



Integrated Education and Training (IET)

Integrated Education and Training (IET)

Many of today’s adults lack the skills needed to seek productive work and grow in their careers. It is widely accepted and reported that the demands of the modern economy and jobs that offer family sustaining wages (primarily middle and high skilled jobs) require some postsecondary training (Wrigley, 2015). When looking at the top 10 fastest-growing occupations in California, all of them require varying basic skills such as reading comprehension, writing, speaking, and critical thinking (State of California Employment Development Department, 2017). Recent findings from the American Community Survey (ACS) and from the Program for the International Assessment of Adult Competencies (PIAAC) sample of U.S. adults have been used to provide a better indicator of the need for improving adults’ basic skills. For example, data from the ACS indicate that 37 million adults lack even a high school credential (American Institutes for Research [AIR], 2013). Further, PIAAC data show that 1 in 6—or 36 million—of U.S. adults are low-literate, regardless of education level (Digital Promise, 2014). In California, according to the ACS, the need for adult education services is vast with a combined population of those 18 and over who lack a high school degree numbering over 5,000,000 and those who have as their highest education level a high school degree numbering over 6,000,000 (U.S. Census Bureau, 2016).

ACS 5-year Estimates Educational Attainment: California	
Population 18 to 24 years	3,989,263
Less than high school graduate	553,859
High school graduate (includes equivalency)	1,150,521
Population 25 years and over	25,257,858
Less than 9th grade	2,532,521
9th to 12th grade, no diploma	2,067,120
High school graduate (includes equivalency)	5,231,824

These hardest to serve Californians will also suffer under increased levels of poverty. According to the ACS, the poverty rate by education level greatly increases as educational attainment decreases (U.S. Census Bureau).

Poverty Rate For The Population 25 Years And Over For Whom Poverty Status Is Determined By Educational Attainment Level	Percent
Less than high school graduate	26.0%
High school graduate (includes equivalency)	15.7%
Some college or associate’s degree	11.0%
Bachelor's degree or higher	5.3%

Over the past several years, economic challenges in the United States and California have illuminated the need for a well-educated workforce and for development of human capital. In the context of adult education, this has led to a new emphasis on workforce training for adult learners, which has translated into educational models and pathways that combine basic education with workforce training. Through the Workforce Innovation and Opportunity Act, Title II: Adult Education and Family Literary Act (WIOA, Title II: AEFLA), states are now able to secure funding to expand opportunities that integrate basic education skills with job training and career development skills for underrepresented or low-skilled adult learners who would otherwise be unable to compete successfully in the U.S. job market.

Instruction to support low-skilled adults takes place in various settings (from district-based schools, training programs, and colleges to workplace training programs) to overcome the challenges resulting from knowledge and skill gaps. Adult basic education (ABE) learners in the United States and California have many educational options and pathways to help them achieve their goals. Choices can include enrolling in an adult secondary education (ASE) program or in High School Equivalency (HSE) courses

to work toward meeting college entrance requirements, taking ABE and literacy courses to obtain mastery of basic education skills, enrolling in English as a Second Language (ESL) programs to develop English language skills, and enrolling in job training and career pathways or career pathway bridges. An educational model that has gained greater visibility is Integrated Education and Training (IET). IET supports career pathways development for adult learners (including English language learners) and offers aligned and contextualized curriculum, instruction, and service to students.

What is Integrated Education and Training?

Integrated Education and Training (IET) is an education model that combines occupational skills training and basic or academic skills instruction to increase and expedite the educational and career advancement of participants. As defined in the WIOA, Title II: AEFLA, “The term ‘integrated education and training’ means a service approach that provides adult education and literacy activities concurrently and contextually with workforce preparation activities and workforce training for a specific occupation or occupational cluster for the purpose of educational and career advancement” (WIOA, Title II: AEFLA, 2014, p. 187).

