability to pay for participant-related costs.

We examine financial capacity using two different strategies: direct funding, which we define as grants or other revenue that are provided directly to the program itself so that it can be spent for any programmatic purpose. The most important source of direct

² This issue is discussed in Chapter II.

³ Legislative approval was still pending in Montana at the time of the visit.

funding is the Child Care and Development Fund, a block grant that can be used to support both administration and worker training. Then we look at indirect sources, such as the TEACH scholarship, Pell Grants, Individual Training Accounts under the Workforce Investment Act, and other forms of support that may be available to individual trainees because they enroll in another program. Finally, we examine the indirect source with the largest potential, tiered reimbursement programs, which provide increased payments to child-care employers through the Child Care and Development Fund's subsidized care so that employers can pay for workers' training themselves. We conclude this section with a discussion of serious constraints that the states face in obtaining financing.

Direct Funding Strategies

Child Care and Development Fund. The Child Care and Development Fund's quality set-aside is seen by most states as the main source of financing for the states with commitments and for most of the other states that are still seeking funds. However, declines in formula allocations and state matching funds because of budget crises in the states, is making this source more problematical.

Nevada is in its second year of independence from QCCI funding, through the Child Care Development Fund. The state provided \$350,000 in the first post-grant year and increased the amount to over \$400,000 in the second year. The child-care agency appears committed to maintaining this grant. Colorado received \$223,000 from the Child Care Development Fund to finance the program for one additional year. Although a subsequent grant appears tenuous, the state child-care agency staff indicates that the apprenticeship should be available as one item on a menu of workforce quality programs. Thus, if workers and sponsors select this method, the state will make funds available, although the specific vehicle was not identified. Kansas secured \$130,000 from the same funding source, although the amount was initially expected to be \$150,000. In South Dakota and Montana, Child Care Development Funds were used during the QCCI grant period to help cover administrative costs, including large portions of the project manager's salary, and some participant-related costs, such as tuition. As part of the ongoing mission of the grantee's office, South Dakota project staff will continue the child-care apprenticeship program using Child Care Development Funds. This is also expected in Montana.

Two other states are hoping for support from their respective quality accounts in the Child Care and Development Fund, but they have not been as successful in obtaining

formal commitments to date. Iowa requested a small \$35,000 grant for state-level apprenticeship support from the managers of the Child Care Development Fund. The child-care agency agreed to put the request in its 2-year plan that goes forward to the federal government. However, there has not been any funding commitment up to this point. Alaska is also hoping to receive some financial support from its special federal earmark for its professional development initiative. After that pot of money ends in 2005, the program expects support for administration from the Child care Development Fund quality set-aside.

Training Trust. Washington is exploring use of a training trust, a traditional method of financing apprenticeships. The trust would be a vehicle for sponsors or external finders to pool funds and make them available for both administrative and participant-related costs.⁴

Other Direct Funding Sources. Some states are looking farther afield in their exploration of alternative funding sources. There is interest in the Workforce Investment Act funds, state-appropriated funds, private-sector businesses, and foundations. For example, the Alaska child-care apprenticeship received a \$50,000 grant from the State Workforce Investment Board to extend the duration of the pilot program. However, the State Board may rescind the funds, because the state is running short of workforce funds. No other state has been successful in obtaining any Workforce Investment Act state reserve funds.

States have explored other sources of funding. For example, Kansas is interested in accessing funds from the state's share of the tobacco product-liability settlement, which the state legislature has targeted for programs that benefit children. Iowa is looking at a pool of state appropriated funds that its legislature has set aside for a variety of social and educational programs benefiting young children. Using these funds, known as Empowerment Funds, local boards of elected and appointed officials can make grants to local programs such as the child-care apprenticeship. As noted in Chapter III, all three Iowa pilot sites drew on these funds during the QCCI grant period. The project manager is also interested in obtaining business and foundation grants for the apprenticeship.⁵

⁴ Development of the trust began in 2001, but no information on its current states is available. An eastern state, Vermont, has reportedly made progress on creating such a trust.

⁵ Foundations supported the TEACH program in its early stages in many states.

Apprenticeship Agency Operations. The state apprenticeship agencies in Montana's and California are expecting to provide substantial support for administrative costs through their regular apprenticeship staff. California's staff will be fully supported from regular staff funding sources while the Montana agency houses the QCCI coordinator.

In-Kind Donations. All of the states have received in-kind support at some level, and expect to continue to receive such support. For example, all states have an advisory committee, in which members volunteer their time and expertise. In addition, these members have often provided additional support, such as helping with recruitment efforts.

Other in-kind support has been provided to the grantees. For example, Nevada and Alaska obtained substantial volunteer labor from several community service programs such as AmeriCorps, Promise Fellows, and VISTA during the grant period to help with administrative tasks. The Nevada project expects to be able to continue to draw on these sources in the post-grant period.

Indirect Funding

The child-care apprenticeship can benefit indirectly from funding that is available to apprentices who enroll in a closely related program such as TEACH or for a generic program for which an apprentice may be eligible, such as Pell grants or Individual Training Accounts under the Workforce Investment Act. The child-care system is also experimenting with tiered reimbursement.

TEACH Scholarships. TEACH can pay for related instruction, including tuition, books and other materials. In Colorado and Oklahoma, the apprentices are co-enrolled in TEACH and are receiving TEACH scholarships to pay for related instruction. Washington, Iowa, and Kansas are planning on also tapping this resource as TEACH moves to implementation in Iowa and Kansas and from pilot to statewide status in Washington.

