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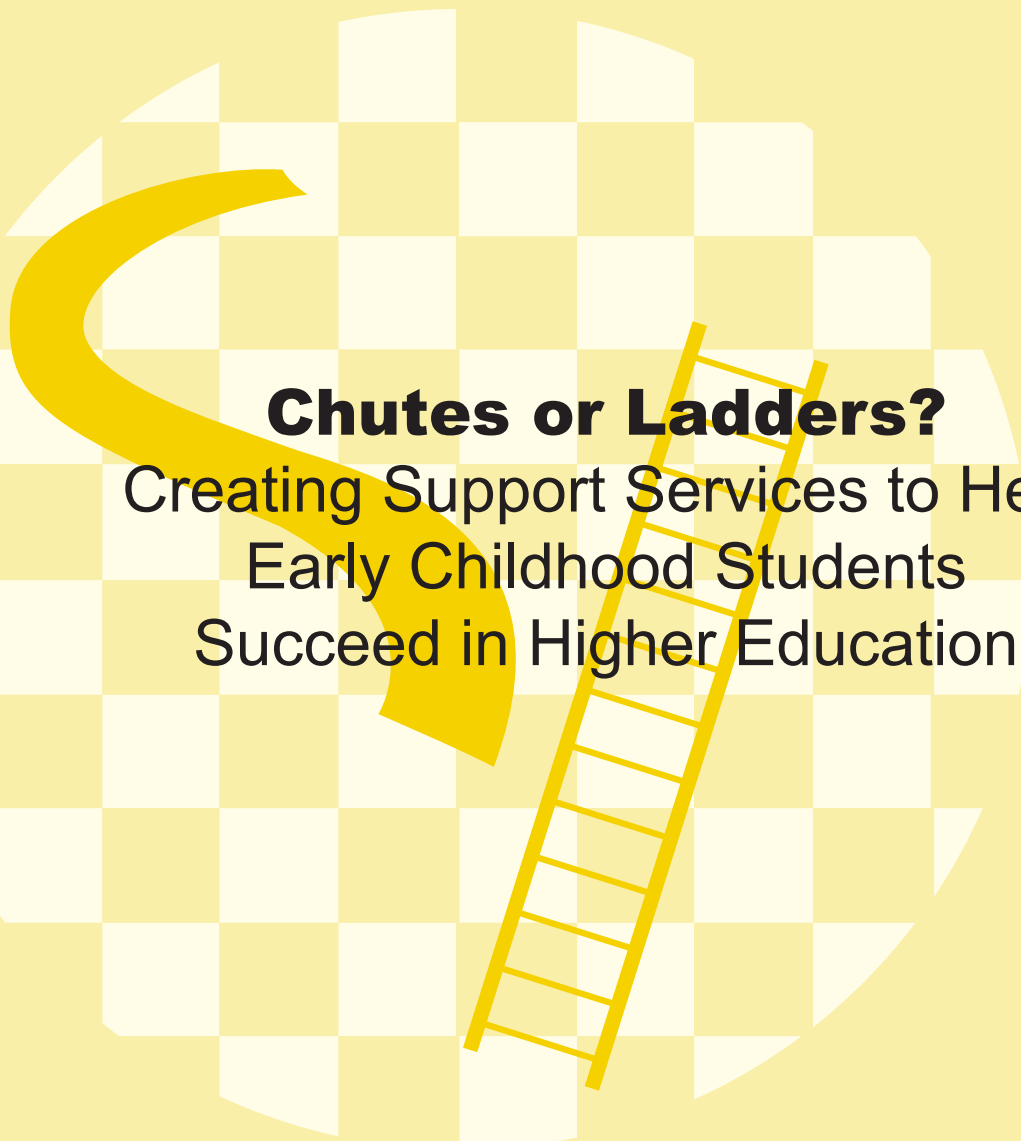
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Chutes or Ladders?

Creating Support Services to Help
Early Childhood Students
Succeed in Higher Education

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CENTER FOR THE STUDY OF CHILD CARE EMPLOYMENT

Institute for Research on Labor and Employment, University of California at Berkeley

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Introduction

The “traditional” American college student is typically defined as a young adult who recently graduated from high school, is enrolled full-time, continues to be financially dependent on parents, and, at most, has only part-time employment. But despite this pervasive image, such students comprise only a small fraction of those participating in American postsecondary education today (Choy, 2002).

The population of “nontraditional” college students has steadily risen over the past two decades. This category has been collectively defined as including low-income students, English language learners, working students, parents (including single parents), immigrants, older students, those in the first generation of their families to attend college, welfare recipients, and those with more than one of these attributes. “First-generation” students, for example, are often nontraditional in other ways: they are more likely than other students to come from low-income families, to delay enrollment in college, to attend part-time and discontinuously, and to have had lower academic performance in high school. Nationwide, nontraditional college students have significantly lower rates of retention and graduation in higher education programs than their traditional counterparts (Choy, 2002; Chen, 2005).

Yet the very prevalence of “nontraditional” students in higher education today makes the terms “nontraditional” and “traditional” so outdated as to be nearly irrelevant. In the 1999-2000 academic year, an extraordinary 73 percent of all U.S. college and university undergraduates were in some way “nontraditional,” and about 43 percent were more than 24 years old. Financial independence was their most prevalent characteristic, followed by part-time attendance and delayed enrollment (U.S. Department of Education, 2003a&b). Between 1992 and 2000, 22 percent of those entering postsecondary education were first-generation students.

These patterns hold true for early care and education (ECE) students in California’s college and university teacher preparation programs. Most ECE students in California are working full-time, typically at low-wage jobs; many speak a language other than or in addition to English; and many face significant challenges in pursuing college-level work in English (Whitebook, Bellm, Lee & Sakai, 2005). According to the California Early Care and Education Workforce Study (Whitebook et al., 2006a&b), most of the state’s overall

ECE workforce is well beyond high school graduation: more than two-thirds of center teachers, and more than one-half of assistant teachers, are age 30 or older, while the average licensed family child care provider is in her mid-forties.

