REL
WEST
Regional Educational Laboratory
At WestEd

Training early intervention assistants in California's community colleges

REL WEST

Regional Educational Laboratory
At WestEd

Training early intervention assistants in California's community colleges

September 2008

Prepared by
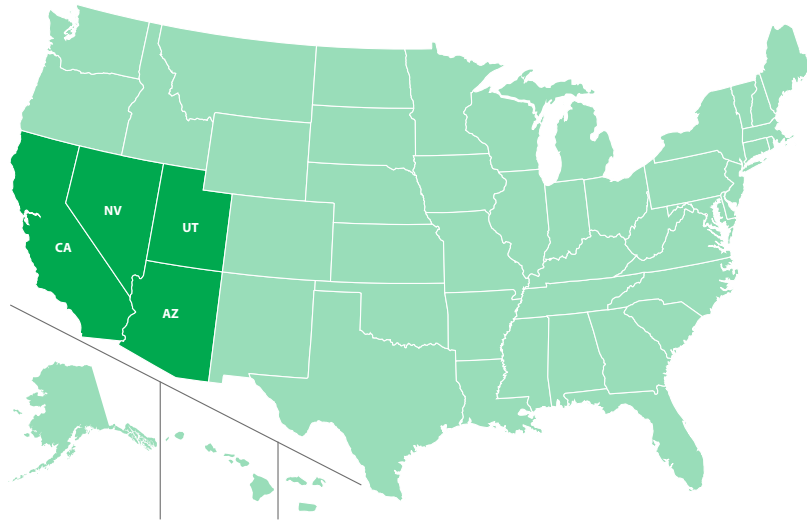
Diane Hammon Kellegrew
WestEd

Jean Pacifico-Banta
University of Southern California

Kari Stewart
WestEd

Issues & Answers is an ongoing series of reports from short-term Fast Response Projects conducted by the regional educational laboratories on current education issues of importance at local, state, and regional levels. Fast Response Project topics change to reflect new issues, as identified through lab outreach and requests for assistance from policymakers and educators at state and local levels and from communities, businesses, parents, families, and youth. All Issues & Answers reports meet Institute of Education Sciences standards for scientifically valid research.

September 2008

Kellegrew, D.H., Pacifico-Banta, J., and Stewart, K. (2008). *Training early intervention assistants in California's community colleges* (Issues & Answers Report, REL 2008–No. 060). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from http://ies.ed.gov/ncee/edlabs.

This report is available on the regional educational laboratory web site at http://ies.ed.gov/ncee/edlabs.

Training early intervention assistants in California's community colleges

This study examines California's efforts to foster preservice preparation of early intervention assistants for infants and toddlers with special needs through the Community College Personnel Preparation Project, a certificate program offered by participating community colleges. The study finds that colleges could develop preservice training programs for early intervention assistants that meet requirements such as those for awarding a Chancellor's certificate, although not all participating colleges were successful, despite receiving state funding for startup expenses.

The Individuals with Disabilities Education Act (IDEA) of 1997 requires that services for infants and toddlers with special needs take place primarily in natural environments, such as home or community settings. Partly as a result of the 1997 reauthorization of the act, the shift to early intervention in natural environments has had a dramatic impact on the necessary skills and scope of duties of early intervention assistants. Under the supervision of specialists with a bachelor's or a master's degree early intervention assistants must be available to independently visit the ever-changing dynamic family setting and carry out a prescribed intervention plan. These assistants are also required to work without the line-of-sight supervision common in center-based programs.

One avenue to create and increase a qualified workforce is to focus on the preservice education of early intervention assistants. A review of state initiatives indicates that many states are actively developing more complete descriptions and training models for early intervention personnel, including early intervention assistants, but only about half have a credential specific to this work or are developing one. This study examined California's efforts to foster preservice preparation of early intervention assistants through a certificate program offered by community colleges, the Community College Personnel Preparation Project. The project is funded by the California IDEA Part C lead agency, the Department of Developmental Services. California's project is unique in the Regional Educational Laboratory West states and can provide information to other West Region states grappling with similar issues.

Community colleges enrolled in the project must meet a series of requirements, including infusing early intervention assistant competencies into coursework, adding early intervention field experiences, and drawing on the experience of community partners and advisory committee members. Graduates

of colleges that meet all requirements are awarded the Chancellor's Certificate for Early Intervention Assistants, a state-level certificate awarded by the Chancellor's Office for California Community Colleges. This study examined data from the inception of the project in 1998 through 2006. Forty community colleges participated during this time, representing 37 percent of the community colleges in the state. Data were gathered from the quarterly reports required of the participating colleges, faculty mentor monthly reports, and administrative annual reports. More than 2,000 documents were included in the qualitative and quantitative analysis. Four research questions were explored:

1. What is the California Community College Personnel Preparation Project, and how does it work?

2. How did community colleges seeking to award a Chancellor's Certificate for Early Intervention Assistants implement the Community College Personnel Preparation Project? In particular, how did the colleges develop faculty, coursework, field experiences, and an advisory board?

3. How did the Community College Personnel Preparation Project implementation differ for colleges that completed all requirements to award the Chancellor's certificate and for those that completed only the requirements for a college-level certificate or that dropped out of the project?

4. What challenges and response strategies did community colleges report in implementing the Chancellor's Certificate for Early Intervention Assistants?

This study found that colleges could develop preservice training programs for early intervention assistants that meet requirements such as those for awarding a Chancellor's certificate, although not all colleges that participated in the project were successful despite receiving state funding for startup expenses. Of the 40 colleges that originally enrolled in the project, 15 completed all requirements for awarding the Chancellor's certificate, 7 completed only the first step (awarding a college-level certificate), and 11 dropped out. These 33 colleges were examined to compare colleges that completed the program with those that did not. In addition, 7 colleges are still working on meeting all requirements. A qualitative examination detailed the challenges and response strategies of all 40 colleges.

Participating colleges implemented many common features, though not all took the same approach. In most colleges the project liaison was a full-time faculty member with a background in general child development or education rather than a specialist in early intervention or special education. A majority of colleges offered faculty training in early intervention or in other special education topics, while the other colleges trained in general child development or education topics. Rather than develop new courses, three-quarters of the colleges modified existing courses to incorporate early intervention topics. A majority of colleges provided field experiences for their students, but only 30 percent of colleges held them in early intervention sites. Close to two-thirds of colleges had community partners and advisors who worked in the early intervention

field, and nearly three-quarters of colleges included employers of early intervention personnel on their advisory committees.

Some of the approaches colleges took to meet the project requirements differed by project outcome. Completion of the Chancellor's certificate requirements was associated with program implementation that focused specifically on early intervention services for infants and toddlers, even in program components where that focus was not required. Unlike colleges that dropped out or that met only the curriculum requirements to award a college certificate, colleges that met all of the requirements to award the Chancellor's certificate were more likely to have early intervention field experiences, a faculty liaison with an early intervention background, specific early intervention training for their faculty, services for infants and toddlers with disabilities as part of on-campus child care centers, and program advisory committees that included at least one member with an early intervention background.

More states are now defining the role of early intervention assistants (some states officially refer to these aides as paraprofessionals) and identifying training for them. In addition, recently proposed changes to federal regulations for IDEA Part C would require every state to add paraprofessional training to their "comprehensive system of personnel development" for those serving the youngest children with disabilities: infants and toddlers from birth to age three.[1]

The study provides an overview of data on the evolving national picture and the West Region states. Specific early intervention training is valuable preparation for a workforce that can serve infants and toddlers with special needs. Those seeking to promote a cadre of early intervention assistants and paraprofessionals prepared at the community college level may find value in examining California's efforts.

Note

1. "Early intervention program for infants and toddlers with disabilities," proposed rule change, U.S. Secretary of Education, 2007, *Federal Register, 72*(89), 26455–26531.

September 2008

TABLE OF CONTENTS

This study examines California's efforts to foster preservice preparation of early intervention assistants for infants and toddlers with special needs through the Community College Personnel Preparation Project, a certificate program offered by participating community colleges. The study finds that colleges could develop preservice training programs for early intervention assistants that meet requirements such as those for awarding a Chancellor's certificate, although not all participating colleges were successful, despite receiving state funding for startup expenses.

WHY THIS STUDY?

Under Part C of the Individuals with Disabilities Education Act (IDEA) of 1997 state agencies are required to provide needed services and care to infants and toddlers with disabilities from birth to age three. California offers such services at special centers managed by professionals, commonly known as early interventionists. They typically hold at least a bachelor's degree, though in a variety of fields, and initially gained the specialized knowledge needed to serve these children through college- or graduate-level coursework.

Working under the direction of these early interventionists—and within their line of sight—are assisting personnel for whom, until recently, on-the-job training was the primary means of preparation (see box 1 on the terminology used to refer to this position).

Beginning in 1997, early intervention staffing strategies across the country began to change as reauthorizations of IDEA and federal policy emphasized serving infant and toddlers' needs in more "natural environments" that incorporate the family's usual routines and settings when possible (Etscheidt 2006). Rather than requiring children with disabilities to attend special centers, service providers are expected to go to their homes or to community settings where these infants and toddlers interact with their typically developing peers. Using natural environments as the setting for intervention was prompted by research indicating that home- and community-based intervention fostered greater developmental gains for infants and toddlers with disabilities (Raab and Dunst 2004). Services in natural environments are also associated with improved family outcomes (Etscheidt 2006). Early intervention personnel may serve children with developmental delays in cognition, physical growth, vision, hearing, communication, socialization, and emotional or adaptive behavior.