Pell Grants. A federal Pell Grant can be awarded to undergraduate students who have not earned a bachelor's or professional degree and meet financial requirements. Although this funding source is an entitlement for eligible students, only a few states are systematically working with their college systems to ensure that apprentices routinely apply for these grants. In Kansas and Montana, apprentices complete the federal assistance packets when they join the apprenticeship program. Any awarded Pell Grants

are used first before any other funds are expended for related instruction. In Northwest Iowa, the community college required enough college credit as part of the program so that economically-eligible students would qualify for Pell grants. Colorado staff suggested that if other funds were not available in the future, the students would be expected to apply for Pell grants.

Individual Training Accounts. The Workforce Investment Act requires that individuals receiving training must be allowed to select training from among a list of eligible providers. A new apprenticeship program is automatically an eligible provider for its initial year of operation, but in subsequent years, it must meet the state and local performance requirements. Parties in several states have advocated these Individual Training Accounts as a viable source for related instruction. However, only one local workforce investment area in Alaska has approved the child-care apprenticeship as an eligible training provider.⁶ Another local area in Alaska and South Dakota's single local area have considered the program for approval but either rejected it or did not act.

Tiered Reimbursement. Tiered reimbursement programs increase the subsidy for providers who meet stipulated quality criteria. The National Child Care Information reports that there are 34 states nationwide who have adopted such a system, including two western QCCI states, Colorado and Oklahoma. South Dakota and Alaska are nearing implementation. And two other states, Iowa and Nevada, are considering adopting similar policies. In Nevada, the child-care agency has prepared a budget impact statement for the adoption of such a policy. Under this plan, the state would encourage providers to pay the higher wages that go hand-in-hand with staff training and higher quality. That state's plan is noteworthy, for its developmental approach in which technical assistance will be offered to low-quality centers in low-income areas to help them make the improvements needed to receive higher payment levels.⁷ In Iowa, there is support for linking reimbursement to quality, but there are no specific plans yet to implement such a program.

A related method of providing additional resources to centers that invest in worker training is to provide a direct bonus to a center that obtains accreditation from the

⁶ The Fairbanks, Alaska Workplace Board approved the program but has not yet funded any training.

⁷ The Chapter III discussion of tiered reimbursement noted that this program can have the effect of shifting more resources to centers that already have the means to provide training to workers.

National Association of Family Child Care. Although accreditation has no specific staff-training requirements, it is unlikely that a center could reach the quality levels necessary to gain accreditation without significant investment in staff training. Iowa currently provides a bonus of \$500 to any center accredited by the National Association for the Education of Young Children and \$250 to any family provider who receives accreditation from the National Association of Family Child Care. The same bonuses are also available to previously accredited providers who renew their accreditation.

Tax Credits. One state is tentatively exploring using tax credits to subsidize quality child care. The Iowa project manager met with representatives of the state's employer federation, which was interested in a state tax credit for businesses that operated child-care centers for their workers. She suggested that the federation consider providing a quality bonus in its proposed legislation for centers that meet accreditation or other quality standards that would include worker training.

Collaboration with Professional Development Initiatives

The linkage to the state professional development initiative, which we discussed in Chapter II, is another critical element of sustainability. These initiatives establish the basic framework for child-care quality improvement in most states, the competencies and training and credential requirements. These initiatives have a high degree of acceptance within the industry as the principal vehicle for quality improvement. Thus, it seems highly unlikely that a child-care apprenticeship can be sustained unless it is compatible with the states' professional development initiative. A key indicator of compatibility is whether the apprenticeship has a place in the states career lattice, which describes the multiple career paths or levels available to a worker and associated training requirements. Six states—Alaska, Colorado, Kansas, Montana, and South Dakota—explicitly placed the apprenticeship program on the career lattice, making it an explicit step in career development across the state. Oklahoma's apprenticeship will fit comfortably into the credential level of its career lattice, but the staff have not yet created the explicit link. Washington made its apprenticeship compatible with the state wage and career ladder, a parallel compensation initiative. Two states, Iowa and Nevada, did not have a professional development initiative at the time of the award of the QCCI grant. Nevada was expecting to develop a career lattice in which the apprenticeship would occupy a key position. In Iowa, the professional development initiative was just beginning to emerge. In California, the grantee hopes to link the apprenticeship training to that state's work

experience and education requirements for various child-care jobs (known as the Permit Matrix), but no steps have yet been taken to make the connection.

DEVELOPING COMPREHENSIVE CHILD-CARE APPRENTICESHIPS WITH A BROAD REACH

In this section, we review progress that has been made to develop a comprehensive program that is widely available. Under the QCCI grants, grantees are obligated to establish a statewide apprenticeship system. However, the grant solicitation did not establish specific criteria for scope and reach of the child-care apprenticeship systems. To help in assessing progress toward this major goal, we propose the following indicators of comprehensiveness and statewide reach:

- Including all types of providers, including Head Start.
- Including all age domains: infant/toddler, pre-school/Head Start, and school-age/after school children.
- Delivering programs to diverse populations and social groups.
- Having the capacity to offer the program throughout the state, when requested.

It is important to understand that these indicators are not intended to establish a precise threshold that can be used to measure whether or not a state has satisfied each requirement. Instead, it provides a way to evaluate the progress that the states are making from a zero point to some desirable outcome determined by the states themselves. This flexible perspective is necessary for two reasons. First, 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 wanting the apprenticeship as one method among several for training staff. Second, it is unrealistic, given the limited capacity of child-care employers to finance the program, to expect that the program could spread any faster than there are funds from child-care or other sources to pay for the various administrative and participant-related costs. And these funds, as we noted above are indeed scarce.