Integrated Education and Training (IET) is an innovative combination of education and job skills training, used to transition adult learners beyond adult basic education and through a career pathway that can offer them job training and eventual gainful employment. According to the U.S. Department of Education, there are “three components that would be required in an integrated education and training program. These components are adult education and literacy activities, workforce preparation activities, and workforce training” (U.S. Department of Education, 2015, p. 20973). Participants in IET programs are dually enrolled, co-enrolled, or concurrently enrolled in job skills training and adult basic education training, receiving services in the two programs at the same time. IET is intended to help adult learners who lack basic and workforce skills obtain both of these types of skills simultaneously specific to high-demand career pathways. For an IET program to be an effective part of a pathway, it needs to be focused on an industry sector, rigorous, and provide support to participants to help them along their path (Mortrude, 2017).

With federal and state mandates in place to require IET, adult education programs across the country are beginning to implement IET programs. According to a survey of 265 respondents conducted by the Center for

Law and Social Policy (CLASP), 52% of IET providers are local school districts or community/technical colleges, 48.4% of IET courses are offered in partnership with local workforce development boards, and 55.8% of IET courses are aligned to support the occupational needs of the local, state, or regional economy. In addition, 32% of respondents reported that their programs offered IET as part of an Integrated English Language Civics Education program as allowed under WIOA, Title II: AEFLA section 243 (Mortrude, 2017). This data holds promise that IET as a program offering is well suited to flourish in California as adult education services are offered primarily through school districts and community colleges that work in consortia geared toward fostering aligned career pathways. IET further aligns as a model that is supportive of the California’s Unified Strategic Workforce Development Plan objectives, which are “fostering ‘demand-driven skills attainment’... enabling upward mobility for all Californians... aligning, coordinating, and integrating programs and services” (California Workforce Development Board, 2016).

In the 2016 California WIOA, Title II: AEFLA application, the California Department of Education states: “In an IET service delivery model, various team teaching strategies are used to deliver the curriculum” (California Department of Education, 2016, p. 11). “Upon completion, it is intended that students will be employable or go on to more advanced training in their chosen career pathway. The IET service delivery may incorporate one or both of the following teaching models:

- **Co-Teaching:** The co-teaching model involves skills instruction in a Career and Technical Education (CTE) program along with basic language instruction, delivered in an integrated fashion. In this model, both an English Language Acquisition (ELA) teacher and a CTE teacher are teaching in the same classroom, and students are enrolled in both of the ELA and CTE courses.
- **Alternating Teaching:** In alternating teaching, students are enrolled in two different but coordinated courses. In this model, an ELA teacher and a CTE teacher are teaching in two different classrooms; students attend the two courses at different times” (p. 11–12).

Co-Teaching Models

In co-teaching models, adult learners are concurrently enrolled in two programs and simultaneously receive basic education skills and professional, technical workforce

skills from two instructors (one from each program) who co-teach (Wrigley, 2015). Through this co-teaching process, both instructors support students at the same time, and instruction within this context includes an integration of workforce or job-specific skills and basic skills that often lead to college credits and a certificate that is recognized by employers. In addition to classroom instruction, students may be provided with a range of educational supports that enhance their likelihood of success. These may include counseling, advising, financial aid, case management, and various types of classroom supports (e.g., additional classes and labs, depending on student needs, or peer tutoring).

The best known IET co-teaching model is the Integrated Basic Education and Skills Training (I-BEST) model, developed in Washington State by their State Board for Community and Technical Colleges (SBCTC). I-BEST is based on the results of a five-year longitudinal study (Emory, Raymond, Lee, & Twohy, 2016) designed to investigate the labor market outcomes of low-skilled adult students in Washington State technical and community colleges. In tracking the progress of students age 25 and over who entered college with a high school diploma (including ABE and ESL students) over a 5-year period, the study found that the students who took at least 1 year's worth of college credit courses and earned a certificate or other credential had an earning advantage over those who did not earn any college credits.

