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Learning Together:

A Study of Six B.A. Completion Cohort
Programs in Early Care and Education:
Year 4

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The conclusions and views presented in this report are those of the authors only, and not of the study's funders.

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Learning Together:

A Study of Six B.A. Completion Cohort Programs in Early Care and Education: Year 4

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Executive Summary

The *Learning Together* longitudinal study focuses on four counties' efforts to expand bachelor's degree opportunities in early care and education (ECE) for adults currently working in the field. The "student cohort" model—in which small groups of ECE students with similar interests and characteristics pursue a bachelor's degree together, and receive targeted support services—emerged in Alameda, Santa Barbara, Santa Clara, and San Francisco Counties, with programs at Antioch University, California State University-East Bay (CSU-East Bay), Mills College, San Francisco State University (SFSU), San Jose State University (SJSU), and the University of La Verne (ULV). With county, First 5, and private foundation support, these six cohort efforts were developed with similar goals:

- To increase and retain a pool of B.A. degree-level professionals in the ECE field with culturally, linguistically, and professionally diverse backgrounds;
- To invest in institutional change at colleges and universities in order to expand their capacity to provide appropriate and accessible B.A. programs for ECE practitioners; and
- To assure that degree recipients are able to demonstrate and articulate professional competencies that are appropriate to the degree obtained.

In 2007, the Center for the Study of Child Care Employment began implementing a five-year longitudinal study of each student cohort, as well as periodic examinations of institutional change at selected colleges and universities. In its first two years, the *Learning Together* study explored students' perspectives on the supports and services that facilitated their higher education access and success, and the impact of the educational experience on their professional practice. Program leaders and faculty also shared their perspectives on these issues. In the third year, the Learning

Together study focused on graduation rates, and graduates' perspectives on two aspects of their B.A. cohort program: the practicum experience, and the extent to which their courses had assisted them in working with linguistically diverse children. In addition, graduates shared their perspectives about their workplaces as environments that supported their ability to apply the knowledge and skills gained from their studies, and changes in their employment and compensation post-graduation.

This report discusses the results of a fourth round of interviews, in which the study team asked graduates to assess how various structural features of their B.A. cohort programs had contributed to their educational success, the value of their general education courses, and the extent to which their programs had addressed leadership development and working with adults. Once again, graduates were asked about the impact of the B.A. degree on their professional and personal lives, and their perceptions of how their workplace environments affected teaching practices with children. To augment our understanding of their professional competence, graduates were presented with three vignettes describing a typical occurrence in a preschool classroom, and were asked to describe what they would do in each situation to promote children's learning.

Graduates in the Sample

Of the 85 graduates who participated in Year 4 of the study, 96 percent were women, and the majority (74 percent) were women of color. The average age of graduates was 45 years, with 55 percent between the ages of 30 and 49. Slightly less than one-third (31 percent) of graduates identified their primary language spoken at home as being other than English, most often Spanish. Over three-quarters (79 percent) of graduates reported working in a child care center, typically serving linguistically diverse children, children of low-income families, and children with challenging behaviors.

The Ongoing Value of a B.A. Education

During the last decade, researchers and policy makers have been debating the optimal level of formal education for ECE practitioners (Bogard, Traylor, & Takanishi, 2008; Calderon, 2005; Early et al., 2008; Fuller, Livas, & Bridges, 2006). Some stakeholders continue to support having few or no barriers to working with young children, while a growing number of advocates and educators assert that a B.A. degree and a credential in early education should be the standard for preschool teachers (Whitebook & Ryan, 2011). The *Learning Together* Year 4 study focused on the experiences and views of practitioners, who are seldom included in these discussions. These findings provide a new perspective: a snapshot of B.A. completion cohorts by program participants two to three years after graduation.

Study Findings, Part I

Finding 1: Looking back on their experiences in B.A. cohort programs, graduates continued to identify the programs' structural supports, such as financial aid and flexible class schedules, as important to their educational success.

Both when they started their program and at the time of the Year 2 interviews, students overwhelmingly viewed its structural features, such as financial assistance, flexible class schedules, and convenient class locations, as very or extremely important. In Year 4, more than one-half of graduates identified financial assistance as key to their success (58 percent). We found that graduates of these cohort programs had incurred less student debt than graduates of other California public and private institutions of higher education (Project on Student Debt, n.d.).

Second to financial assistance, graduates identified flexible class schedules, designed to meet the needs of working students, as an essential feature of their programs. A substantial minority of students mentioned the following as essential: convenient location of classes, a supportive faculty, academic assistance, academic advising, and technology assistance.

Finding 2: Since graduation, cohort members continued to serve as professional, personal, and educational resources for each other.

A large majority (84 percent) of graduates viewed the cohort experience itself—taking classes with the same group of students, all of whom work in the

ECE field—as extremely important to their success in attaining a B.A. degree. Further, virtually all the graduates (99 percent) reported that they had maintained contact with someone in the cohort. For the 88 percent of graduates who reported on the nature of their relationships with fellow cohort members, about three-quarters (76 percent) reported that these colleagues continued to be important professional resources. Graduates reported visiting each other's classrooms, working together to solve job-related problems, discussing ways to apply what had been learned in school to their current jobs, and keeping each other informed about new developments in the ECE field. A similar percentage of students (71 percent) reported that they had maintained personal relationships with cohort members, such as being friends and giving and receiving emotional support.

This finding suggests that peer learning and support are important quality improvement strategies that deserve greater attention; for example, how they compare to or enhance mentoring and coaching, strategies that have recently become prominent in professional development research and policymaking (Tout, Isner, & Zaslow, 2011).

Finding 3: More than two-thirds of graduates reported taking general education classes while participating in their B.A. cohort. Approximately two-thirds of these graduates reported that general education classes had enhanced their educational experience and/or had had a positive impact on their work with children and families.

More than two-thirds of the graduates (69 percent) reported taking general education (G.E.) classes while participating in the B.A. cohort program, with the majority identifying a positive impact. They mentioned, for example, that the G.E. courses had allowed them to learn about topics beyond ECE; had resulted in a more well-rounded educational experience; had helped them succeed in their upper-division courses; and had improved their writing and oral presentation skills.

Approximately two-thirds of the graduates who took G.E. courses mentioned that their G.E. classes had positively influenced their work with children and families. More than one-third mentioned improvement in general work skills, such as using new math skills for determining eligibility and enrollment, better writing skills for writing a report or program newsletter, and overall better problem-solving strategies. Slightly less than one-third mentioned better relationships with

parents due to improved communication skills, and a deeper grasp of research to share with parents. Slightly more than one-fourth talked about how incorporating topics learned in their G.E. classes, such as physical science, history, math, writing, music, literature, and art, had enriched their curriculum for children.

Finding 4: The majority of graduates reported that skills and knowledge related to two issues – ECE public policy and working with other adults - would be helpful to their current jobs and to their future careers. More than one-half reported that their B.A. completion cohort program had addressed these issues to some degree during the course of their studies.

We asked graduates how helpful it would be to understand the early care and education system and the complex sets of regulations, budgets, and public processes that shape the system in which they operate, and whether their B.A. program had provided information on these topics. Approximately three-quarters of the graduates responded that it would be very helpful for their current jobs to know about the impact of federal, state, and local budgets and legislation on the ECE system; about two-thirds thought that it would be very helpful to know how the ECE delivery system changes over time; and slightly more than one-half responded that understanding eligibility requirements, staff qualifications, and funding sources of ECE services in their community would be very helpful. When asked about the importance of these topics to their career goals, a large majority (82 percent) of graduates responded that it would be very helpful to know about the impact of federal, state, and local budgets and legislation on the ECE system; almost three-quarters thought it would be very helpful to know how the ECE delivery system changes over time, and about two-thirds responded that understanding eligibility requirements, staff qualifications, and funding sources of ECE services would be very helpful. About two-thirds of the graduates (65 percent) reported that the B.A. cohort program had provided them with information related to the ECE system.

In addition to knowledge of the ECE system, we asked graduates how helpful skills related to working with colleagues and other adults in the workplace would be to their current jobs and to their future career goals. Graduates overwhelmingly reported that giving constructive feedback to colleagues at the workplace (89 percent), resolving conflict among

adults in the workplace (86 percent), and running an effective meeting (74 percent) would be very helpful to their current jobs, with similar responses for the helpfulness of such skills to their career goals. More than four out of five graduates (82 percent) reported that their B.A. cohort program had provided them with information and/or skills related to working with adults as individuals, and 74 percent with information and skills related to working with adults in groups and organizations.

Finding 5: Approximately one to two years after graduation, nearly one-quarter of graduates reported changes in their job positions, with three-fourths attributing this change to having attained a B.A. degree. Three-fifths of graduates reported pay increases, with 80 percent attributing these exclusively, or in part, to their B.A. degree.

Except for a small percentage (five percent) who were not currently employed at the time of the interview, all graduates continued to work in the early care and education field. For those currently working in child care centers, almost one-quarter (23 percent) reported that their job position had changed since attaining a B.A. degree. Approximately three-quarters of these graduates (73 percent) reported that this



change had been related exclusively, or in part, to having attained the degree.

More than one-half of graduates (61 percent) reported an increase in compensation since attaining the B.A. degree. Four-fifths (80 percent) reported that the raise was related exclusively, or in part, to the degree. Among graduates who reported a raise, the increase averaged \$3.46 per hour. For graduates working full-time and year-round, this translates to an increase of \$7,191 per year.

Finding 6: Almost all graduates were of the opinion that their B.A. degrees would have a positive impact on their future. Most reported a positive impact on their professional lives, more than one-half on their personal lives, and about one-third on their future educational pathways.

Virtually all graduates (97 percent) reported that having a B.A. degree would have a positive impact on their futures. More than four out of five of these graduates (82 percent) mentioned a positive professional impact, more than one-half (54 percent) mentioned a positive personal impact, and one-third (33 percent) mentioned a positive educational impact.

For those who cited an impact on their future professional lives, more than one-half (57 percent) mentioned more career opportunities. Approximately one-half (49 percent) mentioned feeling more competent at their jobs as a result of their education. For those who anticipated an impact on their future personal lives, more than one-half (55 percent) reported on increased self-esteem, approximately one-quarter (23 percent) mentioned other positive personal feelings, and approximately one-quarter (23 percent) also mentioned greater financial security. About one-half (48 percent) who reported an educational impact mentioned the ability to pursue a Master's degree, and one-third (33 percent) mentioned feeling inspired them to keep learning and to keep up with new developments in the ECE field.

Finding 7: Graduates working in center-based programs agreed that prevalent characteristics of the ECE workplace, such as insufficient staffing, staff turnover, lack of sick or personal days, and lack of paid planning or preparation time, all have an impact on a teacher's ability to engage in effective classroom practice. Only about three-fifths of these graduates reported that their workplace offered paid planning time, and a much smaller percentage reported opportunities for paid sharing time with other colleagues.

The *context* of teacher practice matters. Teachers and other professionals develop their skills over time, and thus the work environment can either facilitate or impede practitioners' abilities to implement what they have learned at school and to continue to improve their instructional and caregiving practices (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005; Whitebook, Gomby, Bellm, Sakai, & Kipnis, 2009; Whitebook & Ryan, 2011). The graduates overwhelmingly agreed that various workplace characteristics can impact teachers' abilities to engage in good practice and to continue to develop their skills. The study findings reaffirm the importance of expanding the debate about the value of a B.A. degree for ECE teachers to an exploration of the relationship between higher education and the quality of the work environments in which teachers practice.

The work environment characteristics that most graduates working in center-based programs perceived to have a very big impact on classroom practice included insufficient staffing, staff turnover, lack of paid personal or sick days, inadequate training of co-workers, inadequate director education and training, lack of paid planning and preparation time, and poor access to health care services.

Fifty-nine percent of graduates reported that their workplaces offered paid preparation time at their job, defined as a specific time set aside for preparation that does not occur when one has other responsibilities, including supervising children during play or nap time. Only 15 percent of graduates who were teachers reported having paid professional sharing time, defined as the opportunity to observe others at work and to reflect on one's own job with colleagues.

Study Findings, Part II: Vignettes

To augment graduates' self-reports about professional growth resulting from their participation in the B.A. cohort programs, graduates were read three scenarios that might occur in a typical preschool classroom, and were asked how, picturing themselves as the teacher, they would promote children's learning in each scenario. Analysis of graduates' responses suggests that using vignettes to assess practitioners' knowledge may provide an additional source of information beyond self-reports or director/instructor reports, particularly when individual observations of teachers are not feasible. Other factors requiring further investigation, regarding the research value of this vignette approach, include interviewer reliability, the setting and process for presenting vignettes, and any pre-existing differences in experience and skill among student populations.

The vignettes were adapted from situations described in the *California Preschool Curriculum Framework: Volume 1*, a resource for early childhood educators focused on promoting learning for preschool-age children (California Department of Education, 2010). We selected two vignettes that described situations offering teachers many opportunities to support the development of children's higher-order thinking skills, and one that focused on strategies for working with young children who do not speak English.

Graduates offered a range of strategies to promote learning, such as asking children to classify and experiment with objects, introducing complex math concepts, connecting an activity to children's home and/or classroom experiences, and art projects. Graduates also mentioned different communication strategies they would employ to assist English language learners. Some mentioned multiple strategies for each vignette, while others did not, and some proposed more complex approaches than others.

After each vignette, we asked graduates whether their responses would have been different if we had presented them with the vignette before they had participated in their B.A. programs. A large majority of graduates (87 percent) reported that their responses were influenced by their education, noting that their B.A. programs had provided them with a better understanding of children's capacities at different stages of development, which in turn influenced their choice of appropriate teaching strategies, and they noted that the B.A. programs had helped them to better communicate their views on best practices for teaching children. Many graduates believed that the B.A. program had helped them become aware of how important it is for English language learners to keep their home language.



Conclusion: Next Steps for Research

The cumulative findings of the *Learning Together* study demonstrate how investments in B.A. completion cohort programs that offer sufficient financial and academic supports can help working ECE practitioners access higher education and succeed in obtaining their degrees. Based on student self-reports, these programs offer personal, professional and educational benefits to the participants as well. From the graduates' point of view, these programs have helped them to become more effective teachers of young children.