But in recent years, cities and counties across California – as well as colleges and universities themselves – have launched significant efforts to support ECE students in accessing higher education opportunities, and in focusing their academic and career paths toward earning college degrees. With degree paths in mind, planners in the ECE field are also working on revamping and expanding higher education programming in community colleges and four-year institutions.

This report explores efforts in California to support nontraditional students generally, and ECE nontraditional students in particular.¹ We recommend that institutions of higher education and local planners work together to assess the needs of nontraditional students in their ECE programs, the adequacy of existing supports on campus, and the ability of staff and faculty to make referrals to these supports. We also recommend, based on our findings, that institutions and localities make an investment in targeted supports for ECE students in order to improve their success in school and beyond. Finally, although evaluative research on the effectiveness of student support services has not been extensive, we reference several recent studies, and recommend further research in this area.

Challenges Faced by Nontraditional Students

Nontraditional college students face numerous challenges as they begin their postsecondary experience, and often, even before entering college.

Access

Combining school and work is a significant challenge for many nontraditional students. Two-thirds of those with more than one nontraditional characteristic identify primarily as employees or working people, rather than as students. Drawbacks for working students include less flexibility in their schedules, limiting the number and variety of classes they can take; limited library access; and in some cases, a negative impact on grades. But they also report certain benefits to working while attending school, especially when their work is related to their studies: on-the-job assistance with coursework, and preparation for a career (Choy, 2002). First-generation students tend to approach and enter college

¹Detailed descriptions of ECE student support efforts in Alameda and Santa Clara Counties, California, can be found in Dukakis & Bellm (2006), *Clearing a Career Path: Lessons from Two Communities in Promoting Higher Education Access for the Early Care and Education Workforce*.

less prepared overall than other students; as a result of limited information, they often lack knowledge or understanding about the necessary steps to entering higher education, such as financial aid, basic admissions processes, and the connection between career goals and educational plans. Often, they are also less prepared academically once they enter. Underlying this is a perception by many first-generation college students that they receive less support from their families for attending college than others do – perhaps, in part, because family members are less able to act as role models or sources of information (Tym et al., 2004).

Adult learners returning to school, particularly women, face additional challenges (Benshoff & Lewis, 1992). These may be internal struggles, such as guilt about being away from their children, concern about maintaining a certain family or household role, or worry that family considerations (or minimal support from family members) may compromise their opportunities for a career. Finding appropriate and affordable child care can also be a major obstacle.

English language learners are a fast-growing segment of the adult learner population, and they face yet another set of access issues in pursuing higher education. College classes are generally unavailable in other languages, and support can be quite limited for students who struggle with completing college-level work. Among those who need English as a Second Language (ESL) instruction but do not participate in it, most say that they do not know whether such classes are available, or how to access them. Those who do take ESL classes report most often that they learned about them by word of mouth (Bailey & Mingle, 2003).

Students in ECE higher education programs face similar obstacles. A census of California's college and university ECE teacher preparation programs (Whitebook et al., 2005) found that the major challenges for these students included competing work or family responsibilities; a lack of academic preparation; insufficient funds for financial aid; and a rising need for courses and supports in languages other than English.

Retention and Completion

Findings based on the broad definition of nontraditional

students indicate that they are much more likely than traditional students to leave college without a degree. According to one study, 50 percent of “highly nontraditional”² students in bachelor's degree programs dropped out within three years, compared to 12 percent of traditional students. In associate degree programs, 62 percent of “highly nontraditional” students dropped out within three years, compared to 19 percent of traditional students. Across the board, regardless of the type of degree pursued, nontraditional students were more likely than others to leave during their first year; 27 percent did so in bachelor's programs, and 46 percent in associate degree programs, vs. 14 percent and 23 percent, respectively, of their “traditional” counterparts. Finally, nontraditional students were less likely to obtain their degrees within five years: 31 percent did so in bachelor's degree programs, vs. 54 percent of traditional students, and 27 percent did so in associate degree programs, vs. 53 percent of traditional students (Choy, 2002).

Research on first-generation students has found that they struggle significantly with staying in and completing college. They have been found to earn lower grade point averages in their first year of college, to be more likely to repeat or withdraw from courses, and to be less likely to complete a B.A., than students whose parents have completed a B.A. or higher. Approximately 43 percent of first-generation students who enrolled in college between 1992 and 2000 had withdrawn by 2000, compared to 20 percent of those whose parents had completed college. About 24 percent of first-generation students graduated with a B.A. by 2000, compared with 68 percent of students whose parents had completed college (Chen, 2005).

Similarly, low-income students are significantly less likely to complete a B.A. than others, and even low-income students who demonstrate high aptitude³ are significantly less likely to enroll in college or obtain a B.A. In one study, low-income, full-time students entering four-year colleges or universities had a six-year graduation rate of 54 percent, compared with 77 percent for high-income students and 63 percent for all students (Berkner et al., 2002, as cited in Carey, 2004). As noted earlier, first-generation students from low-income backgrounds face greater challenges in college than other first-generation students (Thayer, 2000).⁴

² Defined as having four or more of the following characteristics: delayed postsecondary enrollment beyond the year of high school completion; part-time attendance for at least part of the academic year; full-time employment while attending school; financial independence as defined by eligibility criteria for financial aid; responsibility for dependents; single parenthood; and lack of a high school diploma (vs. a GED, other certificate or no formal completion).

³ In a U.S. Department of Education study (Fox et al., 2005), high aptitude was defined as having earned high eighth grade math scores.

⁴ “Low income” was defined here as having a dependent family income in 1994 of less than \$25,000; “high income” was defined as a dependent family income of \$70,000 or more in 1994 (the year prior to college entry for the students included in the study).

Support Services that Help Nontraditional Students Achieve Success

Tinto (2003) argues that in order to stem attrition and increase success among nontraditional students, institutions of higher education need to examine and change their own internal structures and policies, rather than focusing only on helping students to adjust to current practices. Within this, he argues for a variety of academic, social and personal supports that are integrated into, not separate from, a college or university’s existing institutional structure.