Analysts anticipate greater demand for properly trained individuals who are fully prepared before

BOX 1

A note about terminology

States do not have a common terminology for describing the role of assistants in early intervention. Some refer to paraprofessionals; others refer to early intervention assistants, associates, or specialists. This study uses the term *early intervention assistants* to refer generically to supervised paraprofessionals who work with young children with disabilities.

entering the workforce to engage more independently this special population (Wallace 2003; Warger 2002; Vogler et al. 2002; Giangreco et al. 2001). This report describes how states are preparing early intervention assistants and focuses on how California is working to meet this demand through preservice training. California is unique among West Region states in developing and piloting a preservice education program to prepare early intervention assistants through existing Associate of Arts (AA) child development degree programs in the state's community college system. This report examines implementation of California's Community College Personnel Preparation Project, a pilot program for developing curriculum at participating state schools that qualifies them to award a Chancellor's Certificate for Early Intervention Assistants (referred to as a Chancellor's certificate).[1]

> California is unique among West Region states in developing and piloting a preservice education program to prepare early intervention assistants through existing Associate of Arts child development degree programs in the state's community college system

HOW STATES PREPARE EARLY INTERVENTION ASSISTANTS

States differ in how they name, use, and train early intervention personnel at all levels (see box 1). To understand national trends and how the California Community College Personnel Preparation Project fits into California's strategy for preparing early intervention assistants, this study turned to national centers charged with providing assistance on IDEA, publications and web resources on how states are preparing early intervention assistants,[2] and early intervention personnel models on the web site of the National Early Childhood Technical Assistance Center.[3] Because some states have recommended early intervention assistant employment practices but have not yet formalized them, interviews with Part C lead agency staff of the West Region states of Arizona, California, and Nevada were also conducted to capture this type of information.

Job duties

Early intervention assistants have a unique role as members of an early intervention team (Geiger et al. 2003). They partner with Bachelor of Arts (BA)–prepared early interventionists on specific activities, such as helping a family choose appropriate play activities for a child with cerebral palsy or implement a therapist-designed communication strategy for a child with autism spectrum disorder. While federal law gives some guidance on the role of BA-prepared professionals who work with children with disabilities from birth to age three (IDEA Part C), federal regulations are less specific about early intervention assistants. Their duties are defined by each state either as part of formal state-adopted personnel models or informally through state-recommended hiring practices and job descriptions. Box 2 provides examples of job duties in the West Region states.

States are developing more complete staffing descriptions and training models for early intervention personnel, including early intervention assistants. About half (51 percent) of the 45 states that completed the 2004 survey of state Part C coordinators by the Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education have added or created new professional categories, particularly at the paraprofessional level, as a means of increasing the number and improving the quality of early intervention personnel and (Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education 2004).

BOX 2

Examples of job duties for early intervention assistants in the West Region states

The following job duties are identified by Arizona, California, Nevada, and Utah for the para-professional or early intervention assistant personnel categories (licensed assistants):

- Conduct therapist-prescribed intervention with infants and toddlers with special needs in home and community settings.

- Plan and organize small group activities with infants and toddlers with special needs in day care and community environments.

- Collect data for evaluating and assessing infants and toddlers under the supervision of a therapist or early interventionist.

- Serve on an Individual Family Service Plan team in partnership with an early intervention professional.

- Help families of children with special needs to know their rights, use resources to support their child, and understand their child's development.

- Identify and report information pertinent to the child and family needs to the multidisciplinary team.

- Serve as a service coordinator under the supervision of a professional staff member (Utah only).

- Provide family-to-family referrals and support to families of children with special needs (Nevada only).

Education and training

To provide early intervention services in the home and community, practitioners must understand how to orchestrate intervention for very young children with special needs in diverse home environments within the resources and routines available to the family. Community-based, family-centered early intervention services demand specific skill sets that go beyond general knowledge of child development and services for children (Raab and Dunst 2004). Education and training are required to develop these skills.

Of 45 states surveyed almost half (43 percent) stated that the primary barrier to obtaining early intervention personnel was the lack of a qualified pool of personnel. Another barrier, reported by 36 percent of responding states, was the lack of higher education training facilities and programs (Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education 2004). Furthermore, proposed changes to federal regulations of Part C of IDEA would require every state to devise a "comprehensive system of personnel development that addresses the training of paraprofessionals" serving the youngest children

with disabilities: infants and toddlers from birth to three (U.S. Secretary of Education 2007).

According to the Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education (2004), 46 percent of states express concern about the training of early intervention assistants, and about half the states have a credential specific to early intervention or are developing one. However, because little national information is available specifically about the education and training requirements of early intervention assistants, the analysis focuses on the eight state personnel models available through the National Early Childhood Technical Assistance Center (2003) web site.

Those states require little advanced education for early intervention assistants. Requirements range from a high school diploma or General Educational Development diploma with some college to an AA degree with specialization in services for children with disabilities (National Early Childhood Technical Assistance Center 2003). Most of the models call for additional qualifications beyond academic preparation, such as specific experience or additional coursework. For example,

Indiana requires a certificate of completion from a state-sponsored orientation program and attendance at annual and quarterly meetings. North Carolina's portfolio model allows candidates to choose from an array of training venues. Several states require candidates to complete the additional requirements within a set period, such as two years in Indiana and three years in North Carolina.

Articulation across levels

The models reviewed provided little information about how the early intervention assistant's role articulates with other levels of the early intervention personnel model. Some states distinguish between early intervention assistants with specialized early intervention training and those without an AA degree or with an AA degree in another field. This distinction usually includes different job titles. For example, the Kentucky model identifies personnel with specialized early childhood training at the AA level as developmental associates and those with only a high school or General Educational Development diploma as developmental assistants. North Carolina assigns all those trained at the AA level or below to the same job category: infant, toddler, and family associate. Connecticut and Utah group those with an AA degree in an early intervention specialization in the same personnel classification as those with a BA in an unrelated discipline.

Likewise, little information was available on how other states integrate two- and four-year preservice early intervention preparation programs. Furthermore, few states appear to have articulated a career ladder for early intervention professionals or assistants once they are in the field. The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education reports that "less than one-fifth (18 percent) of the Part C respondents reported the existence of such a path to recognize advancement within the field" in its 2004 survey (Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education 2004).

Quality preservice training for those who enter the field at the assistant level provides a valuable academic foundation and field experience for those who progress to the BA level. Early intervention education at AA-granting institutions can provide supervised practical application and a comprehensive grounding in competency areas needed to practice in natural environments with families from diverse backgrounds (Smith et al. 2002). Without preservice training early intervention assistants may find it challenging to obtain early intervention–specific education or quality on-the-job training (Pickett, Likins, and Wallace 2003).

A review of the literature on models or outcomes associated with successful implementation of early intervention training at the AA level using the national research and technical assistance center resources already noted and the Education Resources Information Center, ProQuest, and other research databases yielded few results. The search did uncover literature addressing preservice education design elements relevant for early intervention programs, which advocated that preservice education programs involve active collaboration between degree-granting colleges and the state and local agencies likely to recommend, plan, and mandate the services of graduates from these programs (Pickett, Likins, and Wallace 2003). Such collaboration can create a link between the personnel models advocated by a state or local agency and entry-level training content and requirements. It is also recommended that preservice training be evidence- and competency-based (Division of Early Childhood 2006). High-quality competencies ensure that all essential facets of practice are addressed, supported by current best evidence, and developed with community stakeholder input (Katsiyannis, Hodge, and Lanford 2000).

The models reviewed provided little information about how the early intervention assistant's role articulates with other levels of the early intervention personnel model

Approaches in California and the West Region states

Federally funded early intervention services in California are known as Early Start. The Department of Developmental Services is designated as the lead agency for implementing Part C of IDEA, guided by a federally mandated advisory body, the state Interagency Coordinating Council on Early Intervention, which includes representatives from the California Department of Education, Department of Mental Health, Department of Social Services, Early Head Start, Department of Managed Care, Department of Health Services, Department of Drug and Alcohol, Department of Insurance, the state legislature, and numerous community and family representatives. This group has long been concerned about developing a uniform statewide standard for early intervention personnel and ensuring that they are properly prepared and supported.

The Community College Personnel Preparation Project was developed in 1998 as a result of work to adopt a personnel model for California that included early intervention assistants. The personnel model clarified the role of early intervention personnel and included practice competencies for different levels of personnel, as well as a career ladder option (early intervention assistant, early interventionist, early intervention supervisor, and so on). The Interagency Coordinating Council formally approved the Recommended Early Start Personnel Model in 1999. The model was never mandated statewide because of budget constraints, but it was adopted and implemented as recommended practice through the professional development system by the Department of Developmental Services.

California faces a shortage of adequately trained early interventionists, in part because of the changes in IDEA Part C that emphasize services in natural environments. To address the issue, the Department of Developmental Services has requested that the Interagency Coordinating Council Recommended Early Start Personnel Model be revised and presented to the council for review and approval by 2008/09. The revised model will identify the education requirements and articulation between roles for early intervention personnel employed by the Department of Developmental Services in California. The Early Start Personnel Model Workgroup, charged with this task by the California Interagency Coordinating Council and the Department of Developmental Services,[4] has requested descriptions of how the Community College Personnel Preparation Project was implemented in its 40 participating colleges and lessons learned from their experiences.

> **The Community College Personnel Preparation Project clarified the role of early intervention personnel and included practice competencies for different levels of personnel, as well as a career ladder option**

The IDEA Part C lead agencies in the other West Region states have expressed interest in this information as well. Some states have revised or are revising their early intervention personnel requirements. Utah has revised its early intervention model and wants to strengthen preservice training for paraprofessionals through its community colleges. Nevada is refining the role of the early intervention assistant and will use the Community College Personnel Preparation Project outcomes as part of this process. Although Arizona requires a BA degree for early interventionists, paraprofessionals working without a BA degree in 2001 may be grandfathered into the system. Arizona has expressed interest in the Community College Personnel Preparation Project articulation agreements that stimulate a career ladder from the AA- to the BA-prepared interventionist levels.

Three of the four West Region states (California, Nevada, and Utah) include paraprofessionals or early intervention assistants in their early intervention personnel standards. California has two early intervention assistant levels. Level I requires some college and experience and requires on-site supervision. Level II requires an AA in a related field such as the Chancellor's Certificate for Early

Intervention Assistants. Only early intervention assistant IIs can work independently in the home under the supervision of an early interventionist, a BA- or Master of Arts (MA)–prepared professional. Early intervention assistants in California cannot provide case coordination duties as service coordinators under Part C.

Nevada does not require academic preparation at the AA level for those employed as a paraprofessional. Nevada Early Intervention Services (NEIS) allows paraprofessionals to work as family specialists providing family support or as behavioral aides in the home. There are no specified academic requirements for these roles other than work or family experience with a child with a disability. Nevada also employs public service interns who provide intervention independently in the home under the supervision of a MA-prepared early childhood special educator, also called a developmental specialist. Public service interns have no academic background requirements either, but must be enrolled in an institute of higher education that leads to an advanced degree in a field related to early intervention.