Washington's I-BEST co-teaching model has proven to be successful not only for participating students but also for the general public. According to a 2016 report by Upjohn Institute for Employment Research, "Estimates suggest that the I-BEST exiters gain substantial labor market outcomes. The employment rate rose by 12.3 percentage points; the average hourly wage rose by \$1.61; and the average hours of work per quarter went up by 65 hours" (Hollenbeck & Huang, 2016, p. 118). This increase in wages and hours worked is also expected to result in an additional approximation of \$23,370 in tax revenue per I-BEST program completer over their lifetime (Hollenbeck & Huang, 2016).

While the benefits of co-teaching to students and the local economy are clear, it is worth noting that the formation of a co-teaching team can influence the success of an

IET course. Administrators are more likely to experience success with teachers who know and trust each other and have chosen to work together voluntarily than educators who are forced to co-teach with someone they do not know well or with whom they have not had time to develop a trusting relationship: "...Aspects that could result in difficulties between co-teachers include: differing perspectives on education in regard to classroom management and whether the co-teaching partnership was self-chosen or mandated by administration" (Thompson & Chapman, 2016, p. 36).

Washington SBCTC recommends the following co-teaching models for IET programs (I-BEST Team Teaching Models, 2017):

- **Traditional Team Teaching:** Both teachers actively share the responsibility of instruction of both skills and content to all students. In short, equal work and responsibility for both teachers.
- **Collaborative Teaching:** Teachers work collaboratively together to design course content and material. In addition, the instructors teach the skills and content collaboratively by exchanging ideas and concepts in front of the students.
- **Complementary-Supportive Teaching:** One teacher is responsible for teaching the content to the students while the other teacher is responsible for follow-up activities related to the applicable content and skills.
- **Parallel Instruction:** Each teacher is responsible for teaching the same content and skills to two separate small groups within the class.
- **Differentiated Split Classes:** Each teacher provides content and skills instruction based on the learning needs of the students who are put into small groups based on their learning needs or preferences.
- **Monitoring Teacher:** One teacher is responsible for providing the content and skills instruction, while the other teacher roams the class, observing and monitoring the students' understanding and engagement.

The following is an example of a co-teaching model offered in California through the San Diego Community College District.

Co-Teaching in an Automotive Technology Training Program

SDCC San Diego Continuing Education

San Diego Continuing Education offers an introductory automotive program with an IET co-teaching model. These courses were developed to address a need for basic skills remediation that instructors had identified. Faculty and administration within CTE felt that some students were not persisting in the job training program due to low reading, math, or English language skills. The CTE Dean brought together a team to analyze the needs and brainstorm a solution. The team consisted of the CTE Dean, CTE Program Chair, a current Auto Tech instructor, a retired Auto Tech instructor, two Vocational English as a Second Language (VESL) instructors, and a grant coordinator. The priority was to integrate basic skills into an Auto Tech program, not to pull students out or to create a bridge course outside of CTE. Therefore, co-teaching an introductory program was the best approach. This IET introductory program was added to the existing three-course 900-hour core training program. A grant-funded pilot for 20 students was offered in fall 2014. Those students provided positive feedback, and the course has been full-time equivalency funded since then.

How are students enrolled? To identify the students who could most benefit from the IET program, a CASAS workplace appraisal in reading and math is administered to all incoming students during a mandatory auto tech orientation. Students who score below the 8th-grade level in either skill area are referred to the IET introductory program. Other factors considered are previous education and first language. In addition, students who state a desire to take the introductory courses are admitted. About 75% of students enter the core Auto Tech sequence directly, while about 25% of students begin with the IET introductory program. These are managed enrollment courses. Orientation and registration take place every 13–14 weeks, and demand is sufficient to form a new cohort each time. Target students are enrolled in a VESL course and an Auto Tech course concurrently. The automotive curriculum provides an overview of major automotive systems and hands-on training to perform entry-level lube tech tasks, while the basic skills instructor extends those lessons with opportunities to improve English language literacy, reading, writing, math, and soft skills through contextualized instruction. In addition, students develop training goals and job seeking skills.