These self-reports alone, however, tell us little about how the six cohort programs attended by graduates in this study varied in goals and content, and how such variations may have influenced graduates' competence as professionals. The degree of focus on teaching pedagogy for children younger than age five, for example, varies substantially among higher education programs that are considered to be "early childhood-related," including those in this study (Whitebook et al., 2011).

The Center for the Study of Child Care Employment is developing two new measures to deepen our understanding of the contribution of higher education program characteristics and teachers' work environments to teacher effectiveness—issues that surfaced over the course of the *Learning Together* study. The Higher Education Inventory provides a mechanism for states to: a) establish baseline descriptions of higher education offerings for ECE practitioners; b) identify gaps and opportunities in available offerings; and c) assess changes in the capacity of the higher education system over time. In addition, researchers can use data gathered in this inventory to assess different approaches to ECE higher education programs.

A second measure under development is designed to be completed by classroom teaching staff, focusing on how ECE programs support teachers' professional growth, learning and well being. Our hope is that these measures will help states and communities explore strategies to improve and sustain program quality, distinguishing between higher education and workplace contexts when assessing the role of education in effective teacher preparation and practice.



References

- Bogard, K., Traylor, F., & Takanishi, R. (2008). Teacher education and PK outcomes: Are we asking the right questions? *Early Childhood Research Quarterly*, 23(1), 1-6.
- Calderon, M. (2005). *Achieving a high-quality preschool teacher corps: A focus on California*. Washington, DC: National Council of La Raza.
- California Department of Education. (2010). *California preschool curriculum framework: Volume 1*. Sacramento, CA: Author.
- Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. In L. Darling-Hammond & H. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Early, D., Maxwell, K.L., Clifford, R.M., Pianta, R.C., Richie, S., Howes, C., et al. (2008). Teacher education and child outcomes: A reply to the commentary. *Early Childhood Research Quarterly* 23(1), 7-9.
- Fuller, B., Livas, A., & Bridges, M. (2006). Preschool in California: Ideals, evidence, and policy options, *PACE (Policy Analysis for California Education) Working Paper 05-1*. Berkeley and Davis, CA: University of California, and Stanford, CA: Stanford University.
- Project on Student Debt. (n.d.). State by state data. Retrieved from http://projectonstudentdebt.org/state_by_state-data.php
- Tout, K., Isner, T., & Zaslow, M. (2011). *Coaching for quality improvement: Lessons learned from quality rating and improvement systems (QRIS)*. Washington, DC: Child Trends.
- Whitebook, M., Austin, L. J. E., Ryan, S., Kipnis, F., Almaraz, M., & Sakai, L. (2011). *By default or by design? Variations in higher education programs and their implications for research methodology, policy, and practice in early childhood*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- Whitebook, M., Gomby, D., Bellm, D., Sakai, L., & Kipnis, F. (2009). *Effective teacher preparation in early care and education: Toward a comprehensive research agenda*. Part II of *Preparing teachers of young children: The current state of knowledge, and a blueprint for the future*. Berkeley, CA: Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California, Berkeley.
- Whitebook, M., & Ryan, S. (2011). Degrees in context: Asking the right questions about preparing skilled and effective teachers of young children. *NIEER Policy Brief* (Issue 22, April 2011). New Brunswick, NJ: National Institute for Early Education Research.
- Zaslow, M., Tout, K., Halle, T., Whittaker, J. V., & Lavelle, B. (2010). *Toward the identification of features of effective professional development for early childhood educators, Literature review*. Washington, DC: Report prepared for the U.S. Department of Education Office of Planning Evaluation and Policy Development Policy and Program Studies Service.

Introduction

The *Learning Together* longitudinal study focuses on four counties' efforts to expand bachelor's degree opportunities in early care and education (ECE) for adults currently working in the field. The student cohort model—in which small groups of ECE students with similar interests and characteristics pursue a bachelor's degree together, and receive targeted support services—emerged in Alameda, Santa Barbara, Santa Clara, and San Francisco Counties, with programs at Antioch University, California State University-East Bay (CSU-East Bay), Mills College, San Francisco State University (SFSU), San Jose State University (SJSU), and the University of La Verne (ULV). With county, First 5, and private foundation support, these six cohort efforts were developed with similar goals:

- To increase and retain a pool of B.A.-level professionals in the ECE field with culturally, linguistically, and professionally diverse backgrounds;
- To invest in institutional change at colleges and universities in order to expand their capacity to provide appropriate and accessible B.A. programs for ECE practitioners; and
- To assure that degree recipients are able to demonstrate and articulate professional competencies that are appropriate to the degree obtained.

The B.A. completion cohort programs for working adults in ECE examined in this study were designed to support college access and degree completion among those working in early care and education, many of whom are women of color, are among the first generation in their families to pursue higher education, and/or speak English as a second language. Such cohort efforts are also intended to build a pipeline to prepare ethnically and linguistically diverse leaders for the early care and education field who can demonstrate and articulate professional competencies (Whitebook, Kipnis, & Bellm, 2007; Calderon, 2005; Dukakis & Bellm, 2006).

In 2007, the Center for the Study of Child Care Employment began implementing a five-year longitudinal study of each student cohort, as well as periodic examinations of institutional change at selected colleges and universities. In its first two years, the *Learning Together* study explored students' perspectives on the supports and services that facilitated their higher education access and success, and on the impact of the educational experience on their professional practice.

In Year 3 of the study, we focused on program graduation rates and continued investigating the students' (now graduates') perspectives on their B.A. completion program, focusing on their practicum experiences and on the extent to which their studies had assisted them in working with linguistically diverse children. The third year of the study also explored graduates' perceptions of their workplaces as environments that supported their ongoing learning and ability to apply the knowledge and skills gained from their studies. Finally, we asked graduates whether they had changed job roles and/or places of employment since graduation, and whether they had received any increased compensation since receiving their degree.

In Year 4 of the *Learning Together* study, which concluded at the end of June 2011, we attempted brief in-person and telephone interviews with all subjects in order to secure their current contact and employment information, as well as longer in-person and telephone interviews with the graduates.

The longer interviews, conducted approximately two years post graduation, asked the graduates to reflect on the importance of various structural features of the B.A. cohort program to their educational success. They also explored graduates' opinions of their general education courses and course content related to leadership and working with colleagues. Year 4 of the study again focused on the impact of the B.A. degree on the graduates' professional and personal lives, and their perceptions of the impact of various

workplace characteristics on teaching practices with children. Finally, the graduates were presented with three hypothetical vignettes focused on a preschool classroom event, and were asked to describe what they would do in each situation to promote children's learning. The findings provide a snapshot of the B.A. completion cohort by program participants two to three years after graduation.

These graduates overwhelmingly agreed on the long-term personal, professional and educational benefits of participating in a B.A. completion cohort program and of attaining the degree. Their perspectives

are important to consider as policymakers determine whether and how to invest in revamping higher education programs for ECE practitioners (Carey & Mead, 2011; Whitebook, Kipnis et al., 2011).

Of the 105 graduates eligible to participate in the Year 4 interview, 85 did so, representing a response rate of 81 percent. Appendix 1 provides a detailed description of the study methodology. Unless otherwise stated, the body of the report contains data for the graduates in the six cohorts combined; the supplemental tables in Appendix 2 contain data for the individual cohort programs.

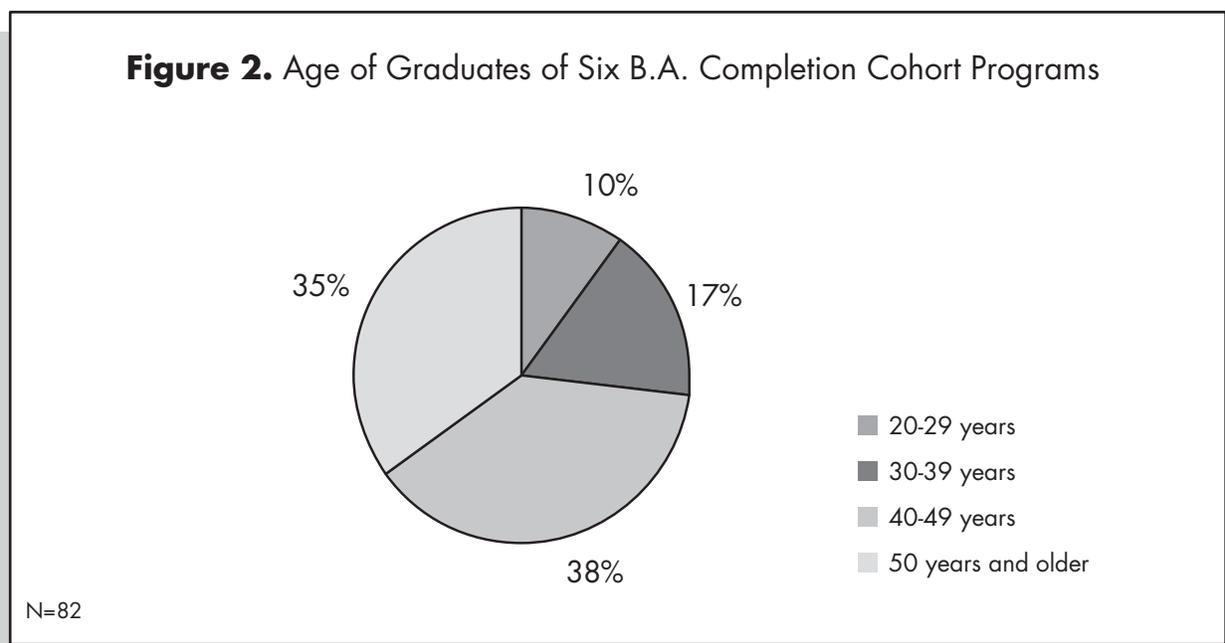
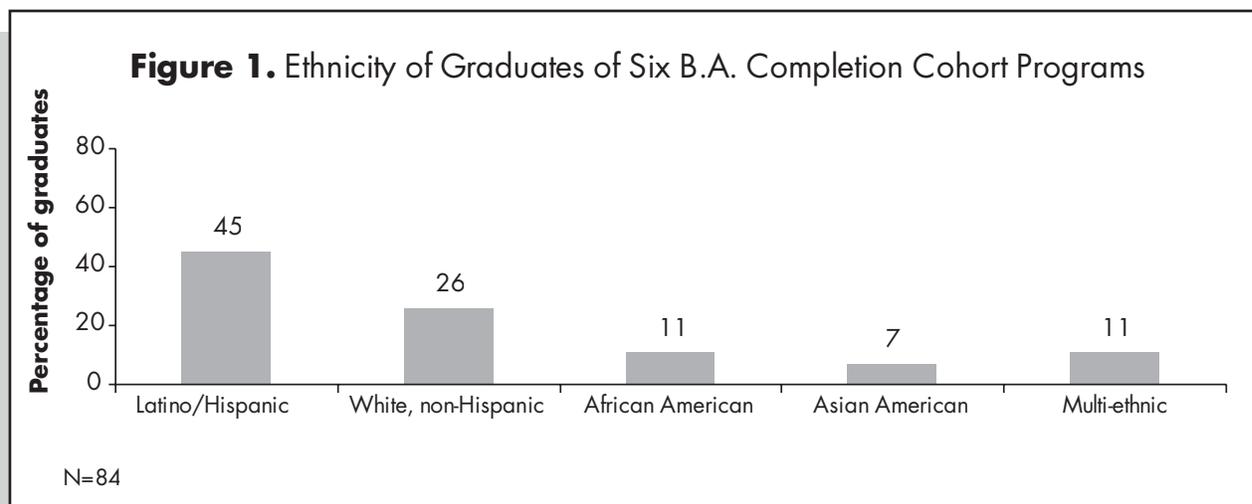


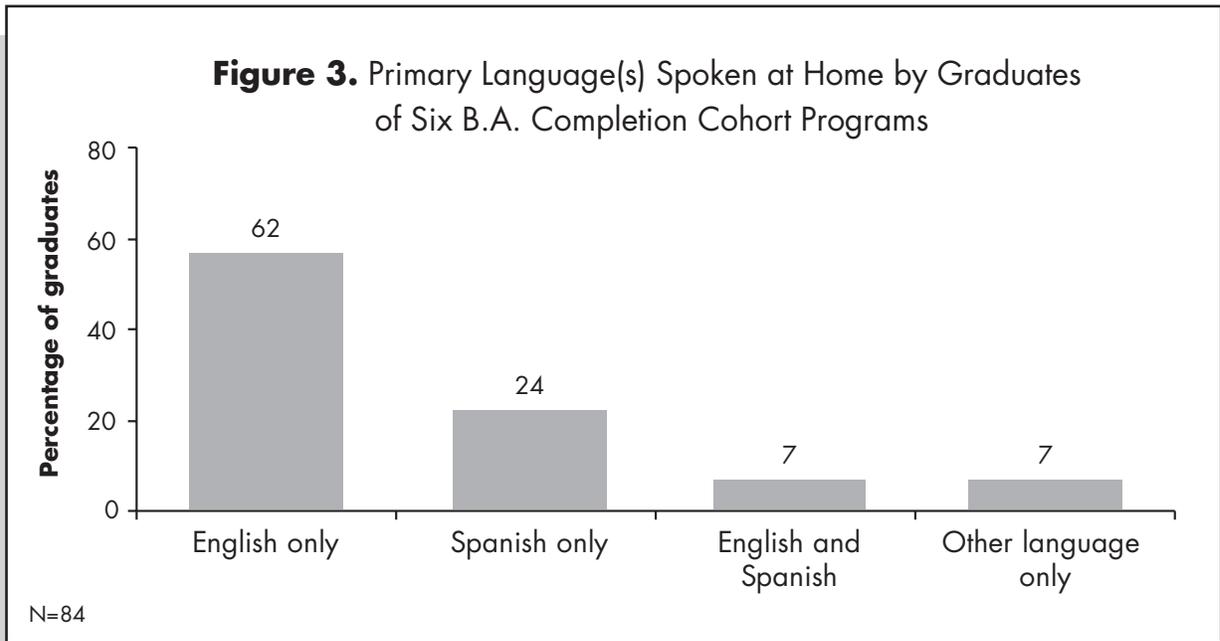
Graduates in the Sample

Demographic Characteristics

Of the 85 graduates who participated in Year 4 of the study, 96 percent were women, and the majority (74 percent) were women of color. (See Figure 1.) The average age of the graduates was 45 years, with 55 percent between the ages of 30 and 49 years. (See Figure 2.) According to the most recent available

data, this age distribution closely reflects California's overall ECE workforce, in which 52 percent of center-based teachers were found to be 30 to 49 years old (Whitebook et al., 2006). Slightly less than one-third (31 percent) of graduates identified their primary language spoken at home as being other than English, most often Spanish. (See Figure 3.)