The various support services available on some campuses to assist nontraditional students can be grouped into five categories. (See chart below.) The following discussion will examine these five types of student support, and offer examples of current program models in California. *Note:* this is intended as an illustrative sampling of current efforts, rather than an exhaustive or comprehensive listing of programs.

Targeted Delivery

Three examples of targeting support to groups of students who share similar characteristics are: student cohorts or learning communities, classes for English language learners, and multipurpose programs.

Student Cohorts

Student cohorts, or learning communities, are guided by the principle that students enjoy greater academic success when

learning in the context of closer relationships with each other, with involved faculty, and with the institution (Price & Lee, 2005).⁵ Cohorts move a group of identified students, often with common interests or characteristics, through a course or course sequence together. They offer a more intimate learning experience that allows students to study and participate in other school-related activities as a group, and commonly include a weekly or monthly seminar or other gathering. California examples include the following, as well as several cohorts listed under “Classes for English Language Learners”:

- *B.A. Program in Child and Adolescent Development, San Jose State University:* a student cohort model initiated by San Jose State University’s Child and Adolescent Development Department and the E3 Institute in fall 2006.
- *B.A. in Human Development, Option in Early Childhood; Minor in Early Childhood Education, California State University-East Bay (Hayward):* a program for small cohorts of early childhood development students who have earned the requisite credits to transfer into the university at junior-year (upper division) status.
- *B.S. in Child Development, California State University, Fresno:* an accelerated, year-round, cohort-based “Child Development Practitioner Option” with a strong applied orientation.
- *Child Development B.A. Program for Working Professionals, Mills College (Oakland):* a pilot program launched in January 2007.
- Other ECE student cohort programs are now operating in Contra Costa, Modoc, San Francisco, Santa Barbara, Ventura and other counties.

Targeted Delivery	<ul style="list-style-type: none"> • Student cohorts / Learning communities • Classes for English language learners • Multipurpose programs
Advising and Counseling	<ul style="list-style-type: none"> • Academic advising and counseling • Career counseling • Personal counseling
Financial Support	<ul style="list-style-type: none"> • Financial aid • Supplemental services (child care, transportation, books/supplies)
Skill-Based Support	<ul style="list-style-type: none"> • Academic support (tutoring) • Technological support (computer training)
Access-Based Support	<ul style="list-style-type: none"> • Classes/services at nontraditional hours & in accessible locations • Online or distance learning

⁵ See Bloom & Sommo (2005) for an evaluation of the effectiveness of learning communities at Kingsborough Community College in Brooklyn, New York.

	Target Population/Criteria	Services Provided
National Programs		
National Student Support Services Program (Federal TRIO program) ⁶ http://www.ed.gov/programs/triostudsupp/index.html	Low-income, first-generation and disabled college students at two- and four-year institutions	Tutoring, counseling, remedial education and other support services
Program for Adult College Education (PACE) (operates at many CSU and community college campuses in California)	Working adult students at two-year and four-year institutions	Core curriculum designed for working adults; classroom hours in each subject area reduced to one-half of those in traditional classes; relevant instructional television and weekend conferences, lectures or activities (McCarthy, 1995)
	Target Population/Criteria	Services Provided
California Programs		
Extended Opportunity Program and Services (EOPS) ⁷ http://www.cccco.edu/divisions/ss/eops/eops.htm	Low-income, full-time students, at beginning of college careers (maximum of 70 credits amassed); participants are required to be in good academic standing and to attend three counseling sessions focused on educational plan	Academic counseling and educational services; financial aid; cash grants; priority registration for required classes; peer networking; child care and transportation assistance
Cooperative Agencies Resources for Education (CARE) http://www.cccco.edu/divisions/ss/care/care.htm	EOPS students on public assistance with children under age 14	Child care and transportation assistance; workshops for single parents
CalWORKs Community College Program ⁸	Welfare recipients attending community college as their approved work activity through CalWORKs (California's welfare-to-work program)	Child care assistance; financial aid; work-study or job placement; personal and career counseling; academic planning and support; reimbursement for books and supplies
Puente Community College Program (operating at 54 community colleges in California) http://www.puente.net/ccp_pg.html	Low-income, first-generation Latino college students Goal is "to increase the number of educationally underserved students who transfer to four-year colleges and universities, earn degrees, and return to the community as leaders and mentors to future generations"	Regular meetings with a Puente counselor; help with college application process and college preparatory curriculum; matches to successful community mentors; accelerated sequence of college preparatory classes

⁶ See Chaney et al. (1997) for results of the National Study of Student Support Services, a longitudinal comparison-group study that examined the effect of the SSS (multipurpose) program on student outcome measures during the first three years of college. A follow-up study (Muraskin, 1997) identified best practices and selected five exemplary program sites that had made a significant impact on students' grade point averages, retention, or both. All sites shared similar core elements, including a "structured freshman-year experience;" a focus on acquiring knowledge and academic skills; frequent contact with students, primarily in groups; targeted recruitment and incentives for participation, such as jobs within or outside of the program; committed staff who had worked within the institution for a significant period of time; and a campus philosophy that viewed the program as improving outcomes, rather than incurring costs.

⁷ A report by the California Community Colleges Chancellor's Office (2003) to the legislature and the Governor included an analysis that compared students in the EOPS and CARE programs to other full-time students in the general population. The report found that EOPS and CARE students remained in school from one term to the next at a higher rate than their non-EOPS counterparts, and were more likely to earn degrees or certificates. It also found that from 1996 to 2002, EOPS and CARE students attempted a greater number of units than other students.

⁸ A study by the California Community Colleges Chancellor's Office (Mathur et al., 2004) examined California welfare participants' earnings and employment levels upon their exit from the state's community college system in 1999-2000, where they had been students as part of their approved welfare-to-work requirement. The study found a strong association between participants' earnings and employment, and the amount of time they had spent in community college. It also concluded that student completion of programs was linked to college "service coordinators" and other staff who assisted students with navigating the institution, accessing services and guiding their courses of study.