What is the student experience? Although the IET program consists of Advanced VESL and Auto 600/601, the courses are presented to students in a single program with two instructors. Students attend classes from 9:00 a.m. to 1:45 p.m., four days a week. The basic skills instructor leads the class from 9:00 to 10:30, and the auto tech instructor leads the class from 10:30 to 1:45. Students sign into one class record number from 9:00 to 10:30 and then sign into the other class record number from 10:30 to 1:45. However, the basic skills instructor stays on and co-teaches with the other instructor from 10:30 to 11:30. This hour of overlap allows for a variety of team teaching opportunities. Using the terms defined by the Washington SBCTC, the instructors mainly engage in Collaborative Teaching, Complementary-Supportive Teaching, or Monitoring. The hour of overlap also helps to synchronize instruction as the two instructors observe each other and pace their lessons accordingly so that instruction is complementary throughout the day. When the IET program concludes, students are prepared to be successful in the rest of the automotive technology training program and can apply for entry-level employment.

Alternating Teaching Model

While the potential for IET to promote success looks very attractive, the cost of implementing IET components (such as co-teaching) is a significant impediment for many states and programs. Co-teaching requires the presence of two teachers in one classroom for a specified period of time, as well as in the planning and development of

the combined basic/workforce skills curriculum, which can take a considerable amount of time to ensure that the curriculum is customized to students' needs. In the face of budget cuts or low funding, many other vocational programmatic offerings provide more affordable alternatives to co-teaching. These alternatives include alternating teachers. IET programs that involve alternating

teachers have some similarities to co-teaching but also have one key difference: how the notion of co-teaching is conceptualized. Like co-teaching, the alternating teaching model involves two teachers; however, both teachers are not required to be in the same class at the same time, and students have the option of alternating the days that they attend classes between the two teachers. *The Developing Basic Skills Curriculum for an IET: A Guide for the Pathways to Employment Program*, produced by the Institute for the Study of Adult Literacy at Penn State University (Institute for the Study of Adult Literacy, 2017, p. 5), provides program guidance on what they term “partially integrated instruction”: it “... allows for greater flexibility in scheduling and requires less coordination between occupational skills and ABE instructors. Although the content and skills instruction may not be as seamlessly

integrated, students are still given the opportunity to learn basic skills that are applicable, contextualized, and aligned to the content course curriculum.”

In North Carolina, the Basic Skills Plus Program offers opportunity for students to be co-enrolled in basic skills classes and occupational skills classes (Basic Skills Plus Legislation and Guidelines, 2010). Although co-teaching is recommended, alternating “co- or team teaching, paired courses, use of bridge or supplemental instruction, hybrid (online and classroom based) course designs” are instructional models that are provided (Basic Skills PLUS Career Pathways by College and NC Career Cluster, 2017, p. 2). The following is an example of an alternating teaching model offered in California through the Los Angeles Unified School District.

Alternating Teaching in a Photovoltaic Program

East Los Angeles Skills Center

East Los Angeles Skills Center (Los Angeles Unified School District) is also using the alternating teaching model with its photovoltaic (solar electric) and ABE math programs. Students who completed the first two of the three photovoltaic courses didn’t want to or were fearful to take the North American Board of Certified Energy Practitioners (NABCEP) exam because of the algebra component. After identifying many of the students struggling with applicable math while mastering other skills relating to the photovoltaic program, the CTE and ABE teachers collaborated to find a solution. That solution was a 60- to 80-hour contextualized math course taught by an ABE teacher on Monday (versus an independent study lab), with the photovoltaic courses taught by CTE teachers Tuesday through Friday. In addition, all students now take integrated math, with course work being differentiated for the different math levels and contextualized for the photovoltaic courses. The solar electric-contextualized ABE Math 3 class provides students with the support and skills needed for them to confidently take the NABCEP exam, the final, and required certification that had previously eluded them. In addition, many students felt stigmatized when placed in remedial/ABE math classes. This included students from a partner agency, Homeboy Industries (which provides support to formerly gang-involved and previously incarcerated men and women who are now returning and contributing citizens).