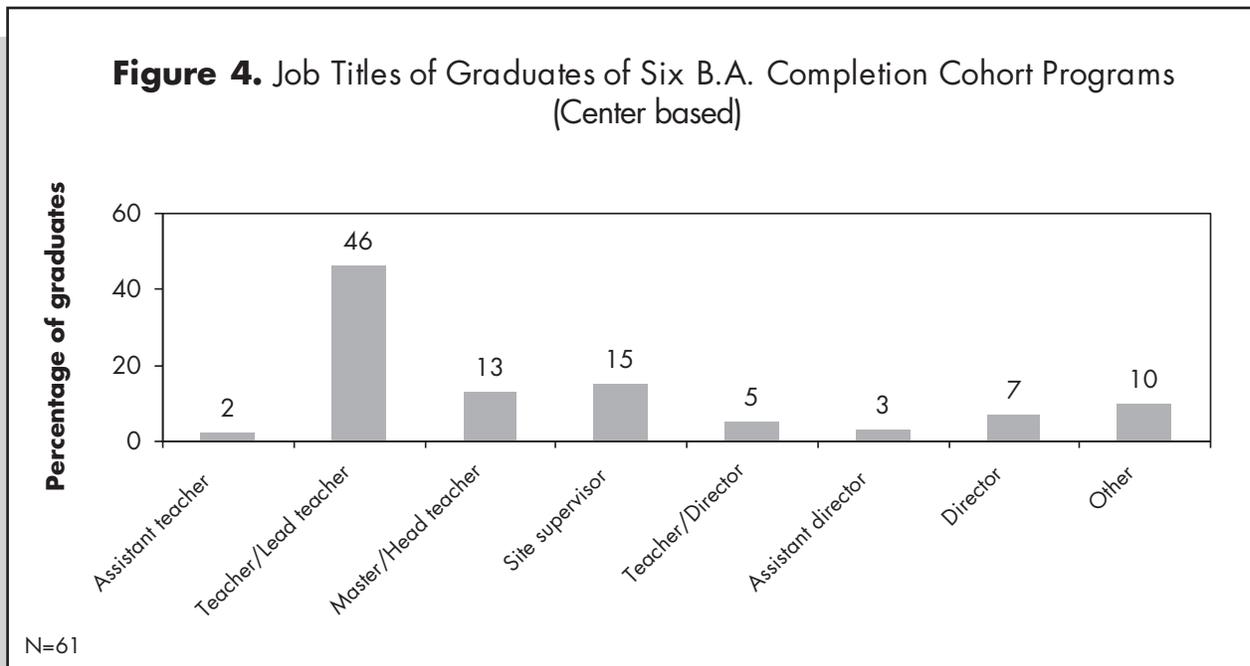


Employment

Over three-fourths of graduates (79 percent) reported working in a child care center, eight percent reported working in a family child care home, and another eight percent reported working in other early childhood organizations. Five percent of graduates were not working at the time of the interview.

Of the graduates working in a center-based program, more than half (66 percent) reported working in the

classroom directly with children as teachers or lead teachers (46 percent), head or master teachers (13 percent), teacher-directors (5 percent), or assistant teachers (2 percent). The remaining center-based participants (34 percent) held administrative positions such as site supervisors, directors or assistant directors, or “other” positions, such as an early childhood specialist, family advocate, family service coordinator, preschool coordinator, or vice president of operations.



(See Figure 4.) Most (88 percent) of the center-based graduates worked 30 or more hours per week, and more than one-half (56 percent) worked more than 10 months per year.

The majority of graduates worked in centers serving children of low-income families. Two-thirds (66 percent) of graduates worked in a Head Start/Early Head Start program, or were employed in programs receiving subsidy funds from a California Department of Education–Child Development Division (CDD) contract. A smaller percentage of graduates (9 percent) worked in centers or family child care programs that received voucher subsidies to care for children of low-income families, but did not receive federal or CDD funding.

Tenure and Compensation

Graduates averaged nine years in their current places of employment, and center-based staff averaged six years in their current positions. Approximately two-thirds of the graduates (64 percent) reported working for their current employer or in their family child care home for more than five years, and more than one-third of center-based staff (38 percent) reported working in their current position for more than five years. (See Figure 5.)

Slightly more than one-quarter (27 percent) of graduates working directly with children in child care center classrooms earned \$18.00 or less per hour, and 46 percent earned \$20.00 or less per hour. The average wage for these graduates was \$22.02 per hour. In a pattern reflecting Years 1 and 2 of this study and the most recent available California ECE workforce data, this is slightly higher than the salaries earned by the highest-paid teachers with bachelor's degrees in their communities (Whitebook et al., 2006).

Of those graduates employed as administrators, including site supervisors, assistant directors, directors and teacher/directors, only four percent earned less than \$18.00 per hour, and only 23 percent earned less than \$20.00. The average wage for this group of graduates was \$24.43 per hour. (See Table 1.)

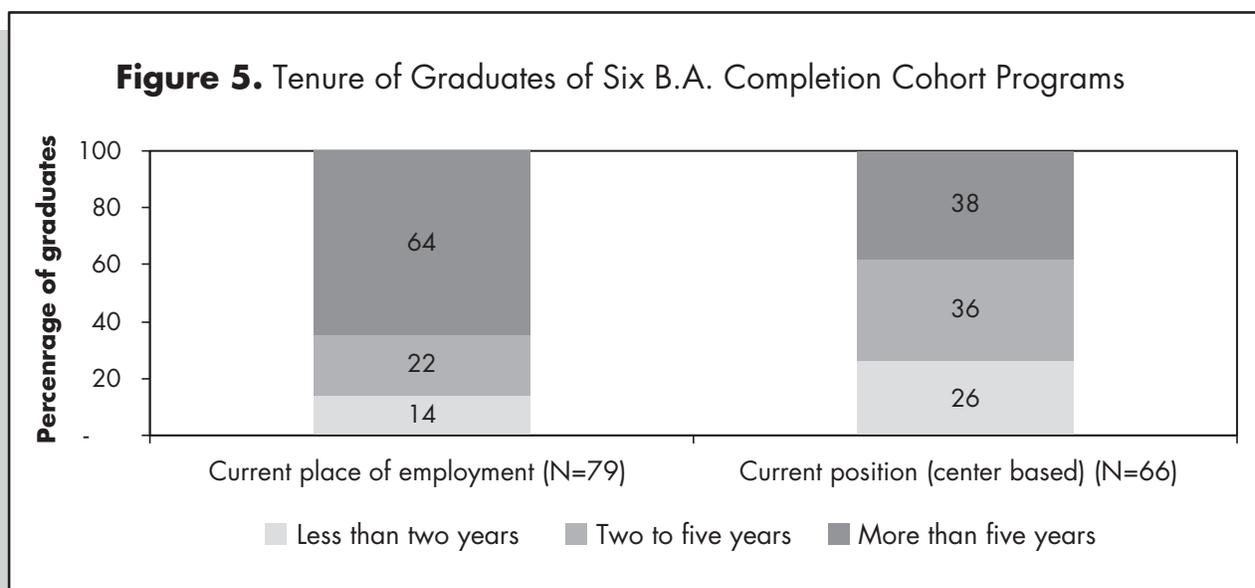


Table 1. Compensation of Graduates of Six B.A. Completion Cohort Programs Employed in Child Care Centers

Compensation	Teachers, lead teachers, head teachers, master teachers	Site supervisors, assistant directors, directors, teacher/directors
Lowest hourly wage	\$14.55	\$16.80
Highest hourly wage	\$34.33	\$42.00
Average hourly wage	\$22.02	\$24.43
N	41	26

Characteristics of Children Served

Graduates also reported on the number of children they served, and the children’s demographic and developmental characteristics. Teachers and family child care home providers reported the number of children in their classroom or family child care home; site supervisors and directors reported the number of children at their site. The 75 graduates who responded to this question reported serving a total of 4,480 children at one point in time.

While a higher percentage of graduates worked with preschoolers than with infants, toddlers, or school-age children, two-thirds of graduates (66 percent) worked with mixed-aged groups.

We asked the graduates who worked directly with children to report on the ethnicity of the children in their classroom or family child care home. On average, 48 percent of children cared for by graduates were Latino/Hispanic, and 21 percent were White, non-Hispanic. African Americans and Asian Americans comprised a smaller group (10 percent and 12 percent, respectively). The remaining nine percent of children

were multi-ethnic or of another ethnic group.

We also asked graduates to report whether they cared for children who had challenging behaviors, defined as persistent social, emotional, and/or behavioral difficulties that interfered with learning and with social behavior with peers and adults. Slightly less than three-quarters (72 percent) of the graduates working in classrooms or as family child care providers reported caring for at least one child with challenging behaviors. Sixteen percent of these graduates reported that more than one-quarter of the children in their care exhibited challenging behaviors.

Lastly, we asked graduates who worked directly with children to report the languages spoken by the children in their care. Very few (nine percent) worked in programs where children spoke only one language. Slightly more than one-third (34 percent) worked in a classroom or family child care home where two languages were spoken by the children. Forty percent worked with children who spoke three to four languages and 17 percent had five or more languages spoken in their classroom or family child care home. Of the 14 graduates who had at least one child in their classroom or family child care home who spoke only a language other than English, almost four-fifths (79 percent) were able to speak that language. (See Table 2.)

Table 2. Characteristics of Children Served by Graduates of Six B.A. Completion Cohort Programs

Percentage of graduates serving:

At least one child less than two years (N=71)	17%
At least one child 2 years (N=72)	36%
At least one child 3 years (N=71)	63%
At least one child 4 years to kindergarten (N=71)	75%
At least one school-age child (N=72)	13%
Mixed age group	66%
One age group only N=72	34%

Percentage of teachers and family child care providers serving children speaking:

1 to 2 languages	43%
3 to 4 languages	40%
5 of more languages	17%
Total	100%
N=47	

Mean percentage of children served by teachers and family child care providers, by ethnicity of children

Latino/Hispanic	48%
White, non-Hispanic	21%
African American	10%
Asian American	12%
Other	9%
Total	100%
N=46	

Percentage of teachers and family child care providers serving various percentages of children with challenging behaviors

None	28%
1 to 10 percent	30%
11 to 25 percent	26%
More than 25 percent	16%
Total	100%
N=46	

Study Findings, Part I

Reflections on the B.A. Completion Cohort Programs

Program Structure and Services

Finding 1: Looking back on their experiences in B.A. cohort programs, graduates continued to identify the programs' structural supports, such as financial aid and flexible class schedules, as important to their educational success.

The designers of these cohort programs, along with policy makers and funders, are interested in the features and services of B.A. completion cohort programs that are necessary for ensuring student success. At the same time, they find it essential to control costs, but without compromising the intent of the programs. In Year 2 of the study, we asked students to rate the importance of various program features and services over time. The students overwhelmingly viewed structural features of their program, such as financial assistance, flexible class schedules, and convenient class locations as very or extremely important, both when they started the program and at the time of the Year 2 interview. This was not surprising, as these were working students employed in a generally low-paying occupation.

The overall demand for cohort program services, such as academic tutoring, computer assistance, academic counseling, and English language assistance (for students with a primary language other than English) declined at the time of the Year 2 interviews, although a subset of students continued to rely on their availability. Again, this was not a surprising finding, as the students reported a parallel decrease in challenges related to their academic, technological, and English-language skills.

In Year 4, we asked graduates to look back on their educational experience, and, using an open-ended question format, tell us which structural features and services were essential to their success. Only five percent of graduates reported that none of

the services or features was essential. For those graduates who mentioned a service or feature, one-fifth (20 percent) mentioned one, 42 percent mentioned two, 19 percent mentioned three, and 19 percent mentioned more than three essential services or structural features.

Consistent with past findings, the structural features of the cohort program, such as financial aid and class schedules, were considered to be essential by a greater percentage of graduates than were program services such as tutoring and academic assistance. More than half of graduates identified financial assistance as key to their success (58 percent).

Because of the importance of this feature, we asked the graduates about any student debt they had incurred while in the cohort program. We found that they had incurred a different pattern of student debt than students in California overall. According to the Project on Student Debt, an initiative of the Oakland-based Institute for College Access and Success, 45 percent of students in California public universities had incurred student debt as of 2009 (Project on Student Debt, n.d.). Because of the financial assistance provided by the cohort programs in the three public universities (San Francisco State University, San Jose State University, and California State University-East Bay), a much smaller percentage of these cohort graduates (21 percent) reported any such debt. The Project on Student Debt also reported that 60 percent of students in private universities had incurred debt averaging \$25,957. Although a larger percentage of the cohort graduates in the private institutions (University of La Verne, Antioch University, and Mills College) had incurred student debt (82 percent), only 19 percent of these graduates reported incurring a debt of \$20,000 or more.

In addition to financial assistance, 43 percent of graduates who mentioned other features or services identified flexible class schedules (designed to meet the

needs of working students) as most essential to their success. A substantial minority of students mentioned the following as essential to their success: convenient location of classes (30 percent); a supportive faculty (28 percent); academic assistance (25 percent); academic advising (22 percent); and technology assistance (20 percent). (See Table 3.)

The graduates were also asked whether they had any recommendations for improving the cohort programs' features and services. Slightly more than one-third (34 percent) did not have any recommendations. As displayed in Table 4 below, fewer than 20 percent of the graduates agreed on any specific recommendation.