Classes for English Language Learners

This approach supports educational advancement by integrating instruction in English as a Second Language with subject-specific, credit-bearing courses. Courses may be provided in English or in the students' first language, but are generally intended to act as a bridge into General Education classes and others taught entirely in English; they might also be delivered in a particular sequence, making up a unified program of study for a cohort of English language learners. California examples include:

- *Emerging Teacher Program, Merritt College (Oakland)*, in which cohorts of 24 English language learner students earn the requisite number of General Education units to reach the "teacher" level of the Child Development Permit Matrix.
- *Spanish-Speaking Student Cohort Program, Chabot College (Hayward)*, in which students take their first four ECE classes in Spanish and transition to English for the last two classes.
- *Programs for Family Child Care Providers and English Language Learners, De Anza College (Cupertino)*, in partnership with *The Provider Connection/Palo Alto Community Child Care*: neighborhood-based child development classes for family child care providers, as a bridge to campus-based courses at De Anza; classes in Spanish; and a mentoring program.
- *City College of San Francisco, and San Francisco State University*: a bilingual student cohort program for Head Start teachers.
- *Other programs* include those at Cabrillo College, Contra Costa Community College, the community colleges of San Mateo County, and Santa Rosa Junior College.

Multipurpose Programs

These programs deliver a combination of support services to students sharing certain qualifying characteristics, such as socioeconomic status, cultural background, participation in welfare-to-work activities, and others, and/or to students in a centralized location (Purnell et al., 2004). A number of multipurpose programs exist in community colleges and four-year institutions across the U.S. and in California. While these are not targeted specifically to early childhood students, they offer important campus resources that could

and should be made available to the early childhood student population.

Advising and Counseling

Academic advising and counseling helps familiarize students with an institution's structure and offerings, guides them through their coursework and educational paths, and at community colleges, may also focus on assisting students with transfer to four-year institutions.⁹ *Career counseling* creates a bridge between academic coursework and a student's future professional aspirations. *Personal counseling* is designed to assist students with overcoming challenges that may interfere with academic functioning and success, such as competing work or family responsibilities, financial concerns, or mental health problems such as depression, stress, or anxiety.

Counseling efforts targeted to ECE students in California include the following:

- *Professional Development Coordinators*, housed at each of Alameda County's four community colleges, and ECE Career Advocates, housed at the county's three child care resource and referral agencies.
- *College Liaisons*, onsite at all community colleges and at two four-year universities in Santa Clara County.
- *One-Unit or Half-Unit Guidance Classes* at community colleges in Santa Clara County, helping students understand the variety of available opportunities related to working with young children, and supporting them in navigating appropriate educational pathways.
- *Transfer Assistance*, available for students at a variety of B.A. programs, including San Jose State, CSU East Bay and Mills College, helping to ensure that applicants are "transfer ready," possessing the appropriate courses, credits and documentation to be able to move from a community college.
- *Other academic advising and counseling efforts* in Contra Costa County, in the Los Rios Community College District, Sacramento County, San Mateo County, and Ventura County. In addition, all CARES programs are currently required to offer advising services to CARES participants, and some have expanded this to academic counseling housed at local colleges.

⁹ A longitudinal study of first-year students at a large public university found that students who believed they had received good academic advising withdrew at a 25-percent lower rate than those who said they had received poor-quality advising, and at a 40-percent lower rate than students who had received no advising. A national survey of nearly 1,000 university and college administrators reported that the number-one feature connected to attrition on their campuses was "inadequate academic advising," and that the improvement of such services was the intervention most commonly used to increase retention (Cuseo, 2003; Purnell et al., 2004).

Financial Support

Financial support, which includes financial aid and other supplemental services, is often a critical element in determining a student’s ability to enter postsecondary education in the first place, or to remain in and complete a course of study or degree. More detailed information can be found in the Appendix, “Higher Education Financing Options for Early Childhood Students.”

Major categories of financial aid available to California college students include loans, grants, work-study positions and scholarships. (See chart below.) Loans are dollars borrowed from state, federal or private sources that must be repaid, typically with interest, but in some programs, a portion of or an entire loan may be forgiven in exchange for post-education service. Grants, which do not require repayment, may come from state or federal sources, or from institutions of higher education themselves. Through work-study programs, students work part time to earn money for college expenses. Scholarships, generally based on merit, may recognize a student’s major, grades, test scores, special talents, heritage, athletic or leadership ability, or community service.

The first step in the process of applying for loans, grants or work-study programs is to fill out the Free Application for Student Aid (<http://www.fafsa.ed.gov/index.htm>). Every scholarship program defines its own application process.

The Berkeley-based Institute for College Access and Success (<http://www.ticas.org/>) is also a valuable source of

information about efforts to make higher education more available and affordable for students of all backgrounds.

Supplemental services can include financial assistance with child care, transportation, books or supplies. Child care-related assistance may include helping students not only with payment through vouchers or subsidies, but also with finding child care that is appropriate to the child’s age and the parents’ scheduling needs. Many colleges also offer child care on-site as a service to students and staff. Assistance with transportation costs (including public transportation passes or parking), or with books or supplies, may be offered through vouchers or subsidies.

A notable example of financial support for ECE students is currently offered by First 5 Alameda County and the E3 Institute, which cover tuition and all expenses for students in the B.A. programs at CSU East Bay and San Jose State University, respectively. In San Joaquin County, the CARES program pays participants’ costs for completing their junior and senior years of college if they agree to work locally in the ECE profession for a minimum of two years. A number of other county-based CARES programs also assist participants with the costs of books and transportation.