The success of this program has been evident in the completion of industry certifications. Over the first 18 months of implementation, the school concurrently enrolled 77 students in ABE and CTE classes specific to the photovoltaic program and saw 85% of its photovoltaic students complete the program, having earned three industry-recognized certifications. However, no success comes without challenges. Creative new scheduling was required and both students and teachers needed to become accustomed to the new routines. Sharing the instructional load required teachers to learn how to work together and share competencies across program lines, with the ABE teacher incorporating photovoltaic problems as the basis for contextualized math and the CTE teachers integrating the math component, specifically giving algebra practice tests.

The students’ math and career technical education instructors met to develop the contextualized math curriculum to integrate it into the first two photovoltaic training courses. The math curriculum is designed to prepare students for photovoltaic applications. Teachers are continually working and meeting to address the needs of the students and ensure student success. Integrating the math instruction into skills training allowed students to continue with their

CTE courses instead of having to wait until they have mastered the necessary math skills; students complete the math course and phase 1 and 2 of the photovoltaic program.

The school generates interest from the community and its partnership agencies. Once the cohort is established, students are concurrently enrolled in both classes. The math teacher then assesses their skills and determines their curriculum. Students are not assessed prior to enrollment due to many students having long gaps in their education that may deter them from accessing the training.

Going forward, there are plans to expand ABE math/CTE IET efforts. The algebra class will become an Algebra for Energy Careers course, to include power line students. With a desire to transition from alternating teaching to co-teaching, the current student information system needs to be updated. The East Lost Angeles Skills Center is also exploring an itinerant teacher option, in order to free up a teacher to support more than one class per term, as needed.

IET Planning Considerations

Planning for IET courses begins with identifying the gap in course offerings that may prevent students from reaching their educational and career goals in a reasonable time frame. Education programs can begin by asking questions such as: Does it take too long for ESL or ABE students to access job training? Or, do students who choose job training need additional basic skills support? Based on the identified gap, programs will determine if the aim is to integrate ABE/ESL instruction into a CTE course or to integrate CTE instruction into an ABE or ESL program. The process is aimed at determining if the target students matriculate through CTE, ABE, or ESL. Building a cohort of students with similar career goals and educational needs is a typical challenge. Interviews with counselors, student services personnel, instructors, students, and community partners may reveal where the need is greatest. Next, consider how to define success for the IET courses. For example, upon exiting IET, will students be more likely to: enter a higher level of job training, gain employment in the training field, or demonstrate gains in basic and occupational skills simultaneously? The definition of success decided upon will provide a common goal for the teaching team, encourage a focused curriculum, provide a clear message for marketing the course, guide which support services to bring on board, determine what assessments to use, and identify what data to collect for monitoring and reporting.

IET Implementation Considerations

Co-teaching is a promising educational model for many adults, but it is the responsibility of states and programs to identify its students' specific needs and contexts and use these in the selection and design of the specific IET model. States and programs can adapt IET models in ways that increase the likelihood that implementation investments would yield the ultimate benefit: student achievement. In addition to considering ways to adapt alternatives that reflect their own programmatic and instructional contexts, states and even local providers need to consider the funding options that are available for supporting IET to ensure that students receive the help they need to succeed. *Integrated Education and Training: Model Programs for Building Career Pathways for Participants at Every Skill Level* (Center for Law and Social Policy, 2016) addresses the opportunities and intricacies of funding IET models:

“Over the past decade, special grants, and philanthropic funds have supported the development of IET models, but to bring this innovation to scale, formula funds now need to be directed toward this strategy. Such investments do not constitute one program ‘raiding’ another program’s funds. Rather, IET enables joint program models through which each partner brings resources and shares a responsibility for outcomes” (p. 3).