Table 3. Essential Program Features and Services, Reported by Student/Graduates of Six B.A. Completion Cohort Programs at Three Points in Time

	Start of Cohort Very or Extremely Important	Year 2- Very or Extremely Important	Year 4- Essential
Financial assistance (N=99,101, 79)	96%	94%	58%
Flexible class schedules (N=100,101, 79)	94%	92%	43%
Convenient location of classes (N=101,102, 79)	87%	90%	30%
Academic advising (N=100,101, 79)	73%	61%	22%
Academic tutoring (N=95,96, 79)	51%	38%	25%
Technology assistance (N=93,94, 79)	48%	29%	20%

Table 4. Recommendations to Improve Cohort Program Characteristics, Reported by Graduates of Six B.A. Completion Cohort Programs

	Percentage of graduates
More post-graduate services/MA programs	17%
Improved class content	13%
Improved financial services	11%
Different class schedule	11%
Better access to tutoring services	11%
Improved class structure	11%
Improved academic advising services	11%
More assistance with technology	11%
More information or access to college services	7%
Improved teaching	4%
Additional types or staff needed	4%
Other	22%
N=54	

The Cohort Experience

Finding 2: Since graduation, cohort members continued to serve as professional, personal, and educational resources for each other.

In Year 2 of the study, we asked students about the value of the cohort experience: taking classes with the same group of students, all of whom work in the ECE field. We asked them to report how helpful the cohort experience was to them when they started the program, and at the current time (Year 2). In Year 4, we asked graduates to rate the importance of the cohort experience to their success in attaining a B.A. degree. Roughly three-quarters (73 percent) of graduates reported that when they began the program, the cohort was very or extremely helpful, and a larger proportion (88 percent) reported in Year 2 that the cohort experience was very or extremely helpful. Similarly, during Year 4 of the study, 84 percent of graduates reported that the cohort experience was extremely important to their success in the B.A. program. (See Figure 6.)

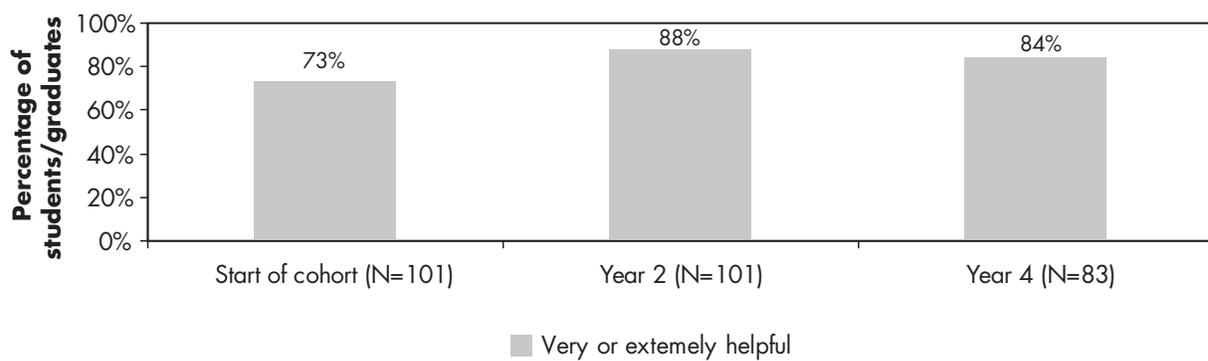
These findings suggest that peer learning and support are important quality improvement strategies that deserve greater attention; for example, how they compare to or enhance mentoring and coaching, strategies that have recently become prominent in professional development research and policymaking (Tout, Isner, & Zaslow, 2011).

We were interested to know whether graduates had maintained these cohort relationships, and whether they continued to be valuable after graduation. Virtually all graduates (99 percent) reported that they had maintained contact with someone in the cohort. More than three-quarters (78 percent) reported on their mode of communication with other cohort members, including: getting together in-person at informal and social gatherings (42 percent); being together at work or work-related meetings and trainings (37 percent); and communicating electronically through social networks or email (36 percent).

For the 88 percent of graduates who reported on the nature of their relationships with others in the cohort, about three-quarters (76 percent) reported that former cohort members continued to be important professional resources. Graduates reported visiting each other's classrooms, working together to solve job-related problems, discussing ways to apply what was learned in school to their current jobs, and keeping each other informed about new developments in the field.

A similar percentage of students (71 percent) reported that they had maintained personal relationships with cohort members, such as being friends, and giving and receiving emotional support. About one-quarter (23 percent) reported that their relationships focused on their continuing professional development, such as pursuing an M.A. or attending ECE-related workshops and trainings.

Figure 6. Importance of the Cohort Experience at Three Points in Time, Reported by Students/Graduates of Six B.A. Completion Cohort Programs



Educational Content of the B.A. Completion Cohort Programs

Finding 3: More than two-thirds of the graduates reported taking general education classes while participating in their B.A. cohort. Approximately two-thirds of these graduates reported that general education classes had enhanced their educational experience and/or had had a positive impact on their work with children and families.

The B.A. completion cohort programs in this study, like all colleges and universities, require students to complete a series of general education (G.E.) courses in order to graduate. As cohort faculty and administrators want to ensure that students succeed in achieving their educational goals and benefit from their academic experience, they were particularly interested learning about the experience of those students who had been required to take their G.E. courses simultaneously with their ECE-related classes.

More than two-thirds of the graduates (69 percent) reported taking G.E. classes while participating in the B.A. cohort. Approximately 70 percent of these graduates mentioned that one or more of these classes were more difficult than others: 43 percent mentioned math, 33 percent mentioned science, and 23 percent mentioned English.

The majority of graduates who took G.E. courses reported an impact on their educational experience (79 percent). Sixty-two percent of these graduates reported that these classes had enhanced their educational experience. They mentioned, for example, that G.E. courses had allowed them to learn about topics beyond ECE; had resulted in a more well-rounded educational experience; had helped them succeed in



their upper-division courses; and had improved their writing and oral presentation skills.

A smaller percentage (29 percent) said that the G.E. classes had enhanced their educational experience on a more personal level. For example, graduates mentioned that they enjoyed the classes, learned things they could apply to everyday life, and learned new ways to look at society.

About one-fifth (19 percent) of these graduates reported that taking the G.E. classes had had a negative impact on their cohort program experience. Graduates mentioned too much work, increasing the time spent to attain a B.A., and taking classes in isolation without the support of the other cohort members.

Approximately two-thirds (68 percent) of the graduates who took G.E. courses mentioned that these had had a positive impact on their work with children and families. More than one-third (35 percent) mentioned improvement in general work skills, such as using new math skills for determining eligibility and enrollment, better writing skills for writing a report or program newsletter, and better overall problem-solving strategies. Slightly less than one-third (30 percent) mentioned better relationships with parents due to improved communication skills, a better grasp of research to share with parents, and understanding mothers better because of new knowledge of women's history. Slightly more than one-quarter (27 percent) talked about enriching their curriculum by incorporating topics learned in their G.E. classes, such as physical science, history, math, writing, music, literature, and art. (See Table 5.)

Finding 4: The majority of graduates reported that skills and knowledge related to two issues—ECE public policy and working with other adults—would be helpful to their current jobs and to their future careers. More than one-half reported that their B.A. completion cohort program had addressed these issues to some degree during the course of their studies.

Policy realities contribute to how well many ECE practitioners can perform their jobs, whether they are teaching in a classroom or family child care home, or directing a center. Yet practitioners are seldom given the opportunity to develop the necessary skills and knowledge to understand the ECE system and the complex sets of regulations, budgets, and public processes that shape the system in which they operate

Table 5. Impact of General Education Courses, Reported by Graduates of Six B.A. Completion Cohort Programs

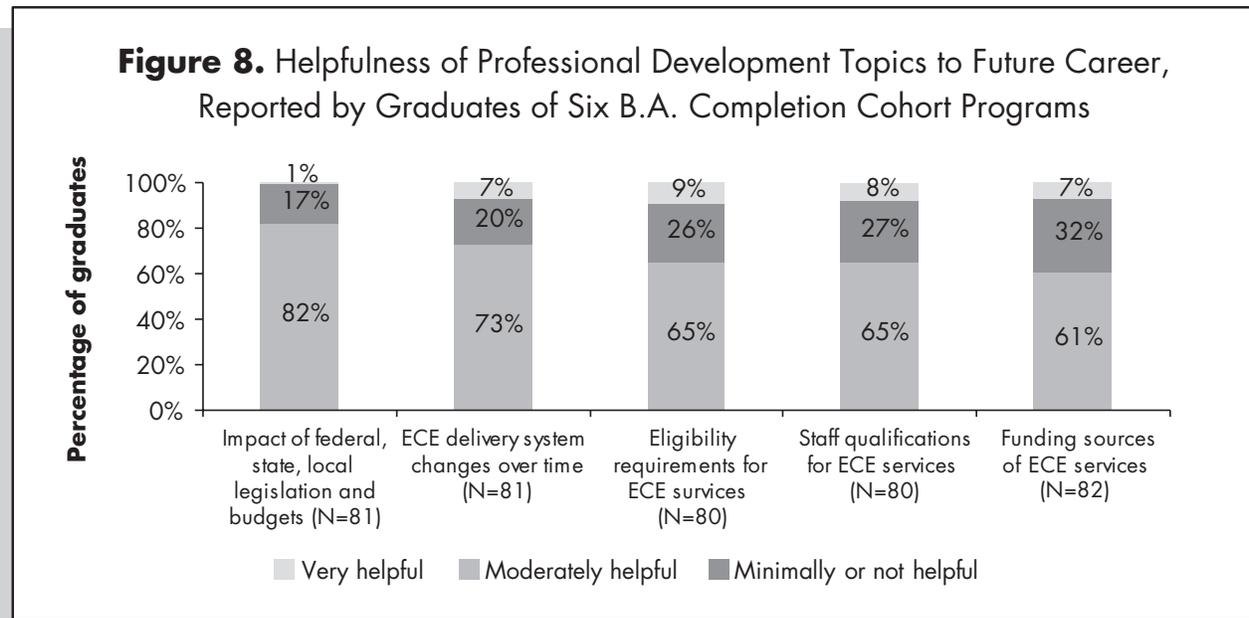
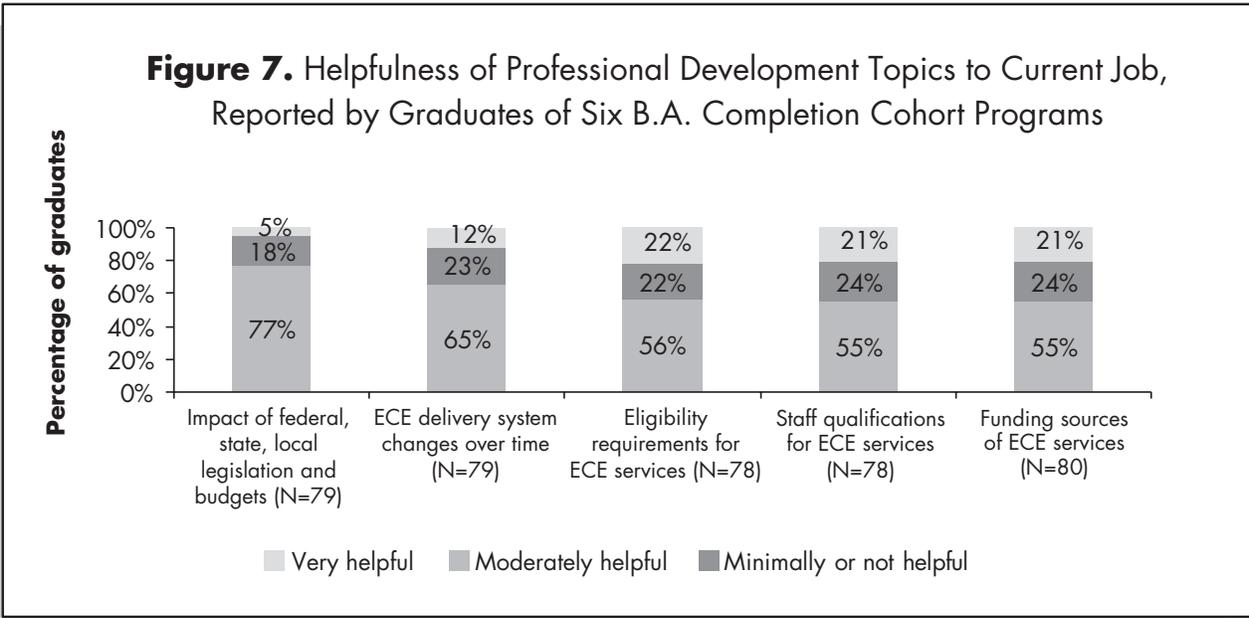
	Percentage of graduates
Impact on Cohort Program Experience	79%
N=53	
Enhanced educational experience	62%
Positive personal experience	29%
Negative impact on educational experience	19%
N=42	
Impact on Work with Children and Families	68%
N=56	
Improved administrative/other work skills	35%
Better relationships with parents	30%
Enriched curriculum by incorporating G.E. topics	27%
Better understanding of child development	16%
Increased knowledge of other cultures	11%
Increased knowledge of child health and nutrition	3%
Other	3%
N=37	

(Whitebook & Austin, 2009). Acquiring such skills and knowledge can contribute to teachers' and administrators' leadership abilities, creating a sense of empowerment and widening their influence in the policy arena. We wanted to know whether the graduates thought this information would be helpful to their current jobs and future careers, and whether they had received such information as part of their B.A. completion cohort program.

We first asked graduates how helpful information related to the history, regulations, and policy context of the ECE field would be to their current job and future career goals. The majority of graduates reported that this information would be very or moderately helpful. Approximately three-quarters (77 percent) responded that it would be very helpful for their current jobs to know about the impact of federal, state, and local budgets and legislation on the ECE system. About two-thirds (65 percent) thought that it would be very helpful to know how the ECE delivery system changes over time. More than one-half responded that understanding eligibility requirements (56 percent),

staff qualifications (55 percent), and funding sources (55 percent) of ECE services in their community would be very helpful. Fewer than one-quarter of the graduates reported that these topics would be minimally helpful or not helpful to their current job. (See Figure 7.)

As displayed in Figure 8, a slightly larger percentage of graduates reported that these topics would be very or moderately helpful for reaching their career goals. More than four out of five (82 percent) responded that it would be very helpful to know about the impact of federal, state, and local budgets and legislation on the ECE system; almost three-quarters (73 percent) thought that it would be very helpful to know how the ECE delivery system changes over time, and about two-thirds responded that understanding eligibility requirements (65 percent), staff qualifications (65 percent), and funding sources (61 percent) of ECE services would be very helpful. Less than 10 percent reported that these topics would be minimally helpful or not helpful to their career goals.