Utah's standards place individuals with postsecondary training leading to a Child Development Associate degree or an AA in a field related to early intervention in the same job classification as those who have obtained a BA in an unrelated field. An employee in this classification is called an early intervention specialist I and may provide intervention and case coordination independently in the community with weekly supervision from an early interventionist II. Utah is the only West Region state that has an early intervention employment model leading to a state-issued credential for its Part C Baby Watch program.

The Arizona Early Intervention Program, as part of its new personnel standards, includes state-licensed assistants in occupational, physical, and speech

> **California is the only West Region state that is addressing recruitment into the early intervention field at the AA level through articulation agreements between community colleges and BA- and MA-granting institutions with related majors**

therapy; all other professionals must have a BA degree to ensure that those working with a family have the knowledge and skills to support a family's priorities and concerns. The state has partnered with Northern Arizona University and Arizona State University to train and recruit child development majors at the BA level and higher to enter the field. Those employed in early intervention without a BA degree since 2001 may be grandfathered into the system and work as a developmental special instructionist under the personnel standards. Those without a BA degree may also work under a waiver when a geographic region can document that they are unable to find a qualified early interventionist at the BA level.[5] However, personnel employed with a waiver must also be enrolled in a BA-granting institution studying in an early intervention-related major.

The IDEA Part C administrators for all West Region states have expressed interest in ways for early intervention personnel to progress from an AA degree to the BA- or MA-prepared early intervention roles. All four states have partnerships with BA- or MA-granting institutions as a means of increasing the number of early intervention students. California is the only West Region state that is addressing recruitment into the early intervention field at the AA level through articulation agreements between community colleges (enrolled in the Community College Personnel Preparation Project) and BA- and MA-granting institutions with related majors, such as child development or early childhood special education.

The three states that employ at the assistant level—California, Nevada, and Utah—are working on strategies to increase the quality of preservice training available for those at the paraprofessional level or are considering them. Nevada officials report success with paraprofessionals and developmental specialists working in partnership. They report that Nevada's Public Service Intern program provides the opportunity to "grow your own," as the paraprofessional gets valuable on-the-job experience while enrolled in a BA or MA program. Utah relies on the well trained,

AA-prepared early interventionist specialist I, particularly in hard-to-serve rural areas of the state.[6] However, only California has a program to address early intervention training at the preservice level.

THE COMMUNITY COLLEGE PERSONNEL PREPARATION PROJECT IN CALIFORNIA

This section considers implementation of the California Community College Personnel Preparation Project, examining four research questions:

1. What is the California Community College Personnel Preparation Project, and how does it work?

2. How did community colleges seeking to award a Chancellor's certificate implement the California Community College Personnel Preparation Project? In particular, how did the colleges develop faculty, coursework, field experiences, and an advisory board?

3. How did California Community College Personnel Preparation Project implementation differ for colleges that completed all requirements to award the Chancellor's certificate and for those that completed only requirements for a college-level certificate or that dropped out of the project?

4. What challenges and response strategies did community colleges report regarding implementing the Chancellor's Certificate for Early Intervention Assistants?

Data for the study were drawn from participating colleges, as described in box 3 and appendix A.

What is the Community College Personnel Preparation Project, and how does it work?

In 1998 the Department of Developmental Services launched a pilot Community College Personnel Preparation Project to develop a curriculum that blended the competencies of the early intervention assistant level into the curriculum of the AA degree (or equivalent) in child development or related fields. This type of blended curriculum is unique for students entering early intervention fields at the AA level. Graduates from participating colleges are awarded a special certificate from the Chancellor's Office and are eligible to be employed as early intervention assistants and paraprofessionals. Participating community colleges also developed articulation agreements with BA-granting institutions to create a career ladder from early intervention assistant to early interventionist, as recommended in the literature (Recruiting New Teachers 2000). Participating colleges generally spend two to four years developing and implementing new coursework on infants and toddlers with special needs, as required for the Chancellor's certificate.

Participating colleges are paid a stipend of $3,000–$7,000 per academic year to support participation activities. Average total stipend awards for colleges that complete the project are $20,000. To earn stipends, colleges must provide regular detailed documentation of student enrollment, faculty, and institutional variables, and reports of the successes and challenges associated with creating an inclusive curriculum. Participating colleges are assigned a paid faculty mentor who guides and reports on each college. Administrative staff and faculty members also assist the colleges to develop articulation agreements with local four-year university programs. To date, 40 of California's 109 community colleges have enrolled in the program.

The Community College Personnel Preparation Project aims to create an infrastructure in California's community colleges to provide high-quality preservice education. The goal is to prepare graduates to work in diverse natural environments with California's children with (or at risk for) disabilities from birth to age three and their families. The early

> The Community College Personnel Preparation Project aims to create an infrastructure in California's community colleges to provide high-quality preservice education

BOX 3
Data sources and methods

Data were collected from the Community College Personnel Preparation Project–enrolled colleges for 1998–2006, as described in detail in appendix A. Data were gathered from comprehensive quarterly reports submitted by colleges and faculty mentors and from annual project summaries. College reports included annual goals papers, progress reports throughout the semesters, and annual project summaries. College reports were submitted in a prescribed format allowing comparison across colleges. Faculty mentors submitted monthly reports in a log format. Annual reports aggregated and synthesized data across colleges and mentors. Minutes of annual college meetings and quarterly mentor meetings and focus groups provided additional data. Approximately 2,000 documents were reviewed.

During the period studied, 40 (37 percent) of California's 109 community colleges were enrolled in the project. Participating colleges fell into four categories:

- Colleges that completed the process to award the Chancellor's certificate ($n = 15$).

- Colleges that completed the process to award a college-level certificate but did not complete the process for the Chancellor's certificate ($n = 7$).

- Colleges that started the Community College Personnel Preparation Project but dropped out ($n = 11$).

- Colleges that are still in preparation to award the Chancellor's certificate ($n = 7$).

The 33 colleges in the first three categories that completed the program or ended their participation at some level were used for the quantitative analysis that contrasted strategies and outcomes based on level of completion. Data from all reports were coded to identify curriculum, faculty, institution, and employer variables pertinent to early intervention training. A classification schema was developed, and interrater reliability was established using the coding schema and protocol. The data for each college that completed the process were coded and analyzed using descriptive statistics to include frequencies and percentages.

Colleges in all four categories ($n = 40$) were included in the qualitative analysis of the challenges and response strategies colleges employed while seeking to implement the project. Challenges were identified by conducting a content analysis of the college and mentor data sets. The annual reports were not used for this analysis because they summarized other reports and therefore were not an independent source of data. Data were coded and triangulated across three researchers for increased rigor. The report included two challenges that were identified by all 40 colleges and one challenge that was identified by 24 of the colleges. Response strategies to address the challenges were also coded and described. Strategies that were noted by at least five colleges were included in this report.

intervention assistant core competencies that provide the foundation for the project are listed in box 4.

All programs under the project are housed in departments with a related child development major. The use of a certificate process seeks to embed the targeted early intervention competencies into the existing academic structure for each community college rather than requiring a new academic major. The project requires enrolled colleges to:

- Select and support a faculty liaison charged with spearheading the new certificate process.

- Develop new early intervention electives, if needed, and infuse existing child development courses with the competencies required to provide services for young children, infants, and toddlers with special needs and their families.

- Train faculty to prepare students to work with young children, infants, and toddlers with special needs.

- Develop articulation agreements with four-year colleges and universities.

BOX 4

Early intervention assistant core competencies

Community College Personnel Preparation Project graduates are expected to have mastered the following core competencies:

- Demonstrate an understanding of family development, functioning, and systems and the family need for education and support.

- Demonstrate cultural competency by respecting and valuing diverse cultures, values, beliefs, and behaviors.

- Use effective verbal and written communication skills to collaborate with families in an ongoing and positive manner to support each child's development.

- Access community agencies, referral systems, and procedures for specialized support, resources, and placement options in the area of residence.

- Describe the typical development milestones of children from birth to age five and identify the strengths and special needs of the child in the family context.

- Demonstrate basic knowledge of the intent of the laws and regulations pertaining to and protecting children with disabilities and their families.

- Describe the developmental assessment process and outline its roles in identifying, planning, and intervening for a child with special needs and the family.

- Demonstrate an understanding of curriculum development for infants, toddlers, and young children at high risk or with disabilities.

- Discuss and recognize basic health issues and conditions that promote optimal health and safety and identify and solve aspects of a program that would impede the optimal growth and development of children.

- Demonstrate a professional commitment to confidentiality and the need for a safe, secure, and nurturing environment for the child and family.

- Convene an advisory board of community partners.

- Document project activities and submit project outcomes.

Each college working toward the Chancellor's certificate must obtain multiple levels of administrative approval. First, a college must demonstrate departmental commitment by obtaining approval from the dean to begin the process. Once early intervention competencies are infused in the general development curriculum, colleges can establish a certificate program. In the California community college system college-level certificates are a means of identifying a series of courses (under 12 units) that provide some measure of specialization in a topic. Each college determines the requirements for the college-level certificates it awards. For early intervention assistants the college-level certificates do not meet all the requirements for the Chancellor's certificate required by the Part

C lead agency, the Department of Developmental Services. After establishing a college-level certificate program, colleges must continue to develop the additional elements needed to meet the project standards set forth by the Department of Developmental Services. Once these required elements are in place, the college applies to the California Chancellor's Office for authorization to award its graduates the state-issued Chancellor's certificate.

Colleges that do not complete the entire process might still offer early intervention coursework and field experiences through the college-level certificate. However, there is no consistency across colleges, and the college-level certificate does not have to adhere to training that meets all of the early intervention assistant competencies. Only programs that offer the Chancellor's certificate can be said to meet all of the state-recommended competencies for early intervention assistants at the preservice level. College-level certificates might not be noted on the graduates' diplomas, but Chancellor's

certificates are officially recognized on diplomas. This distinction is important to graduates and employers, as the Chancellor's certificate documents a high standard of preservice-level training for those seeking paid work in the field.

Colleges participating in the Community College Personnel Preparation Project represent all geographic regions in California, including urban, rural, inner city, and suburban environments. They range from large campuses such as San Francisco City College, enrolling 32,337 students, to smaller campuses such as Oxnard Community College, enrolling 6,564 students. (See appendix B for the list of participating colleges.)