Including All Types of Providers and Age Domains

The grantees focused their effort on child-care centers, which can have an apprentice and journey worker at the same facility and provide an employer to pay the wage progression. Only two local sites in Iowa and Colorado developed the program for family providers. The very rural Northwest Iowa site delivers most child care through family providers, so emphasizing them makes sense in that area. The Triad site in

Colorado added family providers later on in response to demand from a group of family providers who wanted to professionalize themselves and shift their business from babysitting to early childhood education. Although there were only a few attempts, most of the states indicated that they will consider family-provider apprentices once they establish their center-based programs on a sound footing. Two other states, Montana and South Dakota, also offer apprenticeship to group-home providers, which have at least one employee.

Programs varied considerably regarding whether they would accept Head Start workers. In several states, Head Start is the grantee or a lead partner, so these apprenticeship programs made the necessary accommodations to include these workers who generally work only 20-30 hours per week. Two states, Nevada and Colorado, were concerned that part-time Head Start apprentices, would take too much time to complete the 4000 hours of on-the-job-training and thus increase the risk of non-completion. In several other states, Head Start had little interest in the apprenticeship, most likely because 1) the Head Start leadership felt that the apprenticeship would not contribute to meeting the national Head Start training requirements that are above the apprenticeship (50-percent of teachers nationwide with an associate degree), and below the apprenticeship (classrooms without degreed teachers must have teachers with a CDA), and 2) they had sufficient resources through Head Start Collaboration to reach their goal.

Part-Timers are Risky.

Several programs decided against serving Head Start or school-age only workers because they are part-time and thus increase the risk of non-completion.

All of the child-care apprenticeship programs accepted providers of all age domains, including infant/toddler, pre-school, and school-age/after-school children. However, because school-age providers are often part-time and some states require that apprentices work full-time, many school-age-only providers were excluded from the apprenticeship program for the same reasons that Head Start workers were excluded.

Promoting Diversity

Ensuring diversity is a key goal for DOL, and the grant solicitation required applicants to identify the steps they planned to take to promote diversity. Only two grantees, Washington and California, explicitly recognized this in their basic recruiting. Washington requires that sponsors select apprentices from diverse cultures, ethnicities, genders and abilities. California plans to require that sponsors develop diversity goals

and timelines. Nevertheless, with a substantial and growing minority presence in the child-care workforce, all the states reported that the proportion of minorities among their apprentices met or exceeded the minority proportion in their state.

But from a sustainability perspective, it is important for the initiative to bring minority-group members onto advisory committees and otherwise ensure that the QCCI will be able to deliver its child-care training in a manner that is sensitive to the cultural requirements of minority-group workers. Such cultural sensitivity will enable workers to deliver quality care that reflects the cultural background of the children, a clear requirement of the competencies from the National Association for the Education of Young Children. This is especially important in several western states with substantial Native American populations on reservations with a truly distinctive culture, a long history of isolation, and poor relations with the majority white populations. In addition, some observers believe that diversity in the leadership and curricula will promote political and financial support for the initiative.

We did observe that minority-group members played a very small role in project leadership. Consequently, one state, Alaska, designated a seat on its advisory committee for a Native Alaskan child-care practitioner, and Montana and South Dakota also had Native American representatives on the advisory committee. Colorado sought to address under-representation of minority-group members in leadership positions in the child-care field through a privately-funded program to improve their leadership skills.

Several states, including Alaska and South Dakota, were planning to develop culturally sensitive curricula to better serve their Native groups. Oklahoma included Native people in its instructor group and is hoping to add a Native-American project manager to improve inclusiveness. All these states recruited substantial numbers of Native apprentices.

Four projects developed strategies for ensuring inclusion of apprentices with limited English proficiency or basic skills deficits. For example, Colorado developed on-line courses in Spanish. This state also had the written materials on audio-tape. Nevada offered special seminars for native and non-native speakers with poor English skills. Several other states relied on the availability of general remediation programs within their community colleges.

Achieving Statewide Reach

Six states used a geographically-limited, pilot approach as the starting point for building a statewide program. The other four states committed to an early statewide implementation, but started slowly with a limited number of sponsors and apprentices. Despite these dissimilar implementation strategies, all grantees faced similar problems of extending the reach of the apprenticeship beyond a limited circle of initially enthusiastic sponsors. This section describes the strategies used by each state to develop a statewide reach. The strategies used by the pilot states are first described, followed by states that began with a statewide approach.

Examples of Expansion from a Pilot Project to a Statewide System

Six states started with a pilot in one or more local sites. These states—Iowa, Colorado, Kansas, Alaska, California, and Oklahoma—are testing the apprenticeship program at a limited number of local sites before turning to statewide expansion. Yet, as described below, each of the pilot states is pursuing a different strategy in making the transition to a statewide system.⁸

Encourage accretion from a single Pilot (Colorado). Colorado is relying on the expansion of a single pilot project by accretion, both internally and to adjacent counties. There are several reasons for this approach. First, there is necessity because the Triad Consolidated Child-Care Pilot area is the only applicant to implement the program. Second, the Triad Pilot is in the process of increasing its direct geographic coverage since it was taking over the resource and referral function for three adjacent counties after the former resource and referral contractor went into bankruptcy. And third, Triad's location could promote the dissemination of the apprenticeship system to other consolidated pilots in the greater Denver metropolitan area where a large proportion of the state's population lives. For example, the apprenticeship is already serving a few centers in adjacent Denver and Arapahoe Counties. The major challenge to this accretion strategy is that there has been little interest so far from the adjacent Consolidated Pilot programs.