Braiding funds is an option for states and education institutions to consider in supporting IET among other educational and workforce development endeavors. The Spark Policy Institute indicates that “braided funding involves multiple funding streams used to pay for all of the services needed by a given population, with careful

accounting of how every dollar from each funding stream is spent” (Spark Policy Institute, 2017). Funding sources to support more effective career pathways may include the following:

1. Carl D. Perkins Career and Technical Education Act
2. Employment Service (Wagner-Peyser Act)
3. Pell Grant
4. Registered Apprenticeship and Pre-Apprenticeship
5. Temporary Assistance for Needy Families
6. Trade Adjustment Assistance
7. Workforce Innovation and Opportunity Act, Title I: Adult and Dislocated Worker
8. Workforce Innovation and Opportunity Act, Title I: Youth
9. Workforce Innovation and Opportunity Act, Title II: AEFLA
10. Supplemental Nutrition Assistance Program Employment and Training

The above are a few of the potential funding sources that can be braided to support career pathways education and IET programming; state-based and foundation funding may provide other revenue sources. According to the previously referenced study conducted by CLASP, 41% of survey respondents indicated they used state grant funds for the workforce training component of IET programs. In contrast, 37% of survey respondents indicated they used federal financial aid for the workforce training component (Mortrude, 2017, p. 9).

Conclusions

As a strategy for supporting U.S. and California workforce development, IET has the potential to promote both individual and societal benefits. As an adult education or career pathway model, it provides students with multiple opportunities to support their learning and career goals and to advance both academically and economically. In implementing new models, states and programs will need to collect data to monitor implementation and make adjustments based on their findings of students’ strengths and needs over time. While IET may initially require greater implementation costs than more traditional programs, the promise of higher rates of student achievement and employment may make IET a worthwhile investment.

References

- 113th Congress: Workforce Innovation and Opportunity Act. (2014). Congress.gov. Retrieved from <https://www.congress.gov/113/bills/hr803/BILLS-113hr803enr.pdf> (accessed July 7, 2017).
- American Institutes for Research. (2013). Tapping the potential: Infographics illustrate need for further skills training among American adults. Retrieved from <http://www.air.org/resource/tapping-potential-infographics-illustrate-need-further-skills-training-among-american> (accessed August 23, 2017).
- Basic Skills PLUS Career Pathways by College and NC Career Cluster. (2017). Raleigh, NC. Retrieved from http://www.nccommunitycolleges.edu/sites/default/files/basic-page-file-uploads/ccr/career_pathway_review_criteria.pdf (accessed June 21, 2017).
- Basic Skills Plus Legislation and Guidelines. (2010). Raleigh, NC. Retrieved from http://www.nccommunitycolleges.edu/sites/default/files/basic-page-file-uploads/ccr/basic_skills_plus_guidelines_0.pdf (accessed June 21, 2017).
- California Department of Education. (2016). Workforce Innovation and Opportunity Act, Title II: Adult Education and Family Literacy Act (Public Law 113-128): Request for applications (November 2016, Program year 2017–18). Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/fg/fo/r8/documents/wioarfa17.doc> (accessed July 7, 2017).
- California Workforce Development Board. (2016). California’s Unified Strategic Workforce Development Plan 2016–2020. Retrieved from http://cwdb.ca.gov/plans_policies/wioa_unified_strategic_workforce_development_plan/ (accessed July 7, 2017).
- Center for Law and Social Policy. (2016). Integrated Education and Training: Model Programs for Building Career Pathways for Participants at Every Skill Level. Retrieved from <http://www.clasp.org/resources-and-publications/publication-1/WIOA-IET-Model-Programs.pdf> (accessed August 23, 2017&).
- Digital Promise. (2014). PIAAC fact sheet: New data on the skills of American adults. Retrieved from https://s3.amazonaws.com/b.3cdn.net/dpromise/47ea55c5ec3c5ac2e9_23m6iizfd.pdf (accessed August 23, 2017).
- Emory, D., Raymond, L., Lee, K., and Twohy, S. (2016). The academic I-BEST: A model for precollege student success in college transfer programs. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education*, 5(3), pp. 43–49. Retrieved from <https://static1.squarespace.com/static/55a158b4e4b0796a90f7c371/t/58b65917c534a5de912fd925/1488345404438/Winter+2016+Journal+FINAL+ELECTRONIC.pdf> (accessed July 7, 2017).
- Hollenbeck, K., & Huang, W. (2016). *Net impact and benefit-cost estimates of the workforce development system in Washington State* (pp. 133, 206). Kalamazoo, MI: W. E. Upjohn Institute for Employment Research. Retrieved from http://research.upjohn.org/cgi/viewcontent.cgi?article=1036&context=up_technicalreports (accessed June 21, 2017).
- I-BEST Team Teaching Models. (2017). Washington State Board of Community and Technical Colleges. Retrieved from <https://www.sbctc.edu/colleges-staff/programs-services/i-best/team-teaching-models.aspx> (accessed July 7, 2017).