What was learned about implementing the Community College Personnel Preparation Project

To answer the second and third research questions—on how colleges implemented the program and how colleges in the three participating classifications differed—data were collected and analyzed at the college level in three core implementation areas: faculty (including descriptions of lead faculty liaisons and faculty training), student curriculum (including the design of courses, field experiences available, and access to children with disabilities), and use and type of community partners and advisory entities. Within each area how colleges implemented the project is explored first, followed by a comparison of how implementation strategies varied across schools that completed the eligibility process for awarding the Chancellor's certificate, those that completed only the steps for awarding a college certificate, and those that dropped out of the project.

In meeting faculty requirements, most colleges provided faculty training in special education or

The colleges that met all requirements for the Chancellor's certificate were more likely to have early intervention field experiences, a faculty liaison with an early intervention background, early intervention–specific training venues, services for infants and toddlers with disabilities in on-campus child care, and program advisory committee members with an early intervention background

early intervention and assigned as project liaison a full-time faculty member with a background in general child development or education. Curriculum requirements were met in most colleges by redesigning existing courses to include early intervention content and by providing field experiences for students in early intervention or special education sites. Few colleges were able to offer these experiences on campus, as their child care centers did not serve young children with disabilities. Project advisory committees typically included an early intervention specialist and members who employed early intervention personnel.

Colleges' approaches to implementation varied in ways that were related to project outcomes. An implementation focus on early intervention, even in program components where this focus was not required, was more often found in colleges that met requirements for the Chancellor's certificate than in other colleges. The colleges that met all requirements were more likely to have early intervention field experiences, a faculty liaison with an early intervention background, early intervention–specific training venues for faculty, services for infants and toddlers with disabilities as part of on-campus child care centers, and program advisory committees that included a member with an early intervention background.

Faculty. The analysis of faculty implementation looked at faculty liaison and faculty training.

Faculty liaison. The project required each college to identify a lead faculty member or liaison to spearhead and coordinate the college's Chancellor's certificate program. Faculty liaisons had a variety of academic backgrounds that were classified as fields related to early intervention such as early childhood special education, fields related to special education but without early childhood background, and fields related to child development but without special education background. In most colleges (70 percent) the background of the faculty liaison was in general child development or education and not in special education or early intervention (table 1). More colleges that

TABLE 1

Number and percentage of colleges with specific faculty features, overall and by Community College Personnel Preparation Project outcome, 1998–2006

Faculty feature	All colleges (n = 33)		Community College Personnel Preparation Project outcome for college					
			Chancellor's certificate (n = 15)		College certificate (n = 7)		Dropped out (n = 11)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Faculty liaison background								
Early intervention	8	24	7	47	1	14	0	0
Special education	2	6	2	13	0	0	0	0
Child development or education	23	70	6	40	6	86	11	100
Faculty liaison status								
Full-time	30	91	13	87	7	100	10	91
Part-time or adjunct	3	9	2	13	0	0	1	9
Faculty training								
Early intervention	10	30	7	47	2	29	1	9
Special education	10	30	6	40	4	57	0	0
Child development or education	4	12	1	7	0	0	3	27
No training provided	9	27	1	7	1	14	7	64

Note: Of the 40 colleges in the program the 7 that were still working toward offering the Chancellor's certificate at the time of data collection are not included in this analysis. Components may not sum to 100 percent because of rounding.

Source: Authors' analysis of Community College Personnel Preparation Project college and faculty mentor reports 1998–2006; see box 3 and appendix A for details.

successfully completed the eligibility process for awarding the Chancellor's certificate had faculty liaisons with a background in early intervention or special education (60 percent) than those that completed only the steps to award the college-level certificate (14 percent) or that dropped out of the project (0 percent). Faculty liaisons for colleges that completed requirements to award the college-level certificate or that dropped out most often had an academic background in child development or regular education.

Most colleges (91 percent) chose full-time faculty to head project implementation. There was little difference among the three college groups in the percentage of faculty liaisons that were employed full-time.

Faculty training. A core component of the project was training all faculty in the child development

department to integrate content related to early intervention for infants, toddlers, and their families into their courses. The project encouraged each faculty liaison to organize faculty training suited to each institution's overall organizational structure. An analysis of the college reports indicated that colleges used an array of professional development strategies to train faculty (box 5). Faculty training included general early intervention services, early intervention condition-specific topics, early intervention service strategies, family-centered care, general child development, and professional development and career advisement. Box 6 provides examples of the topics discussed in each category.

The focus on early intervention in faculty training varied across colleges (see table 1). Training in early intervention topics was provided in 30 percent of the colleges, and training in special education in another 30 percent. A similar percentage

BOX 5

Types of faculty training activities used by Community College Personnel Preparation Project colleges

Community College Personnel Preparation Project colleges used the following faculty training activities to integrate early intervention for infants, toddlers, and their families into courses:

- Certification courses offered by outside agencies.

- Checklists of early intervention knowledge base.

- Collaboration with faculty at early intervention centers.

- Conferences and seminars off and on campus.

- University continuing education courses.

- Film programs.

- In-service training on site and in collaboration with other colleges.

- Mentorship.

- Guided observation of children with disabilities.

- Retreats (overnight).

- Roundtable discussion groups.

- Summer institutes.

- Support groups with other faculty.

- Tours of facilities that service infants and toddlers with special needs.

BOX 6

Examples of Community College Personnel Preparation Project faculty training topics

Faculty training included six broad categories, listed here with examples of the topics covered.

General early intervention services

- What early intervention is.

- Evaluation and assessment as part of early intervention services.

- Individual Family Service Plan: regulations and process.

- Multidisciplinary support team in early intervention.

- Observation, identification, and referral of infants and toddlers with special needs.

Early intervention condition-specific topics

- Attention deficit hyperactivity disorder, cognition, and learning disabilities in young children.

- Services for children at risk for delay.

- Autism spectrum disorder.

- Challenging behaviors in infants and toddlers with special needs.

- Emotional function in young children.

- Hearing impairment.

- Seizure disorders in young children.

- Handicapping conditions that impact children with special needs.

Early intervention strategies

- Augmentative communication, sign language, and speech services.

- Facilitating and enhancing play behavior.

- Floor-time strategies for children with autism spectrum disorder.

- Inclusion of children with special needs in community settings.

- Infant massage for infants and toddlers with special needs.

- Sensory integration and sensory processing in infants and toddlers.

Family-centered care

- Families in grief.

- What do I do with THIS child?

- Working with families.

- Infant and family mental health.

General child development

- Program for infant and toddler care training.

- Teaching social skills and speech and language through children's literature.

- Child health, safety, and nutrition.

- School readiness training.

- Child development.

- Career development

- Career advising.

- Ethical conduct.

- Leadership training.

- Teaching practices, techniques, and terminology.

- Working with student teachers.

(27 percent) did not provide training for faculty, while the remaining colleges (12 percent) covered topics in general child development or education. Colleges that completed requirements to award the Chancellor's certificate were more likely to train in topics that specifically related to early intervention (47 percent) than colleges that completed requirements for the college-level certificate only (29 percent) or colleges that dropped out of the project (9 percent). Training in special education (preschool through elementary level) was offered by 40 percent of the colleges that completed requirements for the Chancellor's certificate, by 57 percent of colleges that completed requirements for the college-level certificate, and by none of the colleges that dropped out. The majority of colleges that dropped out provided faculty training only in general child development or regular education.

Student curriculum. The analysis of student curriculum includes coursework design, field experience, and access to children with disabilities.

Early intervention coursework. All participating colleges were required to infuse their child development curriculum with the competencies required to meet the needs of infants and toddlers with special needs and their families and to offer specialized content about services in early intervention settings. Some colleges designed new early intervention-specific courses (24 percent), but most (76 percent) redesigned existing courses to integrate the early intervention content (table 2). The first approach, offering new courses in early intervention, was more often taken by colleges that completed the requirements for the Chancellor's certificate (33 percent) than by colleges that completed requirements for the college certificate (14 percent) or that dropped out (18 percent).

Field experiences. Students enrolled in the Chancellor's certificate programs were expected to participate in mentored field experiences with children with disabilities. Most of the participating colleges provided field experiences to students

TABLE 2

Number and percentage of colleges with selected curriculum features, overall and by Community College Personnel Preparation Project outcome, 1998–2006

Curriculum feature	All colleges (n = 33)		Community College Personnel Preparation Project outcome for college					
			Chancellor's certificate (n = 15)		College certificate (n = 7)		Dropped out (n = 11)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Early intervention courses								
Added new courses	8	24	5	33	1	14	2	18
Redesigned existing courses	25	76	10	67	6	86	9	82
Field experience offered								
Early intervention	10	30	8	53	2	29	0	0
Special education	8	24	4	27	1	14	3	27
Child development or education	2	6	3	0	0	0	2	18
No field experience	13	39	0	20	4	57	6	55
Child care center included children with disabilities								
Yes	8	24	7	47	0	0	1	9
No	25	76	8	53	7	100	10	91

Note: Of the 40 colleges in the program the 7 that were still working toward offering the Chancellor's certificate at the time of data collection are not included in this analysis. Components may not sum to 100 percent because of rounding.

Source: Authors' analysis of Community College Personnel Preparation Project college and faculty mentor reports 1998–2006; see box 3 and appendix A for details.

(see table 2) in early intervention sites (30 percent), other special education sites (24 percent), or in general child development or education sites (6 percent). Box 7 provides examples of fieldwork opportunities.

Although colleges that award the Chancellor's certificate are not specifically required to provide field experiences solely with infants and toddlers with disabilities, more early intervention fieldwork placements were available to students enrolled in colleges that completed the program (53 percent) than those that completed requirements only for the college-level certificate (29 percent) or those that dropped out (0 percent). The colleges that dropped out were more likely to provide no field experience than the Chancellor's certificate colleges, but not compared with the college certificate colleges. However, the colleges that dropped out were more likely to provide experiences in general child development or regular education than colleges in both of the other categories (see table 2).

All colleges enrolled in the Community College Personnel Preparation Project have an on-campus affiliated child development center that provides child care and preschool services for young children, although only 24 percent of the centers enrolled young children with disabilities (see table 2). The campus-affiliated child development centers provide ready-made opportunities for supervised student field experiences. More colleges that completed the program to award the Chancellor's certificate had campus-affiliated child development centers that were contracted by the Department of

Developmental Services to provide services for infants and toddlers with special needs (47 percent) than those completing requirements to award the college-level certificate (0 percent) or those that dropped out (9 percent).