In general, however, we do not know the levels at which ECE students are accessing existing financial aid resources, or which barriers to access are most significant.¹⁰ The following barriers have been identified:

- Many federal and state financial aid programs have exclusions for adult learners.
- Pell Grant appropriations have fallen below the cost

Loans	<ul style="list-style-type: none"> • Available loans include federal Stafford Loans and Perkins Loans (http://studentaid.ed.gov/students/publications/student_guide/2005-2006/english/types-perkinsandstaffordloans.htm), plus loans for parents, and private loans.
Grants	<ul style="list-style-type: none"> • Available grants include Federal Pell and Supplemental Educational Opportunities Grants (http://studentaid.ed.gov/), Cal Grants (http://www.calgrants.org/), and institution-specific grants (granted directly by a college or university) • California Community Colleges Board of Governors Fee Waiver, for California residents, based on financial need (http://www.cccco.edu/divisions/ss/financial_assist/attachments/04_05bogfw_ap.pdf)
Work Study	<ul style="list-style-type: none"> • Students are usually expected to work 10-15 hours per week; information available at campus financial aid offices.
Scholarships	<ul style="list-style-type: none"> • Several free scholarship databases are available online; see, for example, www.fastweb.com, which is frequently updated. • Offered by colleges, companies, and other private institutions.

¹⁰ Such information is not readily available online through the California Community Colleges Chancellor’s Office (<http://www.cccco.edu/>), the U.S. Census Bureau (<http://www.census.gov/>), or the federal ERIC database (<http://www.eric.ed.gov/>). Regarding tuition assistance specifically, Whitebook et al. (2005) found that the amount, types and usage at community colleges are not clear from the data. Further work is needed to clarify this issue.

of tuition. Also, they do not cover costs for individuals taking only one class at a time, those enrolled in courses at more than one institution at once, or the costs of distance learning courses.

- The federal Lifetime Learning Credit, designed for older, often working adult students, is not relevant for those with low incomes.
- The increasing focus over the last decade on merit (as opposed to need) as a determinant of state financial aid eligibility has created a challenge for adult learners, as have related scholarships which reach out to students who are imminently graduating from high school and going directly on to postsecondary education.

Based on what is known about ECE students, additional barriers may include the following:

- Lack of knowledge of available resources;
- Living expenses beyond those included in typical financial aid packages (child care, rent on housing for student's children);
- Inability to take on a loan burden when studying for a low-paying field;
- Lack of identification as degree-seeking student.

In order to better assess ECE students' need for financial supports in relation to currently available resources, we need to understand the level of need for financial aid among ECE students, the amount of financial aid they are currently receiving, and their barriers to access.

As Haveman and Smeeding note in a recent report on "The Role of Higher Education in Social Mobility" (2006), "income-related gaps, both in access to and in success in higher education are large and growing." Their recommendations for addressing this issue go beyond clarifying needs and identifying barriers; they advocate for the restructuring of postsecondary education financing.

Skill-Based Supports

Academic supports help students to acquire skills needed for success in their coursework. These most commonly involve tutoring, which may be offered in designated centers or within departments of the institution, individually or in groups, and in connection with a specific course or subject or aimed at developing a certain skill, such as writing. Academic support can also include study skills classes, focusing on such skills as note taking and exam preparation.

Technological supports have become increasingly necessary as college students are now regularly expected to use computer programs, e-mail and the Internet for communication,

research and coursework. Strategies for delivering such support include introductory classes or computer labs; in-class computer use (in non-technological courses) blended with instruction; tutoring or other academic support involving computer use and Internet research; and call-in lines for tech support and trouble-shooting.

CSU Fresno, for example, provides computer support that is built into its Child Development Practitioner Option courses. Students receive specific instruction for use of email, the Internet, and Power Point, as well as how to do electronic searches. The final segment of the program is an eight-week computer lab course in which students assemble and polish the electronic portfolio that they have worked on throughout their course of study.

Access-Based Supports

Offering classes and services at nontraditional hours is an important form of support for many nontraditional students; this would include evening and weekend hours, and/or classes and services offered in a concentrated block of time to accommodate the schedules of working students. CSU East Bay's B.A. program, Mills College's B.A. program and San Jose State's B.A. program all offer classes in the evenings and on weekends, as do some of the programs for English language learners described above. Many CARES programs – for example, those in Lake, Siskiyou, Solano, Ventura and Yolo Counties – have also worked with college administrators and faculty to arrange more conveniently located and scheduled courses.

Making classes more geographically accessible can also be critical. Upper-division courses offered at community college campuses can make a significant difference for students who face geographic hurdles or barriers to transportation, as well as helping to demystify what might be the daunting prospect of entering a B.A.-level program. Likewise, community college classes offered at community-based organizations can create a more familiar and comfortable environment for first-time postsecondary students. San Jose State's B.A. program in Child and Adolescent Development houses classes for cohort students at E3's offices, which are generally more geographically accessible to students and occur during the late afternoons or evenings. San Francisco State University now offers some of its upper-division Child and Adolescent Development courses off-campus at Cañada College (Redwood City), City College of San Francisco, and College of Marin (Novato); in fact, the Cañada College campus now offers all the classes required for a B.A. in Child and Adolescent Development. As noted above, under "Classes for English Language Learners," De Anza College

in Cupertino also offers classes in the community for family child providers and others.

Although *online courses* may seem novel to some, they are only the latest manifestation of distance education, which already has a more than century-long history. Correspondence courses began in the late nineteenth century, instructional audio and television followed in the first half of the twentieth century, and online courses, certificates, credentials and degree programs are now offered by many colleges, universities and other institutions across the United States and around the world (Hains et al., 1999).

Online courses can be an attractive option for students who face scheduling or geographic obstacles to attending traditional college courses. By participating in such courses, ECE students can also develop technological skills that are useful to them more broadly in their work (e.g., accessing online resources for curriculum planning, communicating with other teachers, and participating in early education advocacy) and in their everyday lives (e.g., locating resources for child care, transportation, housing, or employment) (Guha, 2000).