Plan for expansion after implementing and learning from pilots (Iowa and Oklahoma). Iowa has three pilot sites in three distinct geographic areas of the state and

⁸ California is designing, but not implementing, the apprenticeship program during the grant period. To recruit apprentices, the grantees will hold countywide informational meetings in the nine pilot counties to recruit sponsors in both northern and southern California. Plans for transitioning to a statewide program have yet to be developed.

that represent both urban and rural areas. The state grantee planned to convene key representatives from each site to assess their experiences and draw up plans for statewide expansion. In addition, the state will pursue other marketing tactics such as presentations at statewide conferences and a brochure. However, the assessment meeting was delayed, and one site (Davenport) remains quite isolated. Thus, expansion still faces significant challenges.

Oklahoma is using a similar approach. It is using a single pilot area focusing on the suburban area around Oklahoma City. The Oklahoma grantee felt that this would facilitate technical assistance and allow grantee staff to observe the results closely. Subsequently, the grantee will try to move the program to Tulsa, the second largest metropolitan area in the state, once it understands the results from its pilot area.

Build an apprenticeship program in large urban areas (Kansas and Alaska). Kansas piloted the child-care apprenticeship program in its largest city and some outlying counties. Even though the program was initially restricted to the pilot region, the project manager publicized the program through flyers to centers throughout the state and gave presentations at local and statewide professional meetings to build awareness of apprenticeship on a statewide basis. To begin the expansion phase, the grantee convened a committee of key stakeholders to develop a strategy. This resulted in the addition of three colleges in different parts of the state to teach the related instruction, resulting in a total number of seven participating institutions and the beginnings of statewide recruitment.

Alaska's pilot apprenticeship program started in Anchorage, Juneau, and Fairbanks, which comprise the majority of the state's population. These pilot areas were selected because they had sufficient population density and child-care facilities to develop the basic components of the project before rolling out the training to smaller remote regional cities. Eventually, the grantee expects to expand the project through the state's distance-learning network that is available in all communities with 1000 or more people. One challenge will be reaching the small, native communities, which do not have access to this network. Another obstacle will be the technical challenges involved in distance learning, including ensuring that apprentices have the computer skills required to participate in remotely-based related instruction.

Examples of Starting up a System with Statewide Coverage

Montana, Nevada, South Dakota and Washington elected to forgo the pilot approach to create a statewide system immediately. While each state varied greatly in its approach, a common theme was that project managers recruited through broad statewide networks, such as resource and referral, child-care associations, and other child-care training initiatives in the state.

Establishing regional coordination positions for urban and rural areas (Nevada). Nevada had an easier time in achieving substantial coverage of the child-care workforce in the state, since its population is heavily concentrated in the two metropolitan areas of Reno and Las Vegas. This grantee responded by immediately establishing apprenticeship coordinator positions for each metropolitan area. These managers have been able to promote and administer the program in those areas, making the program available to most employers in the child-care industry. The two regional coordinators also served their respective rural areas. Subsequently, the grantee expanded coverage to the rural eastern part of the state by appointing a coordinator for that region.

Have a strong project leader act as apprenticeship ambassador to centers and community colleges (Washington and Nevada). During the project period, Washington built apprenticeships in several regions. The project manager, who has extensive experience with both child care and apprenticeship through her community college position, traveled throughout the state to introduce child-care center directors to the apprenticeship. At the same time she encouraged community colleges to offer courses that meet the related classroom instruction requirements. Nevada's first coordinator was the president of the state unit of the National Association for the Education of Young Children and used her position to emphasize the apprenticeship.

Leadership, however, is a perishable item. Washington's leader retired and has been coordinating the program on a very limited basis. With only a few hours per month to spend on the program, and nobody to replace her, the program is languishing. Nevada, by contrast, worked studiously to increase the program's leadership capacity by encouraging leadership skills from the regional coordinators and other staff. In this way, program operations produce future leaders.

Word-of-mouth (Montana). Montana's project manager, with assistance of the advisory committee members, tailored recruiting materials to address the specific needs of potential apprentices in different areas of the state. Once the program achieved some

initial success, word-of-mouth began to carry the recruiting load, allowing the coordinator to spend more time on quality and consistency issues than on marketing.

Use of incentives (South Dakota and Nevada). South Dakota and Nevada use incentives to encourage sponsors and external journey workers to join the program. Nevada also provides incentives to its apprentices.

Summary of Expansion Progress

The grantees that immediately built broader systems made substantial progress in achieving a broad—an in some cases an arguably statewide—reach. These states recruited more apprentices and were clearly closer to realizing a full statewide system than the states that used a pilot approach. Pilot projects, with their narrower focus, staked out smaller target areas and consequently recruited fewer participants. In addition, they tended more to rely on familiar recruiting targets—those sponsors who were already active in professional development or who participated in writing the grant. Thus, their lack of experience in recruiting to the open market may hamper the pilot states as they expand their recruiting efforts statewide. On the other hand, the pilot states were able to systematically test out various features of their program with a smaller, more familiar group of sponsors. This experimentation may have concrete benefits that will become apparent later on.

Centralized Approaches Had More Apprentices.

States with a more centralized, statewide approach to initial implementation recruited the most sponsors and apprentices.