Community partners and advisory committees. The Community College Personnel Preparation Project requires that all enrolled colleges convene an advisory committee and work regularly with community partners that serve young children and their families. Examination of the types of community partners reported by colleges indicates a broad spectrum of community involvement (box 8). Slightly less than half the colleges (45 percent) had partners working in early intervention, and there were few differences among the three groups of colleges in this respect (table 3). Nearly two-thirds of colleges had at least one advisory member in the early intervention field. Colleges that met requirements for the Chancellor's certificate were more likely than other colleges to have at least one early intervention advisor (80 percent). Only 57 percent of the colleges that met the requirements for the college-level certificate and 45 percent of those that dropped out had advisory board members in the early intervention field.

About half the colleges (52 percent) had advisory committees dedicated to the project rather than shared with other programs. Colleges that completed the requirements for the Chancellor's certificate were less likely to have a dedicated advisory committee (40 percent) than were colleges meeting only the requirements for the college-level

---

BOX 7

Types of fieldwork opportunities provided by Community College Personnel Preparation Project colleges

Most participating colleges provided field experiences to students in early intervention sites, other special education sites, or in general child

development or education sites. The following are examples of fieldwork opportunities provide by participating colleges:

- Campus full inclusion lab preschool.

- County office of education public school programs.

- Early Head Start and Head Start.

- Early intervention program.

- Hospital-based programs for medically fragile children.

- Private employment with families that have children with special needs.

- Special needs preschools.

BOX 8

Types of community agency partners reported by Community College Personnel Preparation Project colleges

Community College Personnel Preparation Project colleges reported a wide range of community agency partners:

- Private and government-funded child care agencies.

- Children's hospitals.

- College/university departments.

- Corporations and grant agencies, such as United Way.

- County agencies serving young children.

- Diagnosis-oriented nonprofit organizations.

- Early Head Start and Head Start.

- Family resource centers.

- Mentor training programs.

- Other community colleges.

- Program for Infant and Toddler Care.

- Early intervention administrative agencies.

TABLE 3

Number and percentage of colleges with selected advisory features, overall and by Community College Personnel Preparation Project outcome, 1998–2006

Advisory and community board feature	All colleges (n = 33)		Community College Personnel Preparation Project outcome for college					
			Chancellor's certificate (n = 15)		College certificate (n = 7)		Dropped out (n = 11)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
At least one early intervention partner								
Yes	15	45	7	47	3	43	5	45
No	18	55	8	53	4	57	6	55
At least one early intervention advisor								
Yes	21	64	12	80	4	57	5	45
No	12	36	3	20	3	43	6	55
Advisory board serves project only								
Yes	17	52	6	40	4	57	7	64
No	16	48	9	60	3	43	4	36
Advisors can employ graduates								
Yes	23	72	13	87	6	100	4	36
No	9	28	2	13	0	0	7	64

Note: Of the 40 colleges in the program the 7 that were still working toward offering the Chancellor's certificate at the time of data collection are not included in this analysis.

Source: Authors' analysis of Community College Personnel Preparation Project college and faculty mentor reports 1998–2006; see box 3 and appendix A for details.

certificate (57 percent) or those that dropped out (64 percent). Nearly three-quarters of colleges (72 percent) had advisors who employed early intervention personnel. Colleges that successfully completed requirements for the Chancellor's certificate (87 percent) and the college-level certificate (100 percent) were more likely than colleges that dropped out (36 percent) to recruit early intervention employers for their advisory boards.

What challenges and response strategies did colleges report?

As part of the regular reporting practices colleges and project mentors described the challenges they addressed while implementing the project requirements. To answer the last research question, the challenges and response strategies of all 40 colleges were examined.

During this study's eight-year time frame, participating colleges mentioned three challenges:

- Inadequate institutional support and commitment.

- Need for faculty professional development and training in early intervention.

- Lack of early intervention practice sites.

While all colleges cited the first two challenges, 24 colleges also had difficulty finding relevant fieldwork opportunities for students, with access to field sites that trained early intervention assistants in the home a particular challenge. The response strategies colleges used to address these challenges were also analyzed. Strategies employed by at least five colleges are discussed, along with the corresponding challenges.

Inadequate institutional support and commitment.
Institutional needs at the administrative and faculty levels were a concern for all 40 colleges. The resources and time needed to address administrative issues were repeatedly cited as a challenge on college and mentor reports. All colleges were required to have administrative approval to begin the Community College Personnel Preparation Project process, but the level of administrative commitment varied. Enthusiastic deans could expedite administrative procedures, as was the case for 4 of the 15 colleges that completed the process. In schools with a wavering commitment or cumbersome administrative approval process, more time was needed to complete qualification requirements. Five of the seven colleges that obtained a college-level certificate cited the time needed to achieve administrative approval as the reason for not completing the process for the Chancellor's certificate. Other institutional challenges associated with the approval process involved personnel issues (dean's sabbaticals or changes in deans) and changes in administrative practices that depleted faculty time.

Among faculty, conflicting institutional commitments and availability were also part of the institutional challenge

Faculty new to administrative duties or adjunct faculty frequently found it more difficult to navigate the administrative system, extending the time required to implement the project. This happened in the case of five colleges. Asked to identify annual challenges, a college in a rural area of the state responded: "Completing the Chancellor's certificate—my college has very little experience submitting certificates at this level." In some cases institutional challenges were related to external circumstances. Faculty at another college reported: "It is becoming increasingly difficult to find time and resources for our program in a down economy. Last year we were very successful with grants. This year we are having trouble securing funds to open our new [Child] Center. These efforts have taken away from the CCPPP project. We have written eight proposals and only received one grant."

Among faculty, conflicting institutional commitments and availability were also part of the institutional challenge. The need for additional time was noted primarily by faculty liaisons responsible for spearheading the project. However, reports indicated that faculty availability varied. For example, 6 of the 40 colleges were simultaneously implementing the California Mentor Project, which required additional work from the faculty as a whole. Three other colleges were also involved in other specialized trainings that required faculty time. For colleges that dropped out of the project, 4 of 11 cited competing faculty demands for time. One northern California college in an urban region reported that "the biggest challenge at this point is time to focus on this project in the context of demands of being involved in so many [early childhood education] grants/projects simultaneously. . . . It is also challenging to work through relationships between these efforts as they are actualized on the college campus."

Response strategies that colleges used to manage institutional and time challenges while implementing the project included:

- *Streamlined administrative approval template.* Project staff and mentors developed an

administrative approval checklist outlining target steps in the Chancellor's certificate approval process. All college liaisons were strongly encouraged to use the template to track their efforts, and mentors used it as part of the liaison training process. Also useful as a tool to educate administrators, the template was shared with them so that barriers to the approval process were addressed early in the process.

- *Liaison teams.* A faculty team collaborated to complete liaison duties, thus reducing time demands on any one faculty member. For example, the faculty liaison from a college that obtained the Chancellor's certificate reported: "As a full-time faculty, I am responsible for directing a Child Development Center serving 150 children and teaching five child development courses each year . . . in addition to my program, department, and college governance responsibilities. I need a colleague to share responsibilities . . . with our early intervention grant [Community College Personnel Preparation Project]. Special efforts will be devoted to this throughout the upcoming academic year."

- *College cohort groups.* Colleges at similar stages in the process shared problem-solving strategies. In many cases college mentors initiated cohort groups among schools in their geographic regions. A dozen of the 40 colleges were paired at some stage of project implementation.

- *Shared advisory committees and board members.* Organizing an advisory board was an often-cited challenge. A northern California college administrator reported: "I was very pleased to have developed an advisory committee in collaboration with the Children and Families Commission. However, getting people to meet has been next to impossible." As a successful response strategy colleges combined the advisory duties required for the Community College Personnel Preparation Project with those for other early childhood

projects institutionalized at the college. Some colleges in densely populated areas found themselves competing with neighboring schools for the same early intervention experts' time. As a response strategy six San Francisco Bay Area colleges formed a consortium of community partners that served as a common advisory board to address their Community College Personnel Preparation Project issues.

- *State-level project mentor and staff support.* These personnel worked to share and coordinate the distribution of resources, such as administrator fact sheets and student recruitment brochures. They adjusted their time and input to meet each college's needs. As one mentor noted: "Each faculty working on the certificate has their own preferred style of work. Some prefer email templates with time to work on their own. Others prefer 'work days' with one-to-one mentoring every step of the process." The college liaison at a southern California college echoed an often-repeated sentiment: "The help that [the Community College Personnel Preparation Project mentor] gave me was invaluable."

Need for faculty professional development and training in early intervention. All 40 colleges noted that faculty members needed additional professional development and training. Specifically, colleges expressed the need to develop faculty understanding and skill along three dimensions:

- Training in basic concepts of early intervention.

- Training in methods to teach and infuse these concepts into existing course content.

> **Colleges expressed the need to develop faculty understanding and skill along three dimensions: training in basic concepts of early intervention, training in methods to teach and infuse these concepts into existing course content, and training in supervision of students at practice sites**

- Training in supervision of students at practice sites.

The project required that early intervention content be infused across the entire child development curriculum; therefore, most community college faculty would be asked to teach courses integrated with that content. Understanding this material was essential to ensure faculty comfort level with the material. As one college noted, "In a survey that we conducted with the faculty, we found that even though [service for children with] special needs was infused into courses, some of the faculty lacked the confidence to teach the topic and barely skimmed over the surface." Faculty field supervisors also required training to be able to properly mentor students at field sites. Yet all colleges had limited numbers of faculty with the early intervention expertise to mentor their peers. The following response strategies were among those noted by the colleges and project mentors for providing quality faculty professional development in early intervention:

- *Partner with early intervention experts.* Most schools enlisted early intervention community experts as guest lecturers and instructors to provide the expertise needed for inclusion in coursework or as part of field supervision. Early intervention experts also provided faculty training. Some colleges organized teams of instructors to coteach early intervention courses. A rural northern California college faculty member wrote: "[W]e had to cancel the [early intervention] class because we were not able to find a qualified instructor for the course. I called all of the Advisory Committee members, made announcements at every community meeting, and the college ran a newspaper ad for three months. All of the potential faculty we contacted have full-time jobs in the [early intervention] field and were unwilling to take on a full three-unit course. We are hopeful that a group of potential

faculty will get together as a team to teach the course in [the] fall."