We then asked graduates whether their B.A. cohort program had provided them with information related to the ECE system. About two-thirds (65 percent) reported that the program had done so. It was beyond the scope of this study, however, to ascertain how much of a focus these topics had been in the curricula of the cohort programs.

In addition to knowledge about the ECE system, understanding how to work with colleagues and other adults in the workplace is an essential skill for ECE practitioners. As there is often more than one practitioner in an ECE classroom, communication and conflict resolution skills with other adults can be essential to good teaching practice.

Figure 9. Helpfulness of Professional Skills to Current Job, Reported by Graduates of Six B.A. Completion Cohort Programs

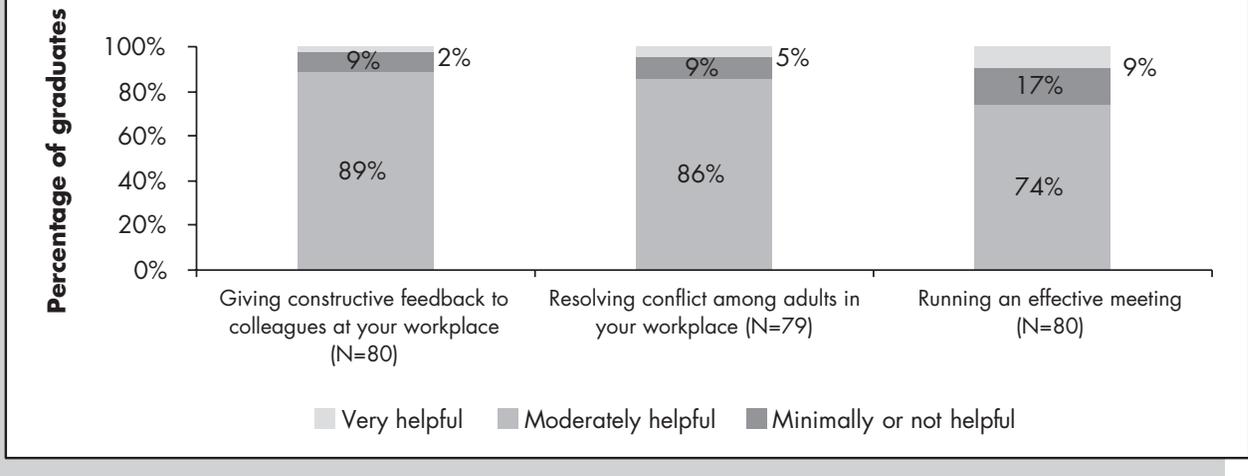
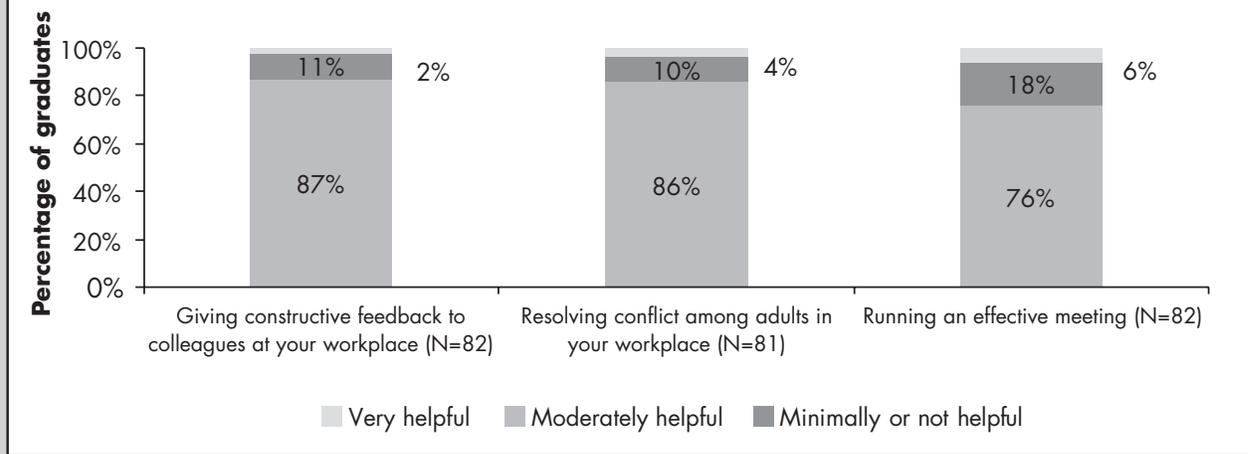


Figure 10. Helpfulness of Professional Skills to Future Career, Reported by Graduates of Six B.A. Completion Cohort Programs



We asked graduates how helpful such skills, related to working with colleagues and other adults in the workplace, would be to their current jobs and future career goals. As displayed in Figures 9 and 10, graduates overwhelmingly reported that giving constructive feedback to colleagues at the workplace, resolving conflict among adults in the workplace, and running effective meetings would be very helpful to their current jobs and their future careers.

More than four out of five of graduates (82 percent) reported that their B.A. cohort program had provided them with information and/or skills related to working with adults as individuals, and 74 percent with information and skills related to working with adults in groups and organizations. Again, the study did not ascertain the extent to which these topics had been covered in the curricula of the cohort programs.

Impact of a B.A. Degree on Graduates' Professional and Personal Lives

Career Trajectory and Compensation

Finding 5: Approximately one to two years after graduation, nearly one-quarter of graduates reported changes in their job positions, with three-fourths attributing this change to having attained a B.A. degree. Three-fifths of graduates reported pay increases, with 80 percent attributing these exclusively, or in part, to their B.A. degree.

One important goal of the Learning Together evaluation is to document the career trajectories of ECE practitioners who attain B.A. degrees. Since they are interested in the impact of their investments, stakeholders want to know whether those who succeed in obtaining degrees are remaining in the ECE field and receiving financial reward for their educational achievements. This is particularly important in light of previous findings that holders of B.A. degrees who work directly with young children in early childhood settings often move to jobs outside the classroom, such as employment in child care resource and referral agencies or local First 5 Commissions (Whitebook, Sakai, & Kipnis, 2010).

With the exception of five percent of graduates not currently employed at the time of the interview, all cohort graduates continued to work in the ECE field. As reported earlier, most had teaching or administrative positions at centers (79 percent). Eight percent worked in family child care, and eight percent in other early childhood organizations such as Head Start administrative offices. In addition, a large majority of graduates (88 percent) had remained in the same place of employment since graduation. As discussed in the sample description, graduates' mean tenure at current places of employment was nine years. For the 12 percent of the graduates who had changed jobs, 89 percent reported that the change had been related exclusively or in part to having attained a B.A. degree.

For graduates currently working in child care centers, almost one-quarter (23 percent) reported having changed job positions since attaining the B.A. degree. Approximately three-quarters of these graduates (73 percent) reported that this change had been related exclusively or in part to having attained the degree. The percentage of graduates reporting a change in job position increased from the previous

year of the study, when 17 percent of the graduates had reported such a change.

Of the 15 students who had changed positions, two had moved from assistant teacher to teacher/lead teacher jobs, and four had moved from the teacher level (such as assistant teacher, teacher, head teacher, or master teacher) to a leadership position (such as site supervisor, assistant director, or director). One graduate, previously a site supervisor, was now a teacher working directly with children in a classroom. Eight graduates reported moving from or to other positions in the ECE field, such as early childhood specialist, family advocate, family service coordinator, preschool coordinator, on-call substitute, or head/master teacher.

More than one-half of graduates (61 percent) reported an increase in compensation since attaining the B.A. degree. Many of these graduates (80 percent) reported that their raise had been related exclusively or in part to attaining the degree. Among those reporting a raise, the average increase was \$3.46 per hour. For graduates working full-time and year-round, this translated to an increase of \$7,191 per year. Almost all of these graduates (93 percent) reported the change in compensation as a salary increase, rather than a bonus or other type of benefit.

The proportion of graduates who had received a raise, and its average amount, increased from the previous year of the study, when just over one-third of graduates (37 percent) reported pay increases that averaged \$4,638.00 per year for a full-time employee. (See Table 6.)

Perceived Long-term Impact of a B.A. Degree on the Future

Finding 6: Almost all graduates were of the opinion that their B.A. degrees would have a positive impact on their future. Most reported a positive impact on their professional lives, more than one-half on their personal lives, and about one-third on their future educational pathways.

During the last decade, researchers and policy makers have been debating the optimal level of formal education for ECE practitioners (Bogard, Traylor, & Takanishi, 2008; Calderon, 2005; Early et al., 2008; Fuller, Livas, & Bridges, 2006). Some stakeholders continue to support having few or no barriers to working with young children, while a

Table 6: Change in Employment and Compensation Since Attaining a B.A. Degree, Reported by Graduates of Six B.A. Completion Cohort Programs at Two Points in Time

	Year 3 - 2009/10	Year 4 - 2010/11
Changed place of employment N	8% 86	12% 74
<i>Center staff only:</i>		
Changed job position N	17% 83	23% 66
Received an increase in compensation N	37% 75	61% 66
Average full-time equivalent increase in compensation N	\$4,638 24	\$7,191 36

growing number of advocates and educators assert that a B.A. degree and a credential in early education should be the standard for preschool teachers (Whitebook & Ryan, 2011). The views of practitioners themselves, however, are rarely included in these discussions; thus, we asked graduates to share their views of the value of their B.A. degrees for their professional and personal lives.

Graduates interviewed in Year 4 overwhelmingly agreed on the long-term personal, professional and educational benefits of participating in a B.A. completion cohort program and of attaining the degree. Their perspectives are important to consider as policymakers determine whether and how to invest in revamping higher education programs for ECE practitioners (Carey & Mead, 2011; Whitebook, et al., 2011).

Virtually all graduates (97 percent) reported that having a B.A. degree would have a positive impact on their futures. More than four out of five of these graduates (82 percent) mentioned a positive professional impact, more than one-half (54 percent) mentioned a positive personal impact, and one-third (33 percent) mentioned a positive educational impact.

For those graduates who said that the B.A. would have an impact on their professional lives, more than one-half (57 percent) mentioned more career opportunities. For example, graduates anticipated opportunities to work with children with special needs or with adults; to become a certified K-12 teacher; to move into a supervisory role; or to have a career related to psychology. Approximately one-half (49 percent) mentioned feeling more competent at their jobs as a result of their education. Graduates mentioned, for example, being more knowledgeable about different cultures, and having more skills to work successfully with parents and with children with special needs.

For those who mentioned that the B.A. would have an impact on their personal lives, more than one-half (55 percent) reported increased self-esteem, because they felt good about themselves for completing their degrees. Approximately one-quarter (23 percent) mentioned other positive personal feelings, such as an increased sense of personal strength and confidence, being a better person, being an example to family

members, feeling like a leader or a mentor, or becoming more active in community events. Approximately one-quarter (23 percent) also mentioned greater financial security.

About one-half of the graduates (48 percent) who reported an educational impact mentioned the ability to pursue a Master's degree, and one-third (33 percent) mentioned that attaining the B.A. had inspired them to keep learning and to keep up with new developments in the ECE field. Approximately one-quarter (22 percent) mentioned the ability to think on a higher level, using new critical thinking skills. (See Table 7.)

Impact of Workplace Characteristics on Teaching Practice

Workplace Characteristics

Finding 7: Graduates working in center-based programs agreed that prevalent characteristics of the ECE workplace, such as insufficient staffing, staff turnover, lack of sick or personal days, and lack of paid planning or preparation time, all have an impact on a teacher's ability to engage in effective classroom practice. Only about three-fifths of these graduates reported that their workplace offered paid planning time, and a much smaller percentage reported opportunities for paid sharing time with other colleagues.

Table 7. Future Impact of a B.A. Degree, Reported by Graduates of Six B.A. Completion Cohort Programs

Impact on Future Professional Life	82%
N=82	
Expanded career opportunities	57%
Increased professional competence	49%
Increased professional respect	15%
Increased job security	10%
Other impact	6%
N=67	
Impact on Future Personal Life	54%
N=82	
Feel good about self	55%
Other positive personal feeling	23%
Increased financial security	23%
Helpful to one's own children	11%
Other impact	5%
N=44	
Impact on Educational Pathway	33%
N=82	
Ability to pursue a M.A. degree	48%
Keep learning/keep up with new developments	33%
Higher-level thinking/critical thinking skills	22%
Affirmation of knowledge	4%
N=27	

The context of teacher practice matters. Teachers and other professionals develop their skills over time, and thus, the work environment can either facilitate or impede practitioners' abilities to implement what they have learned at school and to continue to improve their instructional and caregiving practices (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005; Whitebook, Gomby, Bellm, Sakai, & Kipnis, 2009). In the previous year of the study, we asked graduates about opportunities at their places of employment for continued professional growth and development. In the current year, we asked graduates for their perceptions of workplace characteristics that impact teacher practice.

Graduates working in center-based programs were presented with a list of workplace characteristics, and were asked to assess how much of an impact (very big, moderate, minimal, or none) these characteristics have on a teacher's ability to engage in good practice. Characteristics that a large majority of graduates perceived to have a "very big" impact included insufficient staffing (82 percent), staff turnover (76 percent), lack of paid personal or sick days (74 percent), inadequate training of co-workers (73 percent), inadequate director education and training (73 percent), lack of paid planning and preparation time (68 percent), and poor access to health care services (67 percent). (See Table 8.)

Table 8. Impact of Workplace Characteristics on Teaching Practice, Reported by Graduates (Center-based) of Six B.A. Completion Cohort Programs

	Very big impact	Moderate Impact	Minimal impact	No impact	Total	N
Insufficient staffing	82%	15%	0%	3%	100%	65
Staff turnover	76%	23%	1%	0%	100%	66
No paid sick days or paid personal days	74%	21%	2%	3%	100%	66
Inadequate training of co-workers	73%	24%	2%	1%	100%	66
Director education and experience	73%	23%	3%	1%	100%	66
Paid planning or preparation time	68%	20%	11%	1%	100%	66
Inadequate access to health services	67%	27%	3%	3%	100%	63
Children with challenging behaviors	62%	29%	9%	0%	100%	66
Access to a mentor or coach	57%	35%	8%	0%	100%	65
Tension with co-workers	53%	42%	3%	2%	100%	66
No common language with children and families	46%	42%	11%	1%	100%	65
Paid time to observe other classrooms and share with colleagues	41%	51%	8%	0%	100%	65

Paid Professional and Sharing Time

The collaborative nature of working with young children requires time for adults to communicate about, reflect on, and plan what they do together (Austin, Whitebook, Connors, & Darrah, 2011; Whitebook & Ryan, 2011). Because paid preparation and sharing time facilitates this essential communication, reflection, and planning process, the Year 4 interview asked students to report on the availability of these two opportunities in their workplaces.

