Education Insights Center

Advancing Research and Policy
for K-12 and Postsecondary Education

Aiming to Meet Workforce Needs: An Evaluation of the Economic and Workforce Development Program

February 2016

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Introduction and Context

California's dynamic economy depends on having a large and skilled workforce; consequently, the state must continually support and refine efforts to provide workers with employer-valued competencies. Given the wide range of regional and state needs across this vast state, ensuring that the workforce has the training to keep up with labor market demands is difficult. The California Community Colleges' (CCC) Economic and Workforce Development Program (EWD) aims to support the development of a workforce that will promote California's economic development by connecting employers and educators. This report summarizes the findings of an independent evaluation conducted on EWD.

EWD aims to "invest in California's economic growth and global competitiveness through industry-specific education, training, and services that contribute to a highly-skilled and productive workforce." To support its mission, EWD created a new structure focused on regional and sector service delivery. Each region selected five sectors—three priority and two emergent—based on their rapid growth, high demand for workers, and well-paying jobs.

To provide services, EWD employs:

- Sector navigators (SNs) to serve as statewide experts in their sector
- Deputy sector navigators (DSNs) to address a given sector's unique regional needs
- Industry-driven regional collaboratives (IDRCs) to deliver short-term projects devoted to specific regional workforce needs
- Technical assistance providers (TAPs) to provide support to the SNs and DSNs, including the Centers of Excellence for Labor Market Research (CoE) and LaunchBoard (a data system that tracks student progress and outcomes)

This is the culminating report of the legislatively-mandated independent evaluation of EWD. The evaluation focused on three main components: the processes by which grantees operated (roles, coordination, funding, data use); the services offered; and the outcomes. Our review of these components are based on our perceptions. We were not able to observe activities, nor did we have access to data that would allow us to estimate outcomes. From July to December 2016, we analyzed quantitative data and grantee accountability reports provided by the California Community Colleges Chancellor's Office (CCCCO), conducted 46 grantee interviews, and administered surveys to 110 participants comprised of grantees, career technical education (CTE) deans, regional consortia chairs, and employers. While we were able to gather rich information from EWD grantees, including SNs, DSNs, IDRCs, and TAPs, we faced significant barriers in other aspects of the evaluation. The quick timeline of this work limited our capacity to gather information from stakeholders. The design of EWD lacked a comparison group, and our inability to access relevant data forced us to make many concessions in reporting outcomes and to be unable to make causal claims about the program's effectiveness. The subsections below summarize our evaluation's main findings, EWD's strengths and areas of challenge, and recommendations for program improvement.

EWD Design was Well Received as a Means of Structuring and Unifying Activities

Overall, the evaluation found that EWD grantees provided the services and performed the responsibilities as described by their roles within EWD's structure, and the roles and responsibilities were viewed favorably. DSNs focused primarily on connecting employers and community colleges and assisting in aligning curriculum; SNs served as experts in their sectors' needs; CoEs supplied labor market information to grantees; and LaunchBoard provided data in support of accountability and program improvement. EWD grantees coordinated intentionally and frequently among themselves and with non-EWD stakeholders. The grantees braided together various funding sources in support of economic and workforce development, and they used data to understand market trends and basic demographics and to decide whether to revise programs or add new ones. EWD grantees provided a variety of services and activities in support of EWD goals and objectives. Grantees reported that they made 14 different types of services available to colleges and employers (see Tables 2 and 3 for a breakdown of services provided by EWD grantees). Some services, although similar, varied depending whether the target population was colleges or employers. For example, the professional development services provided by grantees were different for colleges than they were for employers. While colleges might receive a program on how to use new lab equipment, for example, employers might receive help with employee recruitment or with conducting a business needs assessment. In total, EWD grantees reported that they:

- Provided 2,577 services to colleges and businesses.
- Served 13,723 businesses, 41,252 students, and 38,486 employees.

These services were comprised of:

- 32,935 hours of workshops and trainings.
- 116,906 hours of contract education.
- 64,866 hours of performance improvement training.
- 115,146 hours of credit/non-credit instruction.

Interviewees Said Students Gained Work Experience and had Promising Academic Outcomes

In general, respondents reported that EWD improved employment outcomes for program participants. Grantees reported that EWD-funded programs placed:

- 1,135 students or trainees in jobs.
- 2,650 students in work-based learning programs, such as apprenticeships or internships.

Students' academic outcomes were promising, with students' course-passing rates[1] increasing over the life of the grant in courses identified by the CCCCO as being EWD-related. There also was an increase in the number of both CTE- and EWD-related associate degrees and certificates earned. Given that these were simultaneous increases, it is not clear if students in EWD courses did the same as those in CTE courses generally, or if, since the efforts were braided, the impact was shared.