- *Develop a Community College Personnel Preparation Project faculty handbook.* In 2000/01 project staff and mentors developed a faculty handbook as a training tool and guide for teachers to implement lectures and class activities that addressed each of the early intervention assistant competencies.

- *Use media resources.* Project mentors and staff collected and distributed examples of media resources useful for early intervention coursework and faculty training. A mentor noted during a focus group: "Proper training of faculty, especially those with limited experience with early intervention, needs to be implemented. A good training tool in this process has been to provide videos/DVDs and class activities that can be used by the faculty in their classes. These curriculum supplements teach the specific competencies and inform the college students as well as the college instructor."

- *Collaborate with other colleges.* In two geographic regions participating colleges collaborated with neighboring schools to provide joint faculty training on early intervention–related topics. Five Central Valley colleges met together for inclusion roundtables to address ways that fieldwork settings could provide inclusive child care for infants and toddlers with disabilities. The roundtables were initiated by project mentors working there and were particularly useful in this rural, geographically less accessible region, where colleges have limited access to early intervention experts. Two San Francisco Bay Area colleges worked together to train faculty in early intervention topics. The college liaisons reported: "At our first one-day retreat we had full-time faculty from both colleges and representatives from the Children's Center staff attend. . . . Both Deans . . . [were] supportive and were in attendance for the first retreat." In addition, all

> **The project required that most community college child development faculty teach courses integrated with early intervention content**

college liaisons were funded by the Department of Developmental Services to attend an annual training meeting.

- *Hire faculty with early intervention expertise.* Five colleges reported hiring new faculty with early intervention expertise. At many schools such hiring was cited as a "success of the project" even though it was not a project requirement.

Lack of early intervention practice sites. Most colleges identified the persistent problem of finding appropriate fieldwork opportunities for students. Institutionally, all of the Community College Personnel Preparation Project programs were housed in departments whose primary focus was child development. Child development fieldwork at child care centers was an integral part of the general curriculum for all 40 colleges. While child care centers are considered a natural environment for infants or toddlers with disabilities, not all campus-affiliated child care sites accepted them or provided early intervention services as part of the child's day.

Access to field sites that trained early intervention assistants in the home was even more challenging for the colleges. As a Central Valley college noted: "Since our new campus facility does not include infant care, we are still in a quandary about how to access our students' skills in working with babies and their families in an environment which we can supervise appropriately."

Response strategies to increase the number of early intervention sites included:

- *Partnering with state and community agencies.* Colleges enrolled in the project had extensive lists of community partners, but not all of these partners could also serve as potential fieldwork sites or employers. Six colleges partnered with schools and districts that provided early intervention services. Five partnered with early intervention practice sites that provided home visiting services. Two partnered

with Early Head Start, another home visiting agency. Four colleges partnered with state or local agencies (for example, the local Department of Developmental Services Regional Centers) that also employed early intervention assistants. Partnering with potential employers helped create relevant practice sites for students. For example, one college reported that "following meetings with key administrators . . . we are developing a series of community-based service learning opportunities. . . . It is hoped that through continued dialogue with the [school] districts and successful service learning experiences on the part of our students, we can promote viable employment opportunities and additional career pathways for students completing the new certificate."

- *Offering on-campus early intervention services.* Contracting to serve young children at child care facilities on college-affiliated sites gave eight colleges the opportunity to offer early intervention fieldwork in locations convenient for both students and faculty. All eight colleges completed the requirements for awarding the Chancellor's certificate. One provided early intervention opportunities at the campus's State Preschool Program for the Deaf and Hard of Hearing.

Publicizing students' success. A strategy that motivated participation among community partners in the program was to publicize students' learning as a result of the project. One college's annual report illustrated this point: "Students with limited or no understanding of children with disabilities successfully completed the courses that required them to display their understanding of specific disabilities as well as apply strategies learning in class within their daily work environments. As a result of this program, students expressed that they felt better prepared/equipped to work with children with varying abilities. And, the program

> **Most colleges identified the persistent problem of finding appropriate fieldwork opportunities for students**

continued to garner support from community agencies and programs."

LIMITATIONS AND TOPICS FOR FURTHER STUDY

The Community College Personnel Preparation Project used mentors to work with faculty liaisons in supporting the colleges as they sought to develop a Chancellor's certificate program for early intervention assistants. During the eight years of the project examined for this study, the duties of the mentors varied widely from phone support to faculty training to meetings with college administrators. A systematic examination of the role of mentors, along with a cost-benefit analysis of this project component, would provide useful information about how to apply this program feature.

Continuing to track colleges to identify the enrollment trajectory for colleges that participate in the project could provide important data

Limited student data were available for this study. As colleges fully implement the Chancellor's certificate requirements, they "graduate" from the program and are no longer required to submit data on project activities such as course enrollment. During this phase most colleges are just beginning to see enrollment growth as the early intervention program becomes known to the student body. Continuing to track colleges to identify the enrollment trajectory for colleges that participate in the project could provide important data. It might also be useful to contrast the progression for colleges that partially complete the project or that drop out. For this project, devising a system that tracks graduates' employment could help in assessing project outcomes and efficacy.

More states are now seeking to define the role of assistants and paraprofessionals in early intervention services and to identify ways to train them. Other states seeking to establish preservice programs for early intervention assistants and paraprofessionals might benefit from examining California's efforts.

NOTES

1. The Community College Personnel Preparation Project is managed by the WestEd Center for Prevention and Early Intervention under a contract with the California Department of Developmental Services, Early Start Section. While the principal investigator for this study, Dr. Diane Hammon Kellegrew, was employed by the Center for Prevention and Early Intervention, she has not been involved in implementation or management of the Community College Personnel Preparation Project. Kari Stewart has also not been involved in the project. Jean Pacifico-Banta has never been an employee of WestEd, been involved with the project, or employed at any community college involved in this study.

2. For example, survey reports by the Center to Inform Personnel Policy and Practice in Early Intervention and Preschool Education, National Resource Center for Paraprofessionals, Center for Personnel Studies in Special Education, and the Council for Exceptional Children, Division for Early Childhood.

3. Eight models were available: Connecticut, Indiana, Massachusetts, Missouri, North Carolina, South Carolina, Texas, and Utah.

4. The California Early Start Personnel Model Workgroup, convened by the California Interagency Coordinating Council on Early Intervention and the Department of Developmental Services, Early Start Section.

5. Personal communication to the principal investigator from Karen Nelson Hunter, Part CSPD Professional Development Coordinator, Department of Economic Security, Arizona Early Intervention Program, November 15, 2007.

6. Personal communication to the principal investigator from Wendy Whipple, Nevada Part C Coordinator, Nevada Bureau of Early Intervention, November 19, 2007.

APPENDIX A
METHODOLOGY

This appendix discusses project participants, data sources, and study methods.

Project participants

The participants included all community colleges enrolled in the Community College Personnel Preparation Project from 1998 to 2006. The project was funded in its entirety by the California Part C Lead Agency, the Department of Developmental Services, Early Start Section.

Forty colleges enrolled during the 1998–2006 time frame. To enroll, a member of a child development faculty at a California community college submitted an application to the project coordinator that identified a faculty liaison to the project and documented approval and support for the project activities from the dean of the child development department. All colleges that met these two criteria were enrolled. Some colleges enrolled independently, and others were recruited to increase geographic representation across all regions of the state.

Enrolled colleges were required to complete a list of tasks leading to approval to award the Chancellor's Certificate for Early Intervention Assistants to their graduates. The certificate is issued by the state of California. Each year, the faculty liaison identified the tasks targeted for completion.

Colleges were included as participants until they successfully completed the project or were no longer actively working on project-required tasks, at which point no more data were gathered. Some colleges stopped participating after completing the requirements for a specialized certificate in early intervention. While a required task of the project, having a specialized college-level certificate did not constitute successful completion of the project or approval to award the state-level Chancellor's certificate. Some colleges dropped out before achieving any type of certificate.

Data sources

Data were gathered from the college reports, mentor reports, and annual reports during 1998–2006 required from the funding agency as part of the project (table A1). Mentor focus group data and mentor written comments after the focus groups were available beginning only in 2004. Data were available for each college during the years the college participated. The years of participation ranged from one year to seven years, with most colleges completing the program in two to four years.

College reports. Participating colleges submitted several reports each year. At the beginning of the year colleges detailed goals for the year and how they would apply the stipend to support achieving them. Throughout the year the colleges submitted reports at least quarterly, in a prescribed format that identified curriculum revision activities, faculty training activities, student training activities, administrative and institutional activities, and challenges addressed. The college reports were completed by the faculty liaisons. A structured report format was used, but the structure incorporated open-ended questions regarding activities related to project implementation. Most college reports were two to four pages long.

Mentor reports. The project assigned faculty mentors to work with faculty liaisons in supporting the colleges. Four to five faculty mentors worked with faculty liaisons each year, submitting

TABLE A1

Type and number of Community College Personnel Preparation Project reports used as data sources, 1998–2006

Data source	Number
College reports	1,605
Mentor reports	415
Mentor focus group minutes	12
Mentor focus written comments	17
Annual reports	9

Source: Authors' analysis of data described in text.

monthly reports on all college support activities and describing the support activities and the challenges at each college. As a college may not have received support each month, not all colleges were mentioned in the mentors' reports each month. These reports were written informally in log format. In addition, the mentors met regularly from one to three times a year for focus groups to discuss the project's direction and outcomes. Notes recording the focus group discussions were taken by the project coordinator. These notes detailed the variety of discussion topics and points made during the meeting. In addition, mentors were asked to follow focus groups with their own written comments about the discussion topics. Each of the four mentors submitted three to five pages of written discussion points following each focus group.

Annual report. An annual project report (typically 8–12 pages long) was prepared by the faculty liaison for the funding agency, the Department of Developmental Services. The report aggregated college data—average numbers of students enrolled, number of faculty trainings, number of colleges reaching each task milestone, and details of the stipends—to discuss overall project outcomes each year. Challenges noted by the colleges were also detailed and discussed. Progress of individual colleges was used to illustrate patterns and trends, but individual college data were not consistently presented. A structured format was used that included specific types of information and questions that allowed for narrative discussion of the experiences and strategies used throughout the year.