Important considerations for taking an online course include the following:

- Is the institution that offers it accredited? For the purposes of the California Commission on Teacher Credentialing (which issues Child Development Permits), CARES programs, and accredited degree programs, the institution offering the online course must be accredited by one of the six U.S. regional accrediting organizations. Links to these organizations can be found at: http://www.ed.gov/admins/finaid/accred/accreditation_pg7.html#RegionalInstitutional. In California, the accrediting institution is the Western Association of Schools and Colleges (WASC), www.wascweb.org.
- Does the instructor have online teaching experience?
- What is the course format? For example, is there one-on-one interaction with the instructor? Is the course 100-percent online, or are there face-to-face meetings?
- Is technical support available? Participating in online courses requires a significant skill level in computer and online technology, which can be daunting to students with limited computer literacy.

Among those that have developed ECE online courses and programs are Chico State University, San Jose State University, and community colleges in Butte, Del Norte, Inyo, Kern, Modoc, Mono, Plumas, Santa Clara, Sierra, Siskiyou and Tuolumne Counties.

Conclusion

With very high numbers of “nontraditional” students now enrolled in American colleges and universities—and disturbing evidence of a widening gap in retention and success between these students and their traditional counterparts – emerging research is making it clear that students are more likely to pursue and complete their education when various support services are made available to them. However, given that relatively few rigorous research studies have assessed which types of student supports are most effective, and how these are best delivered, we recommend renewed attention to such evaluative efforts.

In the field of early care and education, the longer-term goal for California is a comprehensive statewide professional development system, supported by a substantial infusion of resources. Short of meeting that goal, however, colleges, universities and communities have a variety of options they can undertake to improve student success. This paper has outlined promising options in five areas: targeted delivery to student cohorts, English language learners, and other groups; student advising and counseling; financial support; academic and technological support; and access-based support. When such an array of services is in place at most institutions of higher education, we will be well on our way to guaranteeing higher rates of educational achievement.

Californians are fortunate that, given the large population of nontraditional ECE students in our state, many institutions and communities are already making substantial systemic changes in the area of student support services. We recommend that ECE stakeholders in counties and communities work on a targeted approach to student supports, identifying local needs, assessing existing services, and working to institutionalize the types of support that are most in demand, in order to help greater numbers of students pursue and succeed in higher education.

Appendix: Higher Education Financing Options

The following information was compiled by the Center for the Study of Child Care Employment in the fall of 2006; check web sites indicated below for updates.

Financial Assistance for Future Teachers

While many financial aid programs for future teachers are targeted only to teachers of Grades K-12 and above, the following opportunities include students of early childhood education.

The *Child Development Teacher and Supervisor Grant Program* is designed for students at California colleges or universities who intend to attain a Child Development Permit to teach or supervise in a licensed children's center in California. The program offers \$1,000 and \$2,000 grants to students studying child development; community college students may receive two years of funding, and students transferring to a four-year institution to continue their studies may reapply for an additional two years. The maximum amount a student may receive is \$6,000. Participants must commit to full-time employment in a licensed children's center in California for a period of one year for each year of benefits received. For more information, visit the California Student Aid Commission website, www.csac.ca.gov, or the California Department of Education website, www.cde.ca.gov/sp.cd.

The California Teaching Credential Program provides an additional year of Cal Grant aid (see below under "Federal and California Grants") for students to attend a teaching credential program. Applicants must have received a bachelor's degree, and must be enrolled in a teacher preparation program at a California Commission on Teacher Credentialing-approved institution within 15 months of the end of the term for which he or she last received a Cal Grant payment. For more information, visit the California Student Aid Commission website, www.csac.ca.gov, or CalTeach at www.calteach.com.

Pell Grants (see below under "Federal and California Grants") may be awarded to students who already have a bachelor's degree to help pay for a teaching credential program, if their college doesn't offer a bachelor's degree in education. For more information, visit the Federal Student Aid website, www.studentaid.ed.gov, or the California Student Aid Commission website, www.csac.ca.gov.

The following programs are offered by the *Child Development Training Consortium* (CDTC), a statewide

program funded by the California Department of Education, Child Development Division. More information is available at www.childdevelopment.org.

- The *Community College Program*, through a CDTC contract with 96 community colleges, provides financial assistance to eligible students who are pursuing careers in child care and development. Funds can be used, among other things, to reimburse eligible students for enrollment fees, tuition and/or textbooks. Students must be working at the time of enrollment in a California child care and development program (which can include licensed family child care, out-of-school care, or kindergarten), and must be seeking a new Child Development Permit or maintaining a current one.
- *Career Incentive Grants* are available to eligible undergraduate students pursuing careers in child care and development. Students are reimbursed for actual out-of-pocket educational expenses, including tuition, enrollment fees, and books.

CARES Programs, awarding stipends to early care and education teachers and providers for pursuing professional development, now operate in most California counties, and many are currently targeting funds to students pursuing a college degree. For more information, visit http://uwba.org/matters/w4qcc/w4qcc_caresmodel.htm.

Jumpstart is a national nonprofit organization whose goal is to build literacy, language, social, and initiative skills in young children by pairing college students with preschool children in one-to-one relationships for an entire school year. Members complete 200-300 hours of service during the school year (approximately 10-12 hours per week). Members can earn a work-study stipend during the term of service at their university, and can receive an education award upon the completion of the service term (\$1,000 for 300 hours, and \$1,250 for 525 hours). Members also qualify for the *Pearson Teacher Fellowship*, which is designed for college graduates who want to become full-time early childhood education teachers. If selected, a fellowship recipient agrees to serve for two years as a full-time teaching assistant, team teacher, or lead teacher in a Head Start or other early care and education program in the U.S. Individuals receive a \$12,500 stipend over two years in addition to their teaching salary. For more information, visit www.jstart.org. For information about the Pearson Teacher Fellowship, visit www.jstart.org/pearson.