CONCLUSIONS ABOUT THE PROSPECTS FOR SUSTAINABLE AND COMPREHENSIVE PROGRAMS

The western grantees made significant progress in implementing, sustainable comprehensive child-care apprenticeship systems. However, because most of the grantees are still at an early stage of implementation, much remains to be done. Thus, our findings and any conclusions on the major topics of statewide reach and sustainability must be considered tentative:

Sustainability

- **Administrative capacity and governance.** The prognosis on the infrastructure component of sustainability is very encouraging. Administrative capacity and governance functions that were established under the grant are still in place and do not require significant overhaul to serve sustainable systems.

- **Standards.** All grantees developed apprenticeship standard. No major changes are anticipated
- **Training.** Related instruction is well established in all the states, with resource and referral and postsecondary schools generally offering high quality training. All articulated the apprenticeship curricula with the requirements for the Child Development Associate credential and most provided credit courses that will build towards associate-degree work. On-the-job-training is somewhat less well-established in some states where there is a rudimentary curriculum and relatively little active supervision. On the positive side, nearly all states have developed mentoring programs to improve journey worker skills.
- **Financial capacity.** This remains the most problematical area. Only five states—Colorado, Kansas, Montana, Nevada, and South Dakota—have solid funding commitments beyond the grant period from the Child Care Development Fund. One other state, California, appears set because it will use regular apprenticeship staff to implement the program and will rely on external funds to cover participant costs such as related instruction.
- **Professional development initiatives.** Nearly all grantees designed the apprenticeship program to be compatible with their states' professional development initiative. In most of these states, apprenticeship occupies an explicit step on career lattice. Nevada, which did not have an initiative, will use the apprenticeship as the basis for further quality improvement.

Comprehensive Systems

- **Including a range of providers.** Most grantees serve only child-care centers. Group homes and family providers are reported as being served in only four states and represent a very small proportion of the apprentice group. Most states accepted Head Start, although a few states intentionally excluded these centers because Head Start's part-time employees would not meet the 2000-hour per year on-the-job training requirement.
- **Including all age domains.** All age domains are being served. However, the only school-age apprentices who are participating are employed in centers serving other age groups, so they usually work full-time.
- **Diversity.** All of the states appear to be successful in making sure that their apprentices reflect the composition of their child-care workforce, even though there was little in the way of specific diversity planning. The states were less successful in building minority leadership in the initiative.
- **Statewide capacity.** States that began with a statewide approach obviously have an advantage in attaining broader reach. And this

statewide focus has clearly yielded a larger number of apprentices. Nevertheless, it will be important to find out whether these advantages persist over time once the pilot states are able to broaden their programs. Further, it seems clear that financial resources are the major constraint on capacity.

Overall, it seems clear that Nevada is the state that has made the most notable progress toward sustainability and a comprehensive system. It is establishing a strong administrative structure in all areas that will build the program. Further, there is a capacity to maintain, and even increase, leadership skills. The program is also widely distributed. The two major urban areas were served from the outset, and the state is steadily increasing its rural reach. And finally, the Child Care and Development Fund is paying for the program at a higher rate than the QCCI grant, which should facilitate further progress.

Commitment to Apprenticeship is the Key to Success. The common thread among these successful states is that they each have a clear and unambiguous commitment to the apprenticeship as the principal method of providing skill and wage increases to their child-care workforce.

Among the second round states, Montana has made significant progress in most facets of its program and does very well on most of the indicators of sustainability and comprehensiveness. It has the largest number of apprentices of any of the second group of grantees. On sustainability, the state's very close partnership between the child-care and apprenticeship agencies appears to be a model of collaboration that enhances both its administrative capacity and the linkage to child-care professional development. Although final legislative approval was still pending at the time of the last site visit, the funds have been committed by the child-care agency. In addition, the state has engaged in significant outreach to its Native American tribal child-care and Head Start centers and enrolled many apprentices from those types of centers. South Dakota also has a similarly successful record regarding its indicators of sustainability and is moving to comprehensiveness by recruiting a substantial number of sponsors and apprentices, including its Native tribes.

V. SUMMARY AND RECOMMENDATIONS

DOL's goal in the QCCI was to create sustainable, comprehensive apprenticeship systems for child-care workers. Such a system would address the skill and compensation problems in the child-care workforce and thus contribute to improving the quality of child care. In the preceding three chapters we have detailed the initial progress made by the first 10 western grantees toward meeting DOL's goals. In Chapter II, we looked at the initial project organization and planning. In Chapter III, we discussed project implementation, including recruitment of sponsors and apprentices and the union of related instruction and on-the-job-training in actual operation. In Chapter IV, we estimated the grantees' prospects for building sustainable, comprehensive systems. In this chapter, we summarize the key findings of the evaluation to date and recommend steps that DOL might take to advance its goals in any future grants.

PLANNING

In the planning phase of the project, the grantees needed to translate broad public and political support for reforms in the child-care workforce policies into specific plans for a viable apprenticeship system. The grantees applied for the grants, arranged for project management, and organized networks of stakeholders. In addition, child-care and apprenticeship staff needed to learn the vocabulary and unique requirements of one another's system. They then had to write their apprenticeship standards, the basic framework for the apprenticeship. And finally, they had to fit the apprenticeship into the professional development initiatives already underway in the child-care field. Although there were important differences among the states in the pace with which they were able to accomplish these activities, most states accomplished all of these tasks.