Study method

Data coding. Data from the college reports and mentor reports were coded to identify project status and activities for each college for each academic year. Annual report data and mentor focus group minutes were aggregated across colleges and reviewed to identify larger trends, patterns, and challenges. Variables of interest drawn from the reports are presented in table A2.

Within each variable data were further defined for analysis. Before coding the data, the principal investigator and coding researcher established and defined coding categories. For example, the type of faculty trainings included the codes early intervention, special education, general education, and child development. Category 4 was considered the basic training level, as it was expected that faculty trainings in a child development department might include child development topics (number 4), but if trainings also included one or more general education topics the coded level was number 3. The desired result was that the colleges would include trainings specifically in early intervention, the topic of interest. Colleges that received number 1 included such trainings but could also have included trainings in any of the other three levels. The same codes were used for the variables for fieldwork placements, background of advisory board members and community partners, and academic background of faculty.

To establish reliability, the principal investigator and the coding researcher independently coded 10 randomly selected reports. A 98 percent agreement rate was established for these first 10 reports using an iterative or constant comparison process. The first report was independently coded by the two researchers. The point of difference was negotiated, and the definition list was revised to clarify each item, item by item. The next report was then analyzed and, again, discrepancies were used to clarify the coding schema. This process continued until 100 percent agreement was obtained in all coded reports. In addition, a random sampling of 10 report items was co-coded at two different intervals during the coding process to maintain coding reliability throughout the process. The agreement rate was 100 percent in both instances.

Once data coding was completed, a review of student enrollment data showed that the numbers did not give a complete or accurate picture of student variables related to the project and were not consistent enough across colleges to warrant analysis. For example, some colleges infused existing courses with early intervention content,

TABLE A2

Data categories and variables drawn from Community College Personnel Preparation Project reports, 1998–2006

Category	Variables
Student variables	Number of students that completed the Chancellor's certificate[a]
	Number of students enrolled in specialized coursework[a]
	Number of students that dropped out of the project[a]
Curriculum variables	Number of special needs courses offered
	Type of special needs courses and curriculum design
	Number of special needs field experiences offered
	Types of field experiences offered
Faculty variables	Education background of faculty liaison
	Faculty status of faculty liaison
	Turnover of project faculty
	Number of special needs faculty trainings conducted
	Types of special needs trainings conducted
	Successes and challenges associated with implementation of the project
Institution variables	Length of time the college was enrolled in the project
	Number of community partners
	Type of community partners
	Type of advisory board members
	Function of the advisory board
	Successes and challenges reported regarding implementation of the project
Employer variables	Number of advisory board members that employed project graduates
	Types of employment settings offered to graduates

a. Not used for analysis, as explained in text.

Source: Authors' tabulation of Community College Personnel Preparation Project college and mentor reports, 1998–2006.

leading to larger enrollment, while others created separate courses only for early intervention majors. Some colleges did not report any enrollment data because they were still developing coursework and did not have courses available during the reporting year. Some colleges did not offer the early intervention courses until they met the requirements for the Chancellor's certificate, so their enrollment numbers during the reporting phase were negligible. Colleges that did complete the requirements for the Chancellor's certificate stopped collecting data once they obtained the Chancellor's certificate, which is when enrollment increased. Therefore, enrollment data collected during the implementation phase would be an inaccurate and misleading indicator of student variables.

Quantitative data analysis. Once coding was completed, it was clear that colleges progressed through the Community College Personnel Preparation Project process at their own pace. Some colleges finished all the tasks in one year; others took several years and took breaks from the project. It was not possible to compare colleges by year, so data for colleges were aggregated across all years in the project. Each year of data collection was coded for each college according to the established procedure. Numeric data were calculated using the mean for colleges with multiple years of data. For variables coded using the ordinal-level system (such as early intervention training = highest ordinal level, child development training = lowest ordinal level), the highest ordinal level achieved during any year of data collection was recorded.

Visual inspection of the data indicated that most colleges had consistent patterns that were replicated across years. For example, a college with an early intervention advisory board member in year one was likely to have an advisory board member in later years.

Statistical analyses produced descriptive statistics of the frequencies and percentages of colleges for each coding category of the quantitative variables. Cross-tabulations of the frequency by the three college categories were also prepared. Since the full population of participating colleges was studied, significance tests are not reported.

Qualitative data analysis. Much of the data incorporated in the college reports, mentor reports, and annual reports was narrative. Therefore, qualitative research methods were used to develop a coding schema that would allow quantitative analysis and ensure qualitative examination and interpretation of the data.

Content analysis. Content analysis of all narrative data was conducted using a grounded theory approach. First, an inductive analysis of the data was completed with an open coding schema that sorted data into broad categories to identify general patterns and themes. The principal investigator and coding researcher together determined patterns and trends in the data that served as a framework for further coding, in keeping with qualitative deductive analysis. Data variables were identified, clarified, and named. For example, all report data describing how faculty were trained were grouped under the variable "types of faculty training."

Typology analysis. Data from the content analysis were recoded within the identified framework to determine a classification system. Both researchers reanalyzed the data to identify patterns consistent within a variable that could denote a continuum of responses. Definitions were developed for each level. The typology-coding schema was reviewed by the project coordinator to double-check the validity of the ordinal-level concepts. This typology was converted to an ordinal scale to code the

data for quantitative analysis. The reliability of the coding definitions was tested as identified in the quantitative analysis section above.

Thematic analysis. The content analysis data set was reexamined for themes within each variable. Each theme was considered as a distinct element. Thus, this analysis differed substantially from the typology analysis conducted to develop a continuum of responses required for an ordinal scale. Themes of interest included strategies and challenges colleges identified for each data variable. Identified themes were triangulated across data sets. Data sources included college reports, mentor reports, and mentor focus group minutes. In many cases colleges self-identified the strategies and challenges noted. But in some cases faculty mentors identified challenges and successful strategies used by colleges they supervised that were not included in the college report data. Annual reports were not used for triangulation because they summarized other reports and therefore were not an independent data source.

The strategies or challenges themes were then recoded across investigators to include the principal investigator, coding researcher, and a third independent researcher not involved with the content analysis. This investigator triangulation sought to ensure distinct differences among each strategy or challenge theme. These data were reported in two ways. First, themes that identified response strategies were identified. At least five reports representing five different colleges had to include the concept in their reports for the item to be considered a potential response strategy theme. This information was described in the report in bullet points within the discussions of their corresponding challenges. Second, themes that described the challenges associated with implementing the project were identified in the manner described above. Challenges that were identified by all or most of the 40 colleges were selected for inclusion. Two were identified by all 40 colleges. One challenge was identified by 24 of the 40 colleges. Member checking of the validity of the identified challenges was conducted with the project staff.

APPENDIX B
DEMOGRAPHICS OF COLLEGES THAT PARTICIPATED IN THE COMMUNITY COLLEGE PERSONNEL PREPARATION PROJECT

TABLE B1

Community colleges participating in the Community College Personnel Preparation Project by California region, locale, enrollment, and status

Community colleges	California region	Locale	Enrollment, 2006/07	Status
Allan Hancock College	Southern	Large town	10,287	Dropped out
American River College	Northern	Major city	36,300	Dropped out
Chabot College	Bay Area	Small or medium-size city	14,252	In process
Chaffey College	Southern	Small or medium-size city	18,543	Dropped out
Citrus College	Southern	Large town	10,864	College-level certificate
City College of San Francisco	Bay Area	Major city	77,000	Dropped out
College of the Redwoods	Northern	Large town	8,341	College-level certificate
College of the Sequoias	Central	Small or medium-size city	16,115	Chancellor's certificate
Compton Community Educational Center	Southern	Small or medium-size city	6,726	Dropped out
Cosumnes River College	Northern	Major city	18,567	Chancellor's certificate
Cuyamaca College	Southern	Small or medium-size city	18,222	Chancellor's certificate
De Anza College	Bay Area	Major city	40,626	Chancellor's certificate
El Camino College	Southern	Small or medium-size city	35,643	Chancellor's certificate
Fresno City College	Central	Major city	31,401	Chancellor's certificate
Fullerton College	Southern	Small or medium-size city	29,548	College-level certificate
Gavilan College	Central	Large town	10,989	In process
Las Positas College	Bay Area	Large town	11,936	In process
Los Angeles Mission College	Southern	Major city	12,952	College-level certificate
Merced College	Central	Large town	18,863	Chancellor's certificate
Merritt College	Bay Area	Major city	12,162	College-level certificate
MiraCosta College	Southern	Major city	21,267	Chancellor's certificate
Mission College	Bay Area	Small or medium-size city	19,177	Chancellor's certificate
Modesto Junior College	Central	Small or medium-size city	26,309	Dropped out
Moorpark College	Southern	Large town	22,282	In process
Mt. San Antonio College	Southern	Large town	60,702	Dropped out
Ohlone College	Bay Area	Small or medium-size city	18,802	Dropped out
Orange Coast College	Southern	Small or medium-size city	32,072	College-level certificate
Oxnard College	Southern	Small or medium-size city	10,450	Dropped out
Pasadena City College	Southern	Major city	43,081	In process
Pierce College, Los Angeles	Southern	Major city	30,868	In process
Porterville College	Southern	Large town	5,373	Dropped
Reedley College	Central	Major city	18,130	Chancellor's certificate
Riverside Community College	Southern	Small or medium-size city	47,843	Chancellor's certificate
San Jose City College	Bay Area	Major city	16,313	Dropped

(CONTINUED)

TABLE B1 (CONTINUED)
Community colleges participating in the Community College Personnel Preparation Project by California region, locale, enrollment, and status

Community colleges	California region	Locale	Enrollment, 2006/07	Status
Santa Monica College	Southern	Major city	49,967	Chancellor's certificate
Santa Rosa Junior College	Northern	Small or medium-size city	47,974	Chancellor's certificate
Taft College	Central	Small town	22,674	College-level certificate
West Hills College, Coalinga	Central	Small town	4,383	Chancellor's certificate
West Hills College, Lemoore	Central	Small town	6,417	Chancellor's certificate
West Valley College	Bay Area	Large town	19,484	In process
Yuba College	Northern	Small town	14,436	College-level certificate

Note: Locales are determined by population: small town, 5,000–25,000; large town, 25,001–75,000; small or medium city, 75,001–300,000; major city, more than 300,000.