Fifty-nine percent of graduates reported that their workplaces offered paid preparation time, defined as a specific time set aside for preparation that does not occur when one has other responsibilities, including supervising children during play or nap time. Fifteen

percent of graduates who received paid preparation time reported that children were present during this time. On average, the length of time for professional planning was four hours per week.

Paid sharing time is defined as the opportunity to observe others at work and to reflect on one's own job with other colleagues. Paid professional sharing time is distinct from staff meetings or lesson planning, and has been linked to teacher effectiveness (Whitebook et al., 2009). Such opportunities were seldom available to graduates; only 15 percent of the graduates who were teachers reported having paid professional sharing time. A larger percentage of graduates who were directors (40 percent) responded that their staff did receive such time.



Study Findings, Part II

Vignettes: A New Approach to Assessing Teacher Learning and Practice

The six cohort programs examined in the *Learning Together* study were designed to help small groups of adults working in early care and education to achieve their B.A. degree and expand their capacity to articulate and demonstrate professional competencies. Over the last four years, we have reported on the students' (now graduates') perceptions of their B.A. programs, including services provided, classes completed, and the evolution of their skills in working with children and families. Graduates have identified financial assistance, and emotional and academic support from fellow cohort members, as key contributors to their success in achieving their educational goals, and have credited the B.A. programs with increasing their knowledge and competencies as ECE practitioners (Whitebook et al., 2008; Whitebook, Kipnis, Sakai, & Almaraz, 2011; Whitebook, Sakai, Kipnis, Bellm, & Almaraz, 2010).

Asking graduates to assess how a bachelor's degree program has contributed to the development of their skills provides one perspective on such programs' relevance and quality. Self-reports, however, cannot serve as an independent measure of how an educational experience affects students' classroom practice. To gain such information, researchers typically conduct observational assessments, and, if they are examining the impact of a particular intervention such as schooling or training, they conduct pre- and post-observations to measure changes in teacher behavior (Zaslow, Tout, Halle, Whittaker, & Lavelle, 2010). Limited resources, however, placed independent classroom assessments of graduates beyond the scope of this study.

Nonetheless, we remained curious about the level of competency achieved by recent graduates of different B.A. degree programs. The question is particularly pressing in light of ongoing debates about the contribution of B.A. degrees to teacher effectiveness (Carey & Mead, 2011; Whitebook & Ryan, 2011), as well as studies highlighting teachers' limited proficiency in promoting children's higher-order thinking (Karoly, Ghosh-Dastidar, Zellman, Perlman, & Fernyhough, 2008), or in addressing the needs of linguistically diverse children in early childhood settings (Beyazkurk & Kesner, 2005; California Department of Education, 2010; Maxwell, Lim, & Early, 2006).

Observations conducted by Karoly and colleagues (2008), for example, found that most ECE teachers in California provided nurturing and emotionally supportive environments, and engaging activities for preschool children in well-managed classrooms, but were less competent at promoting children's thinking and language skills, or offering children effective and informative feedback. Several studies have suggested that few ECE practitioners have participated in education or training focused on meeting the needs of young children who are dual language learners, despite the prevalence of language diversity in classrooms across the country (Maxwell et al., 2006; Ray, Bowman, & Robbins, 2006; Whitebook et al., 2006).

To pursue our interest in graduates' skill levels, and to augment what we have learned from self-reports, we piloted a non-observational approach for assessing teaching strategies in the fourth year of the *Learning Together* study. During the fourth-year telephone interview, graduates were asked to respond to three scenarios that might occur in a typical preschool classroom, picturing themselves as the classroom teacher. The interviewer then read each vignette, and asked graduates what they would do next to promote children's learning. To assess the impact of their cohort

program, we also asked graduates whether and how they thought their answers to these vignettes would have differed before they participated in the B.A. program. With graduates' permission, we recorded and transcribed their responses.¹

The vignettes were adapted from situations described in the *California Preschool Curriculum Framework: Volume 1*, a resource for early childhood educators focused on promoting learning for preschool-age children (CDE, 2010). We selected two vignettes that described situations offering teachers many opportunities to support the development of children's higher-order thinking skills, and one that focused on strategies for working with young children who do not speak English. Vignette 1 ("Counting Cars") presented a situation ripe for promoting math literacy, although it was not presented to interviewees as a math activity. We were interested in whether graduates viewed the scenario simply as an opportunity to help children learn about numbers and practice counting, or whether they also saw it as a springboard for helping children build deeper mathematical understanding, such as one-to-one correspondence between labels and actual items (Brenneman, Stevenson-Boyd, & Frede, 2009; Clements & Sarama, 2004; Epstein, 2003; National Research Council, 1999; Pianta, LaParo, & Hamre, 2008).

Vignette 2 ("Nature Walk") also presented opportunities for promoting children's higher-order thinking skills by helping them connect what they learn in the classroom to other experiences in their lives (National Research Council, 1999), and by encouraging them to experiment, predict, classify, and problem-solve, instructional strategies often found lacking in ECE classrooms.

The final vignette ("Nature Walk/Dual Language Learners") focused on promoting learning among children who do not speak English. We were interested in strategies to help integrate dual-language-learner children into classroom activities, honor their home language and culture, and strengthen their language skills (Beyazkurk & Kesner, 2005; Maxwell et al., 2006; Zaslow et al., 2010).

The following discussion presents preliminary findings from our conversations with graduates, providing a sample of the types of information that can be gleaned from responses to vignettes. We remind readers that this non-observational approach is exploratory, and that the responses cannot be considered a reliable assessment of teacher competency without confirmation through observational and other measures of teacher skills and knowledge. We do not know, for example, whether graduates' responses to a hypothetical situation were an accurate measure of what they would do in an actual classroom. Their responses may have been influenced, for example, by their level of comfort in speaking on the telephone or their ability to articulate strategies they might pursue. It is also possible that interviewees' responses would have been different if they had previewed the vignettes, or had been interviewed at a time other than the end of a long work day. Further, we have not assessed inter-rater reliability in probing strategies that may have contributed to responses by graduates.

Nonetheless, the range of responses suggests that the vignette approach may hold promise as a way to assess students across programs, pending further investigation regarding interviewer reliability, setting and process for presenting vignettes, and pre-existing differences in experience and skill among student populations.

¹ The first phase of data analysis involved coding all vignettes to establish recurring categories that captured the meanings expressed by graduates. The coding scheme for each vignette was based both on prior research about teaching practices and on themes articulated by graduates themselves. Each individual research team member read and coded 15 percent of responses for each vignette. The team then met and compared codes for each vignette, discussed points of disagreement, and selected the code that reflected their consensus. To ensure the validity of the coding scheme and its application, 15 percent of all interviews were double-coded. The final phase involved data entry of coded responses into SPSS (Statistical Package for the Social Sciences 18.0). Frequencies were then conducted to determine trends in the data.

Preliminary Findings

Vignette 1: Counting Cars

You are the teacher in a preschool classroom. All the children in your classroom are between three and five years old. The children are enjoying free-play time in the classroom. You observe two children playing with cars on the rug. One child argues: “I have more cars: one, two, three, seven, nine, ten.” His friend replies, “No, I have more: one, two, three, four, five, six, seven.” As a teacher in this classroom, what would you do next to promote children’s learning?

Graduates offered three types of strategies: (1) counting with the children; (2) more complex activities to teach math concepts, such as lining up the cars, or demonstrating one-to-one correspondence to teach such concepts as “more or less” or addition and subtraction; and (3) activities not related to counting or numeracy per se, such as an art activity with the cars. The most common strategy, mentioned by more than three-quarters of the graduates (79 percent), involved asking children to count the cars on their own or with the teacher. Slightly less than one-half (44 percent) responded by suggesting a complex math activity to help children build concepts or practice numeracy skills.

I would scaffold the learning to the next level. We would count the cars together, and when we got to the last car, I would say, “So, how many cars are there?” Then we would do the next row with one-to-one correspondence, point to the cars and count, and then at the end say, “So, how many cars are there?” And then we would brainstorm together which number is more and which number is less.

I’d move in closer and say, “How many cars do you have? I thought I heard you guys counting.” I’d try to encourage them to count again. I would want to see if the one-to-one piece wasn’t there or whether it was the order in the numbers that wasn’t there, if the child skips the same numbers every time. Then I’d want to provide more opportunities to learn. I might try all those lovely Piaget experiments and conservation experiments. I love to do those with children and have them line the cars up to each other to see who has more.

I would maybe get down to wherever they’re playing with the cars, and bring out some cars and say, “How many cars do I have? Do I have more cars than you?” And then count with them, and then have them count them for me, and then we could count them all together. I would ask them, “How many cars would [I have] if I took these away?” Or, “What if we add these ones? How many red cars do we have? How many blue cars do we have? Are there more blue than red? Are there more trucks than vans?” I would just get the language and the numbers in there: more, less, the same, different, subtract or add. [What happens] if I add more, if I take some away?

One third (34 percent) mentioned activities not specifically related to numeracy skills, such as incorporating cars into an art activity (e.g., car track painting), singing, or making a garage for the cars.

Vignette 2: Nature Walk

Picture yourself as a teacher in a preschool classroom. All the children in your classroom are between three and five years old and speak English. As part of a curriculum unit on the seasons, the children went for a nature walk and collected various types of leaves. During the walk, the children explored the leaves and were encouraged to describe different attributes of the leaves. As a teacher, what would you do next to promote children’s learning when they returned to the classroom?

Graduates offered three types of response: (1) using instructional strategies to promote children’s higher-order cognitive thinking, such as classifying and experimenting, (2) extending and connecting the activity to children’s home and/or classroom experiences; and (3) other activities that did not specifically include such strategies.

One-half (52 percent) of graduates’ responses focused on instructional support strategies, such as sorting leaves by color or texture, or experimenting and predicting, to promote children’s analytical and reasoning skills.

[We could] compare the leaves and talk about why leaves fall down, what are the colors, and describe the difference between fall and spring, so that they have a better concept and understanding of the changes of the season.

I would tell them to compare which ones are bigger, smaller, what colors they are, if some give off a scent when you bend them, or if they smell the same. We could hang them all on a hook and organize them according to size and shape. Or we can place them in books and wait to see what happens, if they're going to dry up or go bad. We can place them under the sun and see which leaves will dry faster.

They would do a lot of experiments; compare the different types of leaves, the shape, the color, the dryness, or the texture.

One-quarter (23 percent) responded to Vignette 2 by describing an activity that integrated the nature walk with children's classroom or home experiences:

I might have them take those leaves home and find some in their neighborhood that are like it or similar to them, and bring the leaves back to school or talk to their parents about them. I may even encourage the children's families to explore a little bit, to see if they can find different types of leaves at their home compared to what we found on our nature walk.

I would send them home with a letter to their parents, for that school-home connection, and ask them to maybe find a leaf from a tree around their home or a nearby park and have them bring those back to school.



Three-fifths (61 percent) of graduates mentioned at least one activity that included either connecting concepts or instructional support strategies. A larger majority (87 percent) described such other strategies as art activities (e.g., drawing, making a collage, leaf stamping, leaf rubbing, making murals), going to the library to check out books about leaves, planting a tree, or writing the beginning letter of the color of the leaves.

Vignette 3: Nature Walk–Dual Language Learners

In the scenario I just described, all the children in the classroom spoke English. Now I'd like you to picture the same scene with a class that includes three children who speak no English and whose primary language is Hmong. Would you do anything differently (from what you've just told me) if the class included three children who speak no English and whose primary language is Hmong?

Working with non-English speaking children requires a variety of approaches in order to develop trusting relationships, communicate effectively, and promote learning (Beyazkurk & Kesner, 2005; Gillanders, 2007). Nearly all graduates (96 percent) indicated that they would change how they approached the activity. Responses included four different types of strategies to promote learning and assist dual language learners: (1) research and assistance, (2) simple communication strategies, (3) complex communication strategies, and (4) other strategies not related to communication or access to information.

Fifty-five percent of graduates' responses to Vignette 3 focused on getting the background information and assistance they need to be able to work with dual language learners. Some mentioned, for example, learning more about the child's culture and language, consulting with the child's family to determine how much English the child knows, seeking instructional supports such as locating dictionaries in the child's home language, asking other staff members who speak Hmong for assistance, or asking parents for translation assistance.

I would probably have invited the parent of the child to come and I would find someone, maybe a staff member, who could speak that language, and have them join in the walk.

[I would] ask the parents to write down how they say “leaves” in their home language and probably would get books about leaves in their home language also.

Forty-four percent of graduates’ responses included simple communication strategies to assist dual language learners, such as using a friendly tone, adding gestures or pointing, keeping directions short, and/or speaking slowly and clearly.

One-half of the graduates (50 percent) reported that they would use complex communication strategies, such as modeling language or showing children what to do, combining English words with body gestures or visual cues, careful listening and repeating refrains, using running commentary, summarizing or providing key phrases in the child’s home language, and/or paraphrasing.

I would have those children sit next to me as we do the project, and I would use hand gestures and I would demonstrate for them.

Probably the only thing I would do differently is show other pictures of leaves, or books; actually having kids touch the leaves while I’m talking to them one on one.

I would probably give them a little bit more guidance—more one on one, hands on, and try to guide them with hand gestures, actually showing them, me doing it myself and showing it to them. Not just model for them, but having them see and do it along with me.

Twenty percent of graduates’ responses included other approaches. Some said, for example, that they would get assistance from other children in the classroom, provide emotional support to non-English speakers, and/or use sensory skills to assist the Hmong-speaking children.

Forty-three percent of graduates were able to articulate one strategy, 46 percent described two strategies, and only 11 percent described three or more strategies for working with Hmong-speaking children.