Wage Issues

Arguably the most important issue that emerged during the planning stage was the design of wage standards describing both the minimum wage and the wage progression for apprenticeship. After all, the explicit purpose of the QCCI is to improve the quality of care by increasing the wages of workers. Thus, all parties accepted the basic concept that there should be a wage progression, with workers receiving periodic wage increases as their level of skills increases. The most common schedule for wage progression was a 50-cent wage increase given four times at 6-month intervals over the 2-year period of the apprenticeship. Although we suggested earlier that this progression is not sufficient

to resolve the wage deficits in the industry, it does represent a significant increase in income for the apprentices and establishes the principle in the industry that skill gains must be accompanied by permanent wage increases. One state linked its wage progression to average child-care wage in local labor markets, and thus will explicitly require a large increase for the lowest-paid workers.

Some states also sought to set a minimum starting wage for apprentices that would require the lowest-paying sponsors to raise their entry-level wages. The proponents of a minimum wage contended that the overall intent of the initiative and the broader movement towards solving the child-care workforce conundrum—consisting of low wages, low skill, and low worker retention rates leading to low quality of care—requires an increase in the lowest wage levels. They contended that the value of the apprenticeship would diminish if the starting wage were so low that, even after the wage-progression increases, journey-worker wages would still be too low to solve the retention problem.

Others contended that an apprenticeship system with a lower minimum wage was the best policy. First they said participation by the lowest paid workers will yield the largest percentage in wage gain, through the wage progression. Second, they suggested that the workers earning the lowest wages were the ones with the greatest need for additional training. And finally, they note that skill gains among apprentices in centers paying low wages would create the greatest overall boost to quality in the child-care system as a whole.

Regardless of the outcome of this debate, project leaders were quite cautious in using apprenticeship standards to increase wages drastically, fearing that centers would not participate if the apprenticeship were to establish high minimum wages or create too steep a wage progression. Thus, even the states that established a minimum wage provided exceptions where the market paid less. Nevertheless, most respondents felt that the standards provided workers with actual wage increases that represent a very positive response to the wage problem. Whether these wage levels will in fact boost worker retention rates and lead to improved quality of care, even if apprenticeship is an extremely efficient and effective training system, is still an open question that requires timely examination.

Recommendation #1. It is beyond the province of this evaluation to suggest any particular minimum wage level. However, we believe that formal debate on this issue is extremely beneficial to the states and the objectives of the initiative. Therefore, we recommend that each state include in its standards a minimum wage and a specific progression so that stakeholders in the apprenticeship and child care system will directly address the issue of increasing compensation, even if the short-term outcome of that debate is not to alter current market conditions.

Professional Development

In general, apprenticeship was readily incorporated into the professional development initiative in most of the states. In 7 of the 10 states, apprenticeship was explicitly created by the initiative and occupied a specific niche in the career lattice developed by the professional development initiative. And in one of the remaining three states the project manager coordinated the apprenticeship's wage scale and curriculum with comparable components of the state's professional development initiative. Without such coordination, the child-care apprenticeship risks isolation that will jeopardize the value of the training to workers and substantially reduce the prospects for sustainability.

Recommendation #2. We recommend that DOL requires each grantee to ensure that the apprenticeship project will fully coordinate with the state's professional development initiative. This is especially important for the states where the grantee is not agency responsible for the professional development initiative.

Apprenticeship appears, however, to have a somewhat ambiguous relationship with other compensation initiatives, such as TEACH. On the one hand, six states are closely integrating these two programs by having the TEACH program provide scholarships to pay for related instruction under the apprenticeship program.¹ Although respondents in several states emphasized the complementary nature of these programs, there was some evidence in two TEACH states that some center directors view the two programs as

¹ TEACH is operational in three states, in a pilot stage in another, and planned in two other states.

alternatives. TEACH's goals, simultaneously increasing worker compensation and skills, are exactly the same as those of the apprenticeship. Given these similarities, TEACH's more established reputation in the child-care field and the lower long-term cost of TEACH's one-time stipends compared to the apprenticeship's wage progression, it is possible that some center directors in the field may opt for TEACH rather than combining TEACH with apprenticeship.

Role of DOL Staff

Apprenticeship officials in all states were uniformly helpful in providing technical assistance on developing the standards and the program as a whole. Nevertheless, we observed two different approaches by apprenticeship system officials in providing technical assistance: an approach that emphasized consistency and conformance with apprenticeship standards and a more flexible approach that allowed child-care apprenticeship committees to design standards quickly that suited their needs, even if those standards may be imperfect. In the latter approach, apprenticeship officials tried to encourage formation of the program and then go back later to address shortcomings or correct problems in the standards or other program-design elements.

Recommendation #3. We recommend that DOL consider emphasizing the more flexible approach to adapt the apprenticeship system to meet the needs of the child-care workforce. We believe that flexibility is consistent with DOL's other efforts to develop an effective marketing program for the registered apprenticeship system.

IMPLEMENTATION

High Standards Versus Inclusiveness

As in the case of the wage standards, several states implemented their programs with an emphasis on high apprenticeship standards and practices that would exclude centers or participants that did not meet such standards. Both Iowa and Kansas tried to build apprenticeship systems based on the highest quality standards. For example, one local implementation site in Iowa excluded unaccredited centers from sponsoring apprentices. Local leaders in Northwest Iowa believed that recruiting and organizing the apprenticeship should not detract from the pursuit of the highest quality standards in all elements of the program. The local committees decided, however, that they would still

enroll and train apprentices who worked at non-accredited centers. Training these “unsponsored” apprentices took extra time and money because they had to have paid substitute teachers during the times that they were participating in on-the-job training (OJT) at an accredited center. Similarly, Kansas designed high education and work experience standards for provisional journey workers even at the risk of losing potential centers as participants in the apprenticeship system.