Source: Authors' compilation based on data collection described in appendix A.

APPENDIX C
COLLEGE EXPECTATIONS AND PROPOSED TIMELINES FOR THE CHANCELLOR'S CERTIFICATE

The Community College Personnel Preparation Project provides high-quality training programs that prepare personnel to work with young children with special needs and their families. Project sites created a career ladder with articulation to the four-year colleges and universities and allowed for lifelong learning for those who wished to gain new or improve existing knowledge and skills.

Colleges progressed at their own pace. A faculty liaison was identified as the primary contact for the site. The project takes approximately three years to review, revise, and implement standards for working with special needs children in existing child development classes and programs. The expectations and recommended timelines for participating colleges are described in table C1.

TABLE C1
Expectations and recommended timelines for colleges participating in the Community College Personnel Preparation Project

Activities	Timeline	Deliverables
Preparation		
1. Identify key staff and consultants to work on the project.	Annually	Notify project office upon determination.
2. Complete contract preparation form.		Submit form to project office.
3. If the contract is with an individual, secure a letter of commitment from college administration.		Submit preparation form with contract.
4. Contract will be completed and mailed for signature to person or agency identified in contract preparation form.		Return signed contract to project office.
Staff and faculty orientation to the project		
1. Develop and conduct orientation for all full- and part-time faculty and project staff.		Agenda (attach to monthly report).
2. Prepare materials, or use project materials to orient new faculty or staff.		In monthly reports.
Project advisory committee		
1. Develop project advisory committee and identify project advisory committee members, including representatives from the local regional center, early intervention programs, local education agencies, and the local California State University (child development and early childhood special education programs). Existing program committees may be expanded and used for this purpose.	Within one month of beginning project	Provide advisory committee roster to project office with monthly report.

Other representatives should be considered from the following programs:

- Local child care planning councils.
- Child care and development programs.
- Early Head Start and Head Start programs.
- Institutes of higher education.
- Local developmental disability councils.
- County children's services programs, including children's mental health programs, high-risk infant projects, and so on.
- Family resource centers.
- County children and families commissions (Proposition 10, the California Children and Families First Initiative).

(CONTINUED)

TABLE C1 (CONTINUED)
Expectations and recommended timelines for participating colleges in the Community College Personnel Preparation Project

Activities	Timeline	Deliverables
2. Convene quarterly meetings of the local project advisory committee. Review project goals, objectives, and desired outcomes.	As scheduled	Submit agenda, sign-in sheet, and minutes or notes for advisory committee with monthly reports.
Review and revise course outlines and syllabuses		
1. Submit current syllabi and course descriptions for core early childhood and special needs-related classes.	Within one month of beginning project	Copies of syllabuses, course descriptions, and so on (one time only).
2. Submit other resources such as program or certificate descriptions, college catalogues, and other materials that may be of relevance in describing the programs offered in early intervention or related areas.	Within one month of beginning project	Copies to project office (one time only).
3. Begin reviewing course descriptions, syllabuses, and other materials using the *Early intervention assistant core competencies* (see box 4).		Monthly report status update.
4. Complete revisions of course descriptions, syllabuses, and other course materials.		Submit copies of revised course descriptions to project office for review and approval.
5. Develop new course descriptions and outlines to meet any competencies needed.		Submit copies of new course outlines and syllabuses.
6. Revise courses as needed based upon input from project office.	Ongoing	Submit copies of revised course outlines and syllabuses.
7. Submit syllabuses for existing, new, or revised courses to campus curriculum committee or through college approval process.	Ongoing	Submit final copies to project office once approved.
Award college-level certificate		Submit copy of certificate to project office.
Develop early intervention assistant certificate program		
1. Create certificate program. • Determine preparation for Early Intervention Assistant Certificate for submission to Chancellor's Office.	Year 2	Submit draft of courses and field experience requirements to project office for input and recommendations.
2. Prepare materials for submission to Chancellor's Office, including: • Approval from Regional Occupational Dean. • Campus approvals. • Other information needed in application packet.	Year 3	Submit copy of application to project office prior to review and recommendations and final copy submitted to Chancellor's Office.
In-service training for faculty and staff		
1. Prepare in-service plan for current faculty on how to implement instruction related to serving children with disabilities and other special needs within all child development classes.		Copy of plan to project office; identify technical assistance needs from project office.

TABLE C1 (CONTINUED)

Expectations and recommended timelines for participating colleges in the Community College Personnel Preparation Project

Activities	Timeline	Deliverables
Implement program		
1. Begin to implement new courses that meet the early intervention assistant competencies.	Years 2 and 3	Monthly report updates.
2. Develop field placement and job placement strategies working with local programs serving infants and young children with or at risk for developmental disabilities.	Year 2	Monthly report updates.
3. Implement mentor or supervised fieldwork with typically and atypically developing children.	Year 3	Monthly report updates.
4. Recruit students to participate in the program.	Years 2 and 3	Promotion materials with monthly reports.
5. Develop articulation agreements with local universities to enhance career path options for students wishing to pursue higher education opportunities.[a]	Year 2 and ongoing	Monthly reports, copies of articulation agreements.
Other project activities		
1. Attend community college work group meetings in Sacramento or regionally as may be scheduled.	To be announced	Provide brief updates at meetings.
2. Attend Community College Personnel Preparation Project State Advisory Committee meetings in Sacramento.	1–2 times a year	Attendance at meetings.
3. Assist in data collection and developing tracking system of participating students, which will include current and future job participation.	Annually	Include data in final annual reports.
4. Provide support and mentoring to local programs, other colleges, and future pilot sites.	Ongoing	Documentation of local efforts (copies of flyers, minutes of meetings, and so on).
5. Submit monthly status/activity reports (including a list of related activities) and billing to project office.	Monthly, upon receipt of contract	Monthly reports using project office format, can be submitted electronically.
6. Other tasks required for successful completion of project.	Ongoing	As needed.

a. Often geared toward students transferring from a two-year college to a four-year college, articulation agreements are agreements between two or more institutions to transfer specific courses or entire degrees.

Source: Authors' compilation based on data collection described in appendix A.

REFERENCES

Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education. (2004). *Study I data report: the national landscape of early intervention in personnel preparation standards under Part C of the Individuals with Disabilities Education Act (IDEA)* (CDFA No. 84.325J). Farmington, CT: University of Connecticut Health Center. Retrieved August 13, 2007, from http://www.uconnucedd.org/publications/files/PPDataPartCweb.pdf

Council for Exceptional Children, Division for Early Childhood. (2006). *Personnel standards for early education and early intervention.* [Position statement, adopted December 1993 and reaffirmed February 14, 2006]. Missoula, MT: Council for Exceptional Children, Division for Early Childhood. Retrieved August 15, 2007, from http://www.dec-sped.org/pdf/positionpapers/PositionStatement_PersStan.pdf

Etscheidt, S. (2006). Least restrictive and natural environments for young children with disabilities: a legal analysis of issues. *Topics in Early Childhood Special Education, 26*(3), 167–178.

Geiger, W. L., Crutchfield, M. D., and Mainzer, R. (2003). *The status of licensure of special education teachers in the 21st century* (COPSSE Document No. RS-7E). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.

Giangreco, M. F. (2003). Working with paraprofessionals. *Educational Leadership, 61*(2), 50–3.

Giangreco, M. F., Edelman, S. W., Broer, S. M., and Doyle, M. B. (2001). Paraprofessional support of students with disabilities: literature from the past decade. *Exceptional Children, 68*(1), 45–63.

Hart, K., and Schumacher, R. (2005). *Making the case: improving Head Start teacher qualifications requires increased investment* (Head Start Series, Paper #1). Washington, DC: Center for Law and Social Policy (CLASP).

Individuals with Disabilities Education Act of 1997. Pub. L. No. 105-17, 111 stat. 37.

Individuals with Disabilities Education Act of 2004. Pub. L. No. 108-446, 8302, 118 stat. (codified as amended at 20 U.S.C. 1431).

Katsiyannis, A., Hodge, J., and Lanford, A. (2000). Paraeducators: legal and practice considerations. *Remedial and Special Education, 21*(5), 297–304.

National Association for the Education of Young Children. (2003). *NAEYC standards for early childhood professional preparation: associate degree programs.* Washington, D.C. Retrieved August 15, 2007, from http://www.naeyc.org/faculty/pdf/2003.pdf.

National Early Childhood Technical Assistance Center. (2003). Standards and licensure—examples of state competency requirements, certification and licensure. Retrieved August 15, 2007, from http://www.nectac.org/topics/personnel/standards.asp

Pickett, A. L., Likins, M., and Wallace, T. (2003). *The employment & preparation of paraeducators: the state-of-the-art 2003.* New York: National Resource Center for Paraprofessionals.

Raab, M., and Dunst, C. J. (2004). Early intervention practitioner approaches to natural environment interventions. *Journal of Early Intervention, 27*(1), 15–26.

Recruiting New Teachers, Inc. (2000). *A guide to developing paraeducator-to-teacher programs.* Belmont, MA: Recruiting New Teachers, Inc.

Smith, B. J., Strain, P. S., Snyder, P., Sandall, S. R., McLean, M. E., Ramsey, A. B., and Carl-Sumi, W. (2002). DEC recommended practices: a review of 9 years of EI/ECSE research literature. *Journal of Early Intervention, 25*(2), 108–119.

U.S. Secretary of Education. (2007). "Early Intervention program for infants and toddlers with disabilities." [Proposed rule change]. *Federal Register, 72*(89), 26455–26531. Retrieved from http://edocket.access.gpo.gov/2007/07-2140.htm.

Vogler, S. D., Davidson, A. J., Crane, L. A., Steiner, J. F., and Brown, J. M. (2002). Can paraprofessional home visitation

enhance early intervention service delivery? *Journal of Developmental and Behavioral Pediatrics, 23*(4), 208–216.

Wallace, T. (2003). *Paraprofessionals* (COPSSE Document No. IB-3). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.

Warger, C. (2002). *Supporting paraeducators: a summary of current practices.* Arlington, VA: Eric Clearinghouse on Disabilities and Gifted Education. (ED47583) Retrieved August 15, 2007, from http://www.ericdigests.org/2003-5/paraeducators.htm