Teach For America, a national teacher corps of recent college graduates who commit two years to teach and to effect change in under-resourced urban and rural public schools, launched

a pilot Early Childhood Education Initiative in September 2006, with 18 members teaching in public school pre-K and Head Start classes in the Washington, DC area. The program aims to include more than 500 corps members teaching early childhood education by 2010. For more information, visit: www.teachforamerica.com/about/special_initiatives/early_childhood_initiative.htm.

Among other scholarships for potential teachers, including those in the early care and education field, are the following:

- The *Educational Communications Scholarship*, sponsored by the Educational Communications Scholarship Foundation, is open to any high school student interested in a career in education or communications (not necessarily majoring in either field) who demonstrates academic achievement and leadership, with some consideration for financial need. For information, visit www.honoring.com.
- The *Frances Degen Horowitz Millennium Scholars Program*, developed to support undergraduates from under-represented groups in pursuing graduate work in child development and related disciplines, provides selected students with mentors who offer guidance and support in their pursuit of educational and professional goals. For information, visit www.srcd.org/hmsp.html.
- The *Future Teacher Scholarship*, sponsored by the National Institute for Labor Relations Research, is an award of \$1,000 open to students majoring in education who demonstrate the potential for completing a degree program and obtaining a teaching license. Students must also demonstrate “an understanding of the principles of voluntary unionism and the problems of compulsory unionism in relation to education.” For information, visit www.nilrr.org.
- The *Phi Delta Kappa Scholarship for Prospective Educators*, sponsored by Phi Delta Kappa International, is open to high school seniors who intend to major in education and pursue a career in the education field. Applicants submit recommendations and an essay, and must demonstrate academic achievement, leadership, seriousness of purpose, and service to others. For information, visit www.pdkintl.org.
- The *Troops to Teachers* program is designed to assist separating or retiring military personnel in pursuing a second career in public education. Eligible applicants can receive stipends up to \$5,000 to help pay for teacher certification costs, or bonuses of \$10,000 to teach in schools serving a high percentage of students from low-income families. Participants must agree to teach for three years in targeted schools. For information, visit

www.proudtoserveagain.com.

- The *USA Funds Access to Education Scholarship*, sponsored by USA Funds, is open to high school seniors of low-income families with a career interest (not necessarily a major) in education. Applicants must demonstrate leadership, service to others, and financial need. For information, visit www.usafunds.org.

Loans

Loans are borrowed dollars that must be repaid, typically with interest. A portion or all of some loans may be forgiven in exchange for post-education service.

Federal Stafford Loans are offered to eligible undergraduate, graduate, vocational, and professional students. For *subsidized loans*, awarded to students who demonstrate financial need, the federal government pays the interest while the student is in school. For *unsubsidized loans*, open to all eligible students regardless of their financial resources, the student is responsible for paying interest. Interest rates are variable, but (as of fall 2006) cannot go higher than 8.25 percent. There is also a fee of up to four percent of the loan, deducted proportionately from each loan disbursement.

The amount that students can borrow depends on their college costs, their expected family contribution, the other financial aid they receive, and whether they are dependent or independent. For dependents, borrowing is as follows: up to \$2,625 for freshman year, \$3,500 for sophomore year, and \$5,500 for third and remaining years. Independent and graduate students have higher borrowing limits: \$8,500 of subsidized loans per year, and \$10,000 of unsubsidized loans per year. After graduating, leaving school, or enrolling less than half time, students have a six-month grace period before the first loan payment is due. Total borrowing for undergraduates may not exceed \$23,000 for dependent students and \$46,000 for independent students. Total borrowing for graduate students may not exceed \$138,500, and no more than \$65,500 may be in subsidized Stafford loans. For more information, see Federal Student Aid at www.studentaid.ed.gov.

Federal Perkins Loans are low-interest loans for graduate and undergraduate students with exceptional financial need. Students can borrow up to \$4,000 for each year of undergraduate study, to a maximum of \$20,000, and up to \$6,000 for each year of graduate study, to a maximum of \$40,000. Since funds are limited, few students receive the top award amounts. The interest rate (as of fall 2006) is fixed at five percent; students pay no interest while enrolled at least half time, and must begin repaying the loan nine months after graduating, leaving school, or enrolling less

than half time. For more information, see Federal Student Aid at www.studentaid.ed.gov.

PLUS Loans for Parents help parents and guardians pay their dependents' college costs. The yearly limit is equal to the cost of the student's attendance, minus any other financial aid received. Interest starts to accrue immediately, with repayment beginning within 60 days after the last disbursement. As of the 2006-07 academic year, the variable rate was 7.94 percent. There is also a fee of up to four percent of the loan, deducted proportionately from each loan disbursement. For more information, see Federal Student Aid at www.studentaid.ed.gov.

Private loans from banks and other lending institutions can also help students and/or parents finance college bills, but they usually carry higher interest rates and fees than federal loans, and typically are based on credit-worthiness. For two examples, see www.wellsfargo.com and www.bankofamerica.com/studentbanking.

Federal and California Grants

The following grants – funds that are given outright, and do not need to be repaid – are for undergraduate students.

Federal Pell Grants are need-based, and are awarded to every undergraduate student who qualifies. They may be used for tuition, fees or living expenses at any qualifying college in the United States, including community colleges. The maximum award is \$4,050 per year, and students may receive a grant even if attending school less than half time. For more information, see Federal Student Aid at www.studentaid.ed.gov.

Through *Federal Supplemental Educational Opportunities Grants*, colleges award grants from \$100 to \$4,000 per year to undergraduates with exceptional financial need, with priority given to Pell Grant recipients.

The *Academic Competitiveness Grant*, awarded in addition to a student's Pell Grant, is for first-year students who are recent graduates of a "rigorous" high school program, as determined by the state or local education agency. To receive a second-year grant, students must maintain a cumulative grade point average of at least 3.0. The grant provides up to \$750 for the first year of undergraduate study, and up to \$1,300 for the second year.