In contrast, Nevada took a more permissive attitude towards recruiting and maintaining standards. The project’s leaders felt that bringing lower quality centers into the apprenticeship system could bring about the greatest overall improvement in the quality of the child-care system.

There was one high-standards issue that the states avoided dealing with. This was the debate over whether to include centers that are units of large, national, for-profit chains. Some child-care advocates contend, based on research, that some “chain” centers have among the lowest workforce standards in the industry, although they also acknowledge that there are some corporations that promote higher workforce standards.² Nevertheless, several states reported that they enrolled such centers in the apprenticeship program, and no states indicated that would exclude those centers.

Recruiting Techniques

Grantees used a variety of techniques to recruit sponsors, and in some cases, conducted independent recruitment of apprentices and journey workers. The most important of these recruitment efforts lies with the sponsors because, for the most part, sponsors then bring in the apprentices and journey workers. In contrast, two of the most prolific states in the number of apprentices in training relied extensively—but not exclusively—on direct recruitment among child-care workers. The evidence from our sites makes it fairly clear that—regardless of the recruiting targets—the one common feature of successful recruitment efforts is the use of personal face-to-face contact with potential participants. These personal contacts were far more effective than using mass marketing techniques such as dissemination of flyers and newsletter articles.

An important feature of effective recruitment approaches was that they involved collaboration between child-care and apprenticeship officials. The states that were most

² Marcy Whitebook, *et. al.*, “National Child Care Staffing Study. Final Report,” Washington, DC: Center for the Child Care Workforce, 1989.

successful in recruiting emphasized this collaboration. Even the states that had made few or modest gains in increasing the number of participants in the program felt that this is a critical strategy.

Recommendation #4. We recommend that future training and technical assistance on implementation issues emphasize the effectiveness of using personal recruitment methods.

We also recommend that apprenticeship officials continue their help with recruitment.

On-the-Job-Training

On-the-job-training was a less developed component of the apprenticeship training than the related instruction. The grantees had generally made less progress in defining specific training objectives, establishing a process for supervising on-the-job-training, or creating linkages between on-the-job-training and related classroom instruction. One specific area of concern is in the hours of supervision. We also noted that although all states had blocked out 2000 hours per year of on-the-job-training in specific training segments, several states indicated that active supervision of apprentices was planned for only a small fraction of that time. In the states that used external journey workers, the low level of supervision is particularly acute because of the high cost of paying these external journey workers and supporting their travel costs.

Nevertheless, there was one element of the on-the-job-training that was relatively well developed. This was the journey worker or mentor training. Although many apprenticeships accept the completion of the apprenticeship as the basic qualification to supervise the training of subsequent workers, the educational nature of the child-care industry suggests a more rigorous training path for the journey workers. Seven states provided some form of explicit training for their journey workers before they were qualified to instruct their apprentices.

Recommendation #5 We recommend that apprenticeship officials provide technical assistance on designing effective on-the-job training.

Diversity

Plans to promote diversity within the apprenticeship were common in the grant applications, but there have been few concrete activities to carry out those plans. Nevertheless, the grantees uniformly indicated that the composition of the apprentice workforce to date essentially matches the overall composition of the child-care workforce.

Although the composition of the apprentice group was diverse, we did observe that minority-group members played a very small role in project leadership throughout the project. One state addresses this issue through a program to train future minority-group members as leaders and promote broad-based representation. Only a few states made explicit commitments to have minority-group members on advisory committees.

Recommendation #6. We recommend that DOL consider stipulations in future solicitations to encourage grantees to increase diversity in the membership on apprenticeship committees and other forms of leadership, including leadership training. Such action should promote comprehensiveness.

SUSTAINABLE, COMPREHENSIVE SYSTEMS

Transition to a Comprehensive System

The outcomes for creating a comprehensive system remain most problematic in several of the states that used a local pilot project approach. Several states have yet to move beyond the stage of limited local pilots, so it is not yet possible to assess the success of their efforts to develop the program on a truly comprehensive basis.

As of November 30, 2002, there were a total of 759 apprentices at 348 sponsors across the 10 western states. However, these totals reflect an uneven distribution among the states. Sixty percent of the apprentices are in just three states, Montana, Nevada, and Washington. Other states have added only modestly to their totals.

We found that the states using the pilot approach, especially in first grantee round, had less experience in recruiting apprenticeship sponsors beyond the immediate circle of the personal and professional networks to which project staff and early participants belonged. Some of the sponsors participating in the program in these states had either been committed to the apprenticeship prior to the grant award or were very active in the professional development initiative. Either way, they were already fully committed to the

objectives of the child-care apprenticeship program. The limited penetration of the apprenticeship raises at least some doubt about the ability of these states to develop a comprehensive apprenticeship system. Although we found that the problem was less evident in the second round of grantees, some risk remains.

Recommendation #7. We recommend that DOL require grant applicants to develop recruitment strategies that extend beyond immediate networks of centers that have already committed to the apprenticeship and demonstrate a clear path to comprehensive implementation. This recommendation is especially important in states using a pilot approach, where we think it is appropriate to have such grant applicants develop a transition plan to move from the pilot stage to a comprehensive system.