Graduates’ Assessment of How Their B.A. Program Influenced their Responses

After each vignette, we asked graduates whether their response would have been different if we had presented them with the vignette before they participated in their B.A. program. A large majority of graduates (87 percent) reported that their responses were influenced by their education, but the percentages varied by vignette: Nature Walk, 73 percent, Nature Walk–Dual Language Learners, 64 percent, and Counting Cars, 54 percent.

Graduates described how their B.A. program had provided them with a better understanding of children’s capacities at different stages of development and their implication for effective teaching strategies, which in turn influenced their classroom practice.

[Before,] I would just say: “That kid can’t count.” I might have said [to the child], “No, that’s not right. He’s right.” and left it at that. So I would have missed my teachable moment.

Yes, I would’ve [done things differently], because where I first started, it wasn’t very engaging. A lot of teachers where I first came from just barely had their 12 units and it was more of a babysitting service. Now where I’m at, and having taken the classes, you can really start seeing into the minds of ‘this is how the child thinks’ or we should do this. The classes have helped me really look into the eyes of the child and then also find ways to encourage and teach them.

For some, the B.A. program helped them to better communicate their views on best practices for teaching children.

I think my B.A. has given me a perspective on different teaching practices. I know that before I got my B.A. [my job] was more just sitting there at the table, leaving activities at the table for them with some open-ended questions, but not really extending it to where you connect it to their lives. [Now I] ask questions to analyze and help the child complete that activity.

I think I would say that I’ve always believed that children learn best through play and hands-on experiences, but having gone through the B.A. program, I’m probably better able now to articulate that than I might have been prior to the program.

Many graduates believed that the B.A. program helped them become aware of how important it is for dual language learners to keep their home language. Many also said that they learned the importance of ensuring that non-English-speaking children feel supported by their teachers.

Prior to the B.A. program, I don't know that I was as confident about insisting that children preserve their home language. But the B.A. program reinforced the belief that we do need to help children preserve their home language so that they can then become proficient in English.

In the past, if I had a family who didn't speak my language or English, I would tell them that maybe it was not the right place for them, because it was going to be really difficult to communicate with the child and with the family. But now I know how to handle those issues. Now I know that there's always a way to solve problems if it's about language.



Conclusion: Next Steps for Research

The cumulative findings from the *Learning Together* study demonstrate how investments in B.A. completion cohort programs, which include sufficient financial and academic support, can help working ECE practitioners access higher education and succeed in obtaining degrees. Based on student self-reports, these programs offer personal, professional and educational benefits to participants as well. From the graduates' point of view, these programs have helped them to become more effective educators of young children.

Self-reports from graduates tell us little, however, about how the six cohort programs in this study varied in goals and content, and how such variations may have influenced graduates' competence as professionals. The degree of focus on teaching pedagogy for children younger than five, for example, varies substantially among higher education programs considered to be early childhood-related, including those in this study (Whitebook, Austin et al., 2011).

The Center for the Study of Child Care Employment is developing two new measures to deepen our

understanding of the contribution of higher education program characteristics and teachers' work environments to teacher effectiveness—issues that surfaced over the course of the *Learning Together* study. The Higher Education Inventory provides a mechanism for states to: a) establish baseline descriptions of higher education offerings for ECE practitioners; b) identify gaps and opportunities in available offerings; and c) assess changes in the capacity of the higher education system over time. In addition, researchers can use data gathered in this inventory to assess different approaches to ECE higher education programs.

A second measure under development is designed to be completed by classroom teaching staff, focusing on how ECE programs support teachers' professional growth, learning and well being. Our hope is that these measures will help states and communities explore strategies to improve and sustain program quality, distinguishing between higher education and workplace contexts when assessing the role of education in effective teacher preparation and practice.

Appendix 1: Study Design

Year 4 Survey Universe and Survey Sample

The survey universe included all students who were currently participating in or had graduated from the six B.A. completion cohort programs. The contact lists for the students/graduates were provided in earlier years of the study by the First 5 commissions of San Francisco, Santa Barbara, and Alameda Counties, and the WestEd-E3 Institute in Santa Clara County. These lists were updated by the research team during 2009/2010 interviews (Year 3).

During the course of Year 4, we attempted two telephone interviews with the 110 eligible respondents, defined as those who were currently enrolled in one of the cohort programs, were on non-medical leave but still enrolled, or had graduated. We did not attempt interviews with any students who had left their cohort program before graduating or who were on medical leave. We completed update interviews with 78 percent of the respondents. Graduate interviews were completed with 81 percent of the graduates. (See Table A-1.)

The Committee for the Protection of Human Subjects at the University of California, Berkeley, approved the survey instruments and data collection procedures for this study. After updating the contact list of students and graduates in fall 2010, as described above, we sent a letter to all students/graduates describing the study, encouraging their participation, and informing them about their rights as research subjects.

Continuing from Year 3 of the study, a separate grant from the W. Clement and Jessie V. Stone Foundation allowed the research team to expand the data collection process for students in the San Jose State University and CSU-East Bay cohorts by adding classroom observations to the student interviews. Although the same interview questions were asked of participants in all the cohorts, our data collection processes differed for these two cohorts; thus, we describe the data collection process separately for CSU-East Bay and for San Jose State University. This report focuses on findings from the graduate interviews only; findings from the classroom observations will appear in a separate report.

Table A1-1. Year 4 Completion and Response Rate for Graduates of the Six B.A. Completion Cohort Programs

	Total students	Eligible for graduate interview	Completed graduate interview	Graduate interview response rate
CSU -East Bay	11	11	9	82%
Mills College	6	4	4	100%
San Francisco State University	32	30	22	73%
San Jose State University	27	26	21	81%
Antioch College	22	21	20	95%
University of La Verne	12	12	9	75%
Total	110	105	85	81%

Mills College, San Francisco State University, Antioch University, and the University of La Verne

We attempted two telephone interviews, an update interview and a graduate interview, with the students/graduates in four of the six cohorts: Mills College, San Francisco State University, Antioch University, and the University of La Verne.

The purpose of the update interview, averaging five minutes, was to gather current contact and employment information from each student/graduate. The graduate interview was more in-depth, averaging 35 minutes. The interview focused on graduates' reflections about their cohort program experience, their perception of the impact of attaining a B.A. degree on their personal and professional lives, and their views on the impact of various workplace characteristics on a teacher's ability to engage in good practice. (See "Data Overview," below, for more details.) Graduates were also asked to respond to three preschool classroom vignettes, describing what they would do in each situation to promote children's learning.

The order of the interviews depended upon students' graduation status. Students who had graduated before fall 2010 participated in the fall 2010 graduate interview, and the update interview in spring 2011. Students who had not graduated by fall 2010 participated in two update interviews, one in fall 2010 and one in spring 2011.

The research team was available to conduct interviews during daytime, evening, and weekend hours. We either conducted the interview at the time of the first call to the student/graduate, or scheduled the interview for a time that was more convenient. We made eight attempts to interview each student/graduate.

California State University-East Bay and San Jose State University

All the CSU-East Bay students had graduated by fall 2010 when we contacted them; we attempted interviews with all, as well as classroom observations for graduates who worked directly with children in a center-based classroom or family child care home. Eighty-two percent of these graduates completed the interview. Update interviews were conducted with the graduates in spring 2011.

The students at San Jose State University (SJSU) graduated in May 2010 and were thus on a different interview cycle, as their Year 3 graduate interview occurred in summer 2010. To ensure a one-year period between interviews, we attempted update interviews with the graduates in fall 2010 and graduate interviews in spring 2011. In addition, in spring 2011, we attempted classroom observations for graduates who worked directly with children in a center-based classroom or family child care home.

Data Overview

The purpose of the update interview was to re-establish our relationships with students/graduates and to obtain current contact and employment information. The graduate interview included both open- and closed-ended questions focusing on:

Reflections on the B.A. Completion Cohort Program

- Services and features: Essential program services and structural features; recommendations for improving services; importance of and continued relationship with the cohort;
- B.A. program content: general education classes; ECE delivery system; working with adults;
- Accumulation of school-related debt.

Perceived Long-term Impact of a B.A. Degree on the Future

- Changes in employment since graduation: new workplace; new job title; increased wages;
- Long-term professional and personal effects of attaining a B.A. degree.

Impact of Workplace Characteristics on Teaching Practice

- Perception of the impact of workplace characteristics on a teacher's ability to engage in good practice: staff turnover; children with challenging behaviors; lack of common language with children and families; tension with co-workers; inadequate training of co-workers; inadequate education and training of director; lack of paid planning and preparation time; lack of paid sharing time; lack of access to a mentor or coach; insufficient staffing; no sick or paid personal days; inadequate access to health care services;
- Workplace environment: availability of paid professional time and paid sharing time.

Education and Teaching Practice

- Vignettes: three hypothetical scenarios of how to promote children's learning.

The sample sizes ("N") reported in the report's tables and charts are based on the graduate interviews. Our discussion focuses on the sample as a whole, and notes variations among the cohorts. These varia-

tions have not been tested for statistical significance because of the small number of students within each cohort; we did, however, test statistical significance for selected variables for the full sample. We provide commentary on differences when appropriate, but caution readers to be aware of the small sample sizes of individual cohorts.

Data Analysis

Data coding and analysis were completed in several steps. First, closed-ended questions were coded based on students' responses, and coded data were entered into an Excel data file. Data from 10 percent of all interviews were entered into the computer twice to check the accuracy of our data entry procedures. Next, using SPSS (Statistical Package for the Social Sciences 18.0), we computed frequencies of all closed-ended questions for each individual cohort and for the entire sample. The final step involved performing inferential statistical tests (e.g., chi-square analyses) to examine trends in the data. All significant results are reported at a *p* value of .05 or better.



Appendix 2: Supplementary Tables

Table A2-1. Ethnicity, Gender and Age of Graduates of Six B.A. Completion Cohort Programs

	CSU- East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Ethnicity							
Latino/Hispanic	33%	25%	65%	67%	54%	15%	45%
White, non-Hispanic	56%	25%	15%	22%	9%	45%	26%
African American	11%	25%	0%	0%	23%	10%	11%
Asian American	0%	0%	0%	0%	9%	20%	7%
Multi-ethnic	0%	25%	20%	11%	5%	10%	11%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	22	20	84
Gender							
Female	100%	100%	95%	100%	91%	100%	96%
Male	0%	0%	5%	0%	9%	0%	4%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	22	20	84
Age (Years)							
Youngest	44	33	26	28	33	27	26
Oldest	63	53	61	60	59	62	63
Mean	53	45	38	43	48	46	45
N	9	4	20	9	20	20	82

Please note very small sample sizes.

Table A2-2. Primary Language(s) of Graduates of Six B.A. Completion Cohort Programs

	CSU- East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
English only	78%	100%	70%	56%	36%	70%	62%
English and Spanish	11%	0%	10%	11%	4%	5%	7%
Spanish only	11%	0%	20%	33%	46%	10%	24%
Other language only	0%	0%	0%	0%	14%	15%	7%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	22	20	84

Please note very small sample sizes.

Table A2-3. Employment Status of Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Place of employment							
Licensed child care center	100%	100%	80%	89%	76%	62%	79%
Licensed family child care home	0%	0%	0%	0%	10%	24%	8%
Other	0%	0%	15%	11%	9%	5%	8%
Not working	0%	0%	5%	0%	5%	9%	5%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	21	21	84
Job title/position- center based							
Assistant teacher	0%	0%	0%	0%	7%	0%	2%
Teacher/lead teacher	38%	50%	53%	75%	50%	17%	46%
Head/master teacher	25%	25%	0%	0%	21%	17%	13%
Site supervisor/assistant director/director	13%	25%	33%	25%	7%	42%	25%
Teacher/director	12%	0%	0%	0%	7%	8%	5%
Other	12%	0%	13%	0%	7%	17%	10%
Total	100%	100%	99%	100%	99%	101%	101%
N	8	4	15	8	14	12	61
Hours/months worked- center based							
30 or more hours per week	56%	100%	100%	100%	81%	92%	88%
More than 10 months per year	22%	100%	50%	25%	75%	69%	56%
N	9	4	16	8	16	13	66
Tenure							
Average number of years in current workplace	11	5	10	10	9	9	9
N	9	4	19	9	20	19	80
Average number of years in current position - center based	7	5	5	10	7	4	6
N	9	4	16	8	16	13	66

Please note very small sample sizes.

Table A2-4. Characteristics of Children Served by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Percentage of graduates who serve children:							
Under 2 years	0%	25%	0%	25%	22%	29%	17%
N	8	4	16	8	18	17	71
2 years	38%	50%	44%	38%	22%	39%	36%
N	8	4	16	8	18	18	72
3 years	38%	25%	73%	50%	78%	67%	63%
N	8	4	15	8	18	18	71
4 years to K	63%	75%	73%	88%	78%	72%	75%
N	8	4	15	8	18	18	71
School age	13%	0%	6%	0%	6%	33%	13%
N	8	4	16	8	18	18	72
One age group only	50%	50%	27%	50%	33%	22%	34%
Mixed age groups	50%	50%	73%	50%	67%	78%	66%
Total	100%	100%	100%	100%	100%	100%	100%
N	8	4	15	8	18	18	71
Percentage of teachers and family child care providers serving children speaking:							
1 to 2 languages	0%	67%	67%	50%	39%	36%	43%
3 to 4 languages	60%	33%	22%	50%	46%	36%	40%
5 or more languages	40%	0%	11%	0%	15%	27%	17%
Total	100%	100%	100%	100%	100%	99%	100%
N	5	3	9	6	13	11	47
Mean percentage of children served by teachers and family child care providers, by ethnicity of children							
Latino/Hispanic	48%	7%	79%	69%	46%	23%	48%
White, non-Hispanic	8%	34%	12%	9%	15%	45%	21%
African American	10%	32%	2%	2%	23%	1%	10%
Asian American	24%	12%	5%	6%	12%	13%	12%
Other	10%	14%	2%	14%	4%	19%	9%
Total	100%	99%	100%	100%	100%	101%	100%
N	5	3	9	6	13	10	46

Please note very small sample sizes.