Cal Grants are awarded to undergraduate students who meet certain financial, academic and eligibility requirements, and may be used only at qualifying colleges in California. For more information, see the California Student Aid Commission

website, www.csac.ca.gov or the EdFund website, www.edfund.org. There are three main varieties:

- The *Cal Grant A* program assists with tuition and fees at California's public and independent four-year colleges, and at some private career colleges, for a course of study of at least two academic years. At UC and CSU campuses, the award pays up to full system-wide fees (\$6,141 at UC, and \$2,520 at CSU, as of 2006). At independent colleges, the award provides up to \$8,322 for tuition and fees.
- The *Cal Grant B* program assists low-income students for a course of study of at least one academic year. For first-year students, the award is usually about \$1,500, and may be used for books, living expenses, or transportation, as well as for tuition and fees. When renewed or applied for beyond the freshman year, the grant includes a tuition and fee award for students who will be attending a school other than a California community college.
- The *Cal Grant C* program assists students in occupational, technical or career training programs that are at least four months long. The typical award of \$576 provides for books, tools and equipment. Students may also receive up to \$2,592 in tuition assistance if they choose to attend a school other than a California community college.

University of California Student Aid provides an average award of \$8,500 per year to students in need. For more information, see www.universityofcalifornia.edu.

California State University Grants offer need-based assistance to California residents. While the award amount varies, these generally cover a substantial portion of system-wide fees. For information, see www.calstate.edu/AR/sfa_index.shtml.

The Community College Board of Governors' Fee Waiver covers the enrollment fee at California community colleges for students eligible for need-based financial aid, or receiving CalWORKs/TANF, SSI or General Assistance payments. For more information, see the California Student Aid Commission website, www.csac.ca.gov.

Other financial aid resources for adult students include:

- "Scholarships for Re-entry Students: Grants and Retraining Assistance for Adults Returning to College," available at www.adultstudentgrants.com.
- Tuition Assistance Programs funded by employers.
- Tax breaks such as the Lifetime Learning Credit, which can be used to decrease the cost of higher education for returning students.
- Back 2 College, at www.back2college.com.

Scholarships and Fellowships

Scholarships and fellowships are grants that are generally based on merit, recognizing a student's major, grades, test scores, special talents, heritage, athletic or leadership ability, or community service.

Several free *scholarship databases* are available online:

- *FastWeb*, updated frequently, contains information on 1.3 million scholarships worth over \$3 billion. Visit www.fastweb.com.
- The College Board's *Fund Finder* scholarship database, updated annually, lists scholarships and other financial aid programs from 2,300 national, state, public and private sources, at http://apps.collegeboard.com/cbsearch_ss/welcome.jsp.
- *FinAid!* Visit www.finaid.org.

The following is a selection of well-known *scholarships for undergraduates*:

- The *Apple Scholars* program, sponsored by Apple Computer, awards \$2,000 scholarships to ten high school seniors for innovative use of technology in their schoolwork.
- The *Robert C. Byrd Honors Scholarship* program, funded by the federal government and administered by state governments, offers \$1,500 awards to approximately 6,500 high school seniors per year. Students apply through the state education agency in their state of legal residence.
- The *Coca-Cola Scholars Foundation Scholarships* are open to U.S. high school seniors with a grade point average of at least 3.0. A total of 250 scholarships are awarded each year, with 50 National Scholars receiving \$20,000 scholarships, and 200 Regional Scholars receiving \$4,000 scholarships. Recipients are selected based on leadership, character, civic and extracurricular activities, academic excellence, and community service. Information is available at: 1-800-306-COKE.
- The *Elks National Foundation "Most Valuable Student" Competition* awards 500 four-year scholarships to high school seniors who are U.S. citizens. Information is available through local Elks lodges, although applicants do not need to be related to an Elks member.
- The *Gates Millennium Scholarship program* is sponsored by the Bill and Melinda Gates Foundation (www.gatesfoundation.org), and administered by the United Negro College Fund (www.uncf.org). Nomination by a professional educator (such as a principal, teacher, or guidance counselor) is required. The program focuses on students pursuing careers in mathematics, science,

engineering, education or library science. A candidate must be African American, American Indian/Alaskan Native, Asian/Pacific Islander American, or Hispanic American, as well as a U.S. citizen or permanent resident/national; have a cumulative grade point average of 3.3; and be entering a U.S. accredited college or university as a full-time degree-seeking freshman in the fall. Candidates must also be eligible for the Federal Pell Grant. For more information, write to Gates Millennium Scholars, P.O. Box 10500, Fairfax, VA 22031-8044, or call 1-877-690-4677.

- The National Merit Scholarship Corporation (NMSC) sponsors the *National Merit Scholarships*, *National Achievement Scholarships*, and the *Special Scholarships*. These are among the largest scholarship competitions in the United States, with more than 10,000 students receiving college scholarships totaling \$47 million. High school students enter the competitions by taking the PSAT test, also referred to as the National Merit Scholarship Qualifying Test (NMQT). Approximately 16,000 students with the highest selection index scores are named semifinalists; of these, about 15,000 are named finalists, and about 8,000 finalists are selected to receive a National Merit Scholarship. An additional 1,600 participants who were not finalists are selected for Special Scholarships, sponsored by corporations. The National Achievement Scholarship Program recognizes approximately 775 outstanding African American students per year. Scholarship amounts in each of these programs range from \$2,500 to renewable, four-year, full-tuition scholarships. For more information, visit www.nationalmerit.org.
- The *All-Ink.com College Scholarship Program* is open to high school seniors who are U.S. citizens or permanent residents, and who demonstrate academic achievement through submission of an essay. For information, visit www.all-ink.com.
- The *Horatio Alger National Scholarship* is open to high school seniors who demonstrate financial need, seriousness of purpose, and service to others, and who have overcome great obstacles in life. See www.horatioalger.org/scholarships.
- The *Presidential Freedom Scholarship* is open to high school upperclassmen applying for their freshman year in a two- or four-year institution, and requires a nomination from the student's high school. Students must have completed at least 100 hours of community service in the 12 months prior to nomination. For information, visit www.nationalservice.org/scholarships.

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