Good Outcomes for Participants

The preliminary results, based on limited information and site visits completed early in the training period, suggest that the initiative is providing high quality training to apprentices. From direct participants—centers, apprentices, and journey workers—there is unqualified endorsement of the apprenticeship training method, a high degree of apparent customer satisfaction, and some evidence that the training will result in higher quality of care to children. Our site visitors were certainly struck by the enthusiastic acceptance of the apprenticeship method child-care practitioners in all states.

Nevertheless, the observations of participants tell us only a little about whether QCCI is actually achieving its major goal of addressing the deficits in skill, and the low wages and short retention of child-care workers. Effective program management requires that grantees collect and maintain good quality data. Our efforts to collect data for the *Statistical Picture* report suggests that there is room for substantial improvement. Only by studying the impact of the apprenticeship program on wages and retention can DOL decide whether the program is effective in reaching its goals.

Recommendation #8. We recommend that DOL reach agreement with the grantees (and former grantees, if possible) on an appropriate set of data that will facilitate internal program evaluation by each grantee and external evaluation by DOL. Information on participant characteristics, pre-program work experience and credentials, program experience, and outcomes are vital.

Future Financing

Most respondents thought that finding ongoing financial support was the most challenging aspect of building a sustainable apprenticeship system. Our observations and analysis only reinforce this concern. Noteworthy is the observation about the precarious economics of the child-care industry. Its low cost-structure and inability to raise prices deter employers from investing in training on their own. In this regard, the child-care apprenticeship differs fundamentally from most other apprenticeships, where paying for training is normally the responsibility of the employer who benefits directly from increased skills of the worker. The available evidence suggests that there is no immediate remedy to this dilemma.³

Despite this fundamental underlying problem that impedes a truly large-scale system, states will want to rely on the varieties of direct and indirect funding sustain service to a smaller group of child-care workers. To reach sustainability, most of the states indicate that they plan to use the quality set-asides from their Child Care and Development Fund quality grants to finance the program directly by paying for the costs of related instruction, the largest cost in the program. While this funding source is available in all states, commitments from the administrative agency were not yet assured in several states.

Recommendation #9. We recommend that DOL consider a requirement in future grant solicitations that applicants identify sources of future funding once the grant period is over.

Although child-care sponsors lack the conventional resources of apprenticeship, sponsors in other industries, the use of tiered-reimbursement policies, can provide incentives to child-care sponsors to enhance their role in managing workforce quality and serve a larger proportion of their workers. Under tiered reimbursement, the Child Care and Development Fund subsidy program provides a higher level of payment to child-care providers who meet certain conditions, such as achieving accreditation or meeting staff

³ The Washington project manager indicated, at the time this report was being completed, that the state is developing a training trust into which child-care employers can contribute. But, we were unable to obtain any further information on this promising idea.

training requirements or reaching compensation goals, or some combination of these. Such incentives that encourage providers to find the correct balance of training, compensation, and quality on their own should encourage sponsor involvement that is characteristic of apprenticeships in other industries. Several western grantees are revising their subsidy policies to provide for tiered reimbursement along these lines.

It is also important to note that tiered reimbursement, by itself, will likely exacerbate the differences between centers in wealthy and poor communities. Centers in wealthy communities often have more resources to have previously invested in improving quality that raise standards and qualify them for higher reimbursements. Centers in poor communities lack these resources and are less able to meet the criteria for the higher reimbursement rates. At least one of the grantees that is developing a tiered reimbursement strategy is also creating a technical assistance capacity for weaker centers so that these centers can also improve quality and become eligible for higher reimbursement levels.

Recommendation #10. We recommend that DOL consider provisions in future grant solicitations to encourage tiered reimbursement strategies that link to the apprenticeship. We also recommend that any such tiered reimbursement plans provide technical assistance to promote access for lower-performing centers in poor communities.

SUMMARY CONCLUSIONS

In reviewing the overall process of developing and implementing a child-care apprenticeship in the first two rounds, we found a consistent level of achievement. We observed that there were good connections between the child-care system and the early childhood education departments of community colleges, both of which had a fairly long history of collaboration. We also found that connections with the apprenticeship system were quite effective, once the parties were able to learn one another's vocabularies. Apprenticeship officials from the states and DOL gave willingly of their limited resources to promote this initiative.

However, some important differences emerge in the extent to which the grantees are establishing sustainable, comprehensive systems. Two states, Nevada and Montana have recruited 37 percent of the apprentices have the most successful systems and appear

to be reaching sustainability.⁴ South Dakota also has a number of key attributes of sustainability and comprehensiveness. What these states share is an unambiguous commitment to the apprenticeship as a principal vehicle for professional development. Nevada however, stands out. It has established recruiting efforts in the major population centers and in its rural areas. The staff are in place to develop the program wherever there is interest, and financing is available.

Although the other states made less progress towards meeting the goals of the initiative, there was, nevertheless, much to recommend in their approaches. These states each had—or were on the road to developing—a strong, professional development initiative in which the child-care apprenticeship would figure prominently. They made important decisions in their apprenticeship standards and recruiting strategies on how to strike a balance between setting high standards and encouraging the broadest possible participation of low-quality or low-paying centers. These accomplishments will likely yield rich payoffs once these states begin to apply them on a more comprehensive basis.

The apprenticeship systems that we reviewed were, of course, only a means towards addressing the ultimate goal of the initiative: improving the skills and wages of the child-care workforce. Since this report 1) was limited to a process analysis of planning, implementation, and potential sustainability, 2) the research occurred early in the process, 3) and the duration of the training is very long, the real results of the initiative await further study when more has been accomplished.

⁴ Washington did very well in the first year and received solid marks in the interim version of this report. But, it has reported little progress since then.

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