Table A2-5. Essential B.A. Completion Cohort Program Characteristics,
As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU- East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Financial assistance	67%	75%	55%	43%	47%	70%	58%
Flexible class schedules	0%	50%	30%	57%	58%	55%	43%
Convenient location	0%	0%	30%	29%	32%	50%	30%
Supportive faculty	11%	25%	45%	29%	21%	25%	28%
Academic tutoring and assistance	44%	25%	0%	43%	47%	15%	25%
Academic advising	33%	0%	15%	14%	26%	25%	22%
Technology assistance	67%	0%	0%	14%	16%	30%	20%
Other	56%	50%	0%	57%	0%	65%	30%
N	9	4	20	7	19	20	79

Please note very small sample sizes.

Table A2-6. Accumulation of School Debt, As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
No debt	56%	25%	20%	11%	80%	90%	54%
Less than \$10,000	33%	0%	50%	0%	15%	5%	21%
\$10,000 - \$19,999	0%	0%	30%	67%	5%	5%	17%
\$20,000 - \$29,999	0%	25%	0%	11%	0%	0%	3%
\$30,000 or more	11%	50%	0%	11%	0%	0%	5%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	20	19	81

Please note very small sample sizes.

Table A2-7. Importance of the Cohort Experience, As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Extremely important	100%	75%	75%	78%	81%	95%	84%
Somewhat important	0%	0%	20%	22%	19%	5%	13%
Not very important	0%	25%	5%	0%	0%	0%	3%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	21	20	83

Please note very small sample sizes.

Table A2-8. Impact of G.E. Courses, As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Took G.E. courses as part of cohort	89%	75%	35%	78%	86%	70%	69%
N	9	4	20	9	21	20	83
G.E. courses impacted program experience	88%	67%	86%	71%	88%	67%	79%
N	8	3	7	7	16	12	53
Positive educational experience	86%	50%	67%	20%	57%	75%	62%
N	7	2	6	5	14	8	42
G.E. courses improved work with children and families	88%	67%	86%	43%	78%	46%	68%
N	8	3	7	7	18	13	56

Please note very small sample sizes.

Table A2-9. Perception of Helpfulness of Professional Development Topics, As Reported by Graduates of Six B.A. Cohort Completion Programs

	Percentage of Graduates who said, "very helpful"						
	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Impact of federal, state, local legislation and budgets							
Current job	89%	75%	79%	100%	75%	63%	77%
N	9	4	19	8	20	19	79
Future career	89%	100%	79%	100%	76%	75%	82%
N	9	4	19	8	21	20	81
ECE delivery system changes over time							
Current job	44%	75%	68%	75%	75%	53%	65%
N	9	4	19	8	20	19	79
Future career	67%	100%	63%	88%	76%	70%	73%
N	9	4	19	8	21	20	81
Eligibility requirements for ECE services							
Current job	33%	50%	63%	63%	63%	53%	56%
N	9	4	19	8	19	19	78
Future career	56%	50%	63%	63%	75%	65%	65%
N	9	4	19	8	20	20	80
Staff qualifications for ECE services							
Current job	44%	50%	72%	67%	63%	32%	55%
N	9	4	18	9	19	19	78
Future career	67%	50%	72%	67%	70%	55%	65%
N	9	4	18	9	20	20	80
Funding sources of ECE services							
Current job	33%	50%	63%	56%	60%	53%	55%
N	9	4	19	9	20	19	80
Future career	56%	75%	63%	44%	57%	70%	61%
N	9	4	19	9	21	20	82

Please note very small samples sizes.

Table A2-10. Information on the ECE System Provided by the Cohort Program, As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Yes	56%	50%	68%	78%	55%	75%	65%
No	44%	50%	32%	22%	45%	25%	35%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	19	9	20	20	81

Please note very small sample sizes.

Table A2-11. Perception of Helpfulness of Professional Skills, As Reported by Graduates off Six B.A. Completion Cohort Programs

Percentage of Graduates who said, "very helpful"

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Giving constructive feedback to colleagues at your workplace							
Current job	89%	100%	90%	89%	90%	84%	89%
N	9	4	19	9	20	19	80
Future career	89%	100%	84%	89%	86%	85%	87%
N	9	4	19	9	21	20	82
Resolving conflicts among adults in your workplace							
Current job	67%	75%	84%	89%	95%	90%	86%
N	9	4	19	9	19	19	79
Future career	67%	100%	84%	89%	90%	90%	86%
N	9	4	19	9	20	20	81
Running an effective meeting							
Current job	78%	100%	74%	67%	85%	58%	74%
N	9	4	19	9	20	19	80
Future career	78%	100%	63%	89%	86%	65%	76%
N	9	4	19	9	21	20	82

Please note very small sample sizes.

Table A2-12. Skills to Work with Adults Provided by the Cohort Program,
As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Yes	89%	75%	100%	78%	81%	63%	82%
No	11%	25%	0%	22%	19%	37%	18%
Total	100%	100%	100%	100%	100%	100%	100%
N	9	4	20	9	21	19	82

Please note very small sample sizes.

Table A2-13. Change in Employment and Compensation since Attaining a B.A. Degree,
As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
<i>All graduates:</i>							
Changed place of employment	11%	0%	11%	22%	6%	20%	12%
N	9	4	19	9	18	15	74
<i>Center staff only:</i>							
Changed job position	22%	0%	25%	13%	19%	39%	23%
N	9	4	16	8	16	13	66
Received an increase in compensation	44%	25%	75%	88%	69%	39%	61%
N	9	4	16	8	16	13	66
Average full-time equivalent yearly wage increase related to B.A. degree	\$8,106	Not reported	\$6,505	\$7,628	\$7,378	\$6,900	\$7,191
N	3	1	11	8	9	4	36

Please note very small sample sizes.

Table A2-14. Future Impact of B.A. Degree, As Reported by Graduates of Six B.A. Completion Cohort Programs

	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Impact on future professional life	100%	100%	90%	89%	76%	67%	82%
Impact on future personal life	67%	67%	26%	44%	62%	67%	54%
Impact on educational pathway	11%	67%	26%	44%	52%	19%	33%
N	9	3	19	9	21	21	82

Please note very small sample sizes.

Table A2-15. Impact of Workplace Characteristics on Teaching Practice, As Reported by Graduates of Six B.A. Completion Cohort Programs Working in Center-Based Programs

Percentage of graduates employed in centers who reported, "very big impact"							
	CSU - East Bay	Mills College	Antioch University	University of La Verne	San Francisco State University	San Jose State University	All cohorts
Insufficient staffing	78%	100%	81%	88%	75%	83%	82%
N	9	4	16	8	16	12	65
Staff turnover	89%	75%	50%	50%	100%	85%	76%
N	9	4	16	8	16	13	66
No paid sick or personal days	89%	100%	75%	75%	69%	62%	74%
N	9	4	16	8	16	13	66
Director education and experience	67%	50%	81%	100%	75%	54%	73%
N	9	4	16	8	16	13	66
Inadequate training of co-workers	56%	50%	69%	88%	69%	92%	73%
N	9	4	16	8	16	13	66
Paid planning or preparation time	78%	100%	69%	100%	63%	39%	68%
N	9	4	16	8	16	13	66
Inadequate access to health services	75%	75%	75%	63%	69%	46%	67%
N	8	4	16	8	16	11	63
Children with challenging behaviors	67%	50%	75%	63%	69%	39%	62%
N	9	4	16	8	16	13	66
Access to a mentor or coach	63%	75%	31%	63%	69%	62%	57%
N	8	4	16	8	16	13	65
Tension with co-workers	33%	50%	56%	75%	44%	62%	53%
N	9	4	16	8	16	13	66
No common language with children and families	13%	50%	63%	63%	44%	39%	46%
N	8	4	16	8	16	13	65
Paid time to observe other classrooms/share with colleagues	38%	75%	25%	38%	63%	31%	42%
N	8	4	16	8	16	13	65

Please note very small sample sizes.

References

- Association of American Colleges and Universities (n.d.). Retrieved from <http://www.aacu.org/>
- Austin, L. J. E., Whitebook, M., Connors, M., & Darrah, R. (2011). *Staff preparation, reward, and support: Are quality rating and improvement systems addressing all of the key ingredients necessary for change?* Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- Beyazkurk, D., & Kesner, J. E. (2005). Teacher-child relationships in Turkish and United States schools: A cross-cultural study. *International Education Journal*, 6(5), 547-554.
- Bogard, K., Traylor, F., & Takanishi, R. (2008). Teacher education and PK outcomes: Are we asking the right questions? *Early Childhood Research Quarterly*, 23(1), 1-6.
- Brenneman, K., Stevenson-Boyd, J. S., & Frede, E. (2009) Math and science in preschool: Policies and practice. In E. C. Frede & S. Barnett (Series Eds.), *Preschool policy matters*. New Brunswick, NJ.
- Calderon, M. (2005). *Achieving a high-quality preschool teacher corps: A focus on California*. Washington, DC: National Council of La Raza.
- Clements, D. H., & Sarama, J. (2004). Learning trajectories in mathematics education. *Mathematical Thinking and Learning*, 6, 81-89.
- California Department of Education. (2010). *California preschool curriculum framework: Volume 1*. Sacramento, CA: Author.
- Carey, K., & Mead, S. (2011). *Beyond bachelor's: The case for charter colleges of early childhood education*. Washington, DC: Brookings-Rockefeller Project on State and Metropolitan Innovation.
- Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. In L. Darling-Hammond & H. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Dukakis, K., & Bellm, D. (2006). *Clearing a career path: Lessons from two communities in promoting higher education access for the early care and education workforce. Alameda & Santa Clara Counties, California*. Berkeley, CA: Center for the Study of Child Care Employment, San Leandro, CA: First 5 Alameda County, & San Jose, CA: WestEd - E3 Institute: Advancing Excellence in Early Education.
- Early, D., Maxwell, K.L., Clifford, R.M., Pianta, R.C., Richie, S., Howes, C., et al. (2008). Teacher education and child outcomes: A reply to the commentary. *Early Childhood Research Quarterly* 23(1), 7-9.
- Epstein, A. S. (2003). How planning and reflection develop young children's thinking skills. *Young Children*, 58(4), 28-36.
- Fuller, B., Livas, A., & Bridges, M. (2006). Preschool in California: Ideals, evidence, and policy options, *PACE (Policy Analysis for California Education) Working Paper 05-1*. Berkeley and Davis, CA: University of California, and Stanford, CA: Stanford University.

- Gillanders, C. (2007). An English-speaking prekindergarten teacher for young Latino children: Implications of the teacher-child relationship on second language learning. *Early Childhood Education Journal*, 35(1), 47-54.
- Insight Center for Community Economic Development. (n.d.). *The self-sufficiency standard for California*. Retrieved from <http://www.insightccd.org/index.php?page=ca-sss>
- Karoly, L. A., Ghosh-Dastidar, B., Zellman, G. L., Perlman, M., & Fernyhough, L. (2008). *Prepared to learn: The nature and quality of early care and education for preschool-age children in California*. Santa Monica, CA: RAND Corporation.
- Maxwell, K. L., Lim, C. I., & Early, D. M. (2006). *Early childhood teacher preparation programs in the United States: National report*. Chapel Hill, NC: FPG Child Development Institute, University of North Carolina.
- National Research Council. (1999). *How people learn: Brain, mind, experience, and school*. Washington DC: National Academies Press.
- Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *The classroom assessment scoring system*. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Project on Student Debt. (n.d.). *State by state data*. Retrieved from http://projectonstudentdebt.org/state_by_state-data.php
- Ray, A., Bowman, B., & Robbins, J. (2006). *Preparing early childhood teachers to successfully educate all children: The contribution of four-year undergraduate teacher preparation programs*. Chicago, IL: Erikson Institute.
- Tout, K., Isner, T., & Zaslow, M. (2011). *Coaching for quality improvement: Lessons learned from quality rating and improvement systems (QRIS)*. Washington, DC: Child Trends.
- U.S. Social Security Administration. (Oct. 19, 2011). *Cost-of-living adjustment (COLA) information for 2011*. Retrieved from <http://www.ssa.gov/cola/>
- Whitebook, M., & Austin, L. (2009). *Leadership in early childhood: A curriculum for emerging and established agents of change*. Berkeley, CA: Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California, Berkeley.
- Whitebook, M., Austin, L. J. E., Ryan, S., Kipnis, F., Almaraz, M., & Sakai, L. (2011). *By default or by design? Variations in higher education programs and their implications for research methodology, policy, and practice in early childhood*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- Whitebook, M., Gomby, D., Bellm, D., Sakai, L., & Kipnis, F. (2009). *Effective teacher preparation in early care and education: Toward a comprehensive research agenda*. Part II of *Preparing teachers of young children: The current state of knowledge, and a blueprint for the future*. Berkeley, CA: Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California, Berkeley.
- Whitebook, M., Kipnis, F., & Bellm, D. (2007). *Disparities in California's child care subsidy system: A look at teacher education, stability and diversity*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- Whitebook, M., Kipnis, F., Sakai, L. & Almaraz, M. (2011). *Learning together: A study of six B.A. completion cohort programs in early care and education: Year 3*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.

- Whitebook, M., & Ryan, S. (2011). Degrees in context: Asking the right questions about preparing skilled and effective teachers of young children. *NIEER Policy Brief* (Issue 22, April 2011). New Brunswick, NJ: National Institute for Early Education Research.
- Whitebook, M., Sakai, L., & Kipnis, F. (2010). *Beyond homes and centers: The workforce in three California early childhood infrastructure organizations*. Berkeley, CA: Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California, Berkeley.
- Whitebook, M., Sakai, L., Kipnis, F., Almaraz, M. Suarez, E., & Bellm, D. (2008). *Learning together: A study of six B.A. completion cohort programs in early care and education. Year 1 report*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- Whitebook, M., Sakai, L., Kipnis, F., Bellm, D., & Almaraz, M. (2010). *Learning together: A study of six B.A. completion cohort programs in early care and education. Year 2 report*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- Whitebook, M., Sakai, L., Kipnis, F., Lee, Y., Bellm, D., Almaraz, M., & Tran, P. (2006). *California early care and education workforce study*. Berkeley, CA: Center for the Study of Child Care Employment University of California, Berkeley, and San Francisco: California Child Care Resource and Referral Network.
- Zaslow, M., Tout, K., Halle, T., Whittaker, J. V., & Lavelle, B. (2010). *Toward the identification of features of effective professional development for early childhood educators, Literature review*. Washington, DC: Report prepared for the U.S. Department of Education Office of Planning Evaluation and Policy Development Policy and Program Studies Service.