- Institute for the Study of Adult Literacy. (2017). *Developing basic skills curriculum for an IET: A guide for the Pathways to Employment Program*. Pathways to Employment. The Pennsylvania State University Central Pennsylvania Workforce Development Corporation, p. 5. Retrieved from https://sites.psu.edu/pathwaystoemployment/files/2017/09/IET-Guide_FINAL_U.ED-EDU-17-48-no-page-on-tools-p7rrm7.pdf (accessed September 1, 2017).
- Mortrude, J. (2017). *Integrated education and training: A career pathways policy & practice*. Center for Postsecondary and Economic Successes. Retrieved from <http://www.clasp.org/resources-and-publications/publication-1/Integrated-Education-and-Training-A-Career-Pathways-Policy-Practice.pdf> (accessed July 7, 2017).
- Spark Policy Institute. (2017). *Overview: Blending and braiding defined*. Retrieved from <http://tools.sparkpolicy.com/overview-blending-braiding/> (accessed August 23, 2017)
- State of California Employment Development Department. (2017). Top 100 fastest growing Occupations in California, 2014–2024. EDD: Labor Market Information. Retrieved from <http://www.labormarketinfo.edd.ca.gov/OccGuides/FastGrowingOcc.aspx> (accessed September 1, 2017).
- Thompson, B., & Chapman, D. (2016). *Teacher perspectives on co-teaching in a content classroom with English language support*. Saint Paul, MN: Hamline University. Retrieved from http://digitalcommons.hamline.edu/cgi/viewcontent.cgi?article=5101&context=hse_all (accessed June 21, 2017).
- U.S. Census Bureau. (2016). American Community Survey (ACS). Factfinder.census.gov. Retrieved from <https://www.census.gov/programs-surveys/acs/news/data-releases.html> (accessed August 23, 2017).
- U.S. Department of Education. (2015). Programs and activities authorized by the Adult Education and Family Literacy Act (Title II of the Workforce Innovation and Opportunity Act), Workforce Innovation and Opportunity Act, miscellaneous program changes, and; proposed rules. *Federal Register*, 80(73), p.20973. Retrieved from <https://www.gpo.gov/fdsys/pkg/FR-2015-04-16/pdf/2015-05540.pdf> (accessed July 7, 2017).
- Wrigley, H. S. (2015). Preparing English learners for work and career pathways: Issue brief. Retrieved from: https://lincs.ed.gov/sites/default/files/ELL_Context_Instruction_508.pdf (accessed July 7, 2017).

Produced by the California Adult Literacy Professional Development Project (CALPRO) of the American Institutes for Research, under contract with the California Department of Education.

Authors: Mariann Fedele-McLeod (American Institutes for Research), Sudie Whalen (American Institutes for Research), Anestine Hector Mason (American Institutes for Research), Carolyn McGavock (San Diego Community College District)

Contributors: David Coleman and Andrea Rodriguez (Los Angeles Unified School District, Division of Adult and Career Education)