Employers Stated that They Received Benefits from EWD Services

Employers were also recipients of EWD services and reported the program was helpful. Grantees indicated in their quarterly reports that their services led to:

- Hiring 1,498 employees.
- Retaining 7,194 employees (i.e. reducing employee turnover).
- Generating $75,430,844 in revenue.
- Achieving $99,319,944 in sales.
- Developing 75 new products.
- Creating 94 new services.

Employers surveyed noted that employers had limited awareness of EWD. Those who were familiar with EWD and those who were not both

reported a lack of knowledge about available EWD programs and services. Further signaling a need to build program awareness was the fact that employers indicated a need for services similar to the ones EWD already provided.

Grantees and Stakeholders Believed the Program was Generally to Somewhat Effective in Advancing California's Economy

EWD grantees and stakeholders alike were generally positive about the effects they perceived EWD was having on California's community colleges, employers, and workforce system. We found that:

- Nearly all (97 percent) of DSNs believed the EWD program was meeting its goal of advancing California's economic growth and global competitiveness at least "somewhat well." (47 percent reported "very well" and 50 percent reported "somewhat well").
- More than half (61 percent) of CTE deans reported that EWD had been at least "somewhat effective" in fulfilling its mission. (17 percent reported "very effective" and 44 percent reported "somewhat effective").
- All (100 percent) of the regional consortia chairs said EWD had been at least "somewhat effective" in fulfilling its mission. (29 percent reported "very effective" and 71 percent reported "somewhat effective").
- All (100 percent) of the employers that knew of EWD believed the program was meeting its goal of advancing California's economic growth and global competitiveness "somewhat well."

EWD's Strengths and Areas of Challenge

As the data above indicate, while there was general support for EWD, there also were some concerns; respondents provided information about both EWD strengths and challenges. Most of the perceived strengths stemmed from EWD's design. Interviewees believed the program's challenges were likely due to the revision of EWD structure and may be minimized as the new structure matures. The strengths were:

- EWD's ability to respond more quickly to employers' dynamic needs, which improved employer engagement with the community colleges.
- The Doing What Matters for Jobs and the Economy (DWM) framework helped connect programs with shared goals, promoted a mindset of care and service, and increased grantees' focus on the community colleges.
- The sense of camaraderie fostered by EWD among grantees and stakeholders around efforts to build regional economies and workforces.
- The explicit focus on high growth sectors that allowed grantees to target and better understand the unique job skills of specific sectors and to concentrate on those that would reap greater returns for students, workers, and regional economies.
- The building of career pathways starting in K–12 that help make workforce and economic development options more visible to students, teachers, and administrators.
- The focus on continuous improvement, an effort that will promote EWD's impact on economic and workforce development.

The challenges were:

- Lack of clarity for both DSNs and the stakeholders they work with about DSN roles and accountability.
- Complicated and poorly functioning funding and grant management mechanisms. This led to grantee frustration and time spent figuring out contract issues rather than providing services to support EWD's mission.
- Data limitations and lack of clarity on metrics. As a result, grantees struggled to understand what services should be provided and how EWD was performing.
- Lack of awareness about EWD activities and services by employers and community colleges, which affected grantees' ability to connect with employers and coordinate with stakeholders.
- Difficulty experienced by grantees in connecting with community colleges in order to meet EWD objectives. Grantees

cited CCCs' rigid structure and the colleges' lack of understanding about EWD and its lines of accountability.

- Regional boundaries, which placed some DSNs in such large regions that they couldn't consistently meet regional needs and prevented grantees from easily coordinating with stakeholder organizations in other regions. Additionally, DSNs wound up also serving adjacent regions that lacked DSNs with expertise in specific sectors.
- Lack of clarity about how regions select priority and emergent sectors and, as a result, a lack of EWD buy-in by stakeholders.

Recommendations for EWD Program Improvement

Across all participants we interviewed and surveyed, stakeholders generally believed that EWD has succeeded in contributing to a skilled and productive workforce. The structure of the program under the Doing What Matters framework is relatively new, and this is reflected in participants' statements about the program's effectiveness, impact, strengths, and weaknesses. While some of the issues highlighted will likely work themselves out as the program matures, especially given the ongoing work to address recommendations from the CCC Board of Governors' (BOG) Task Force on Workforce, Job Creation and a Strong Economy, we have identified areas that should be addressed to improve EWD's success. Many of our recommendations overlap with those of the BOG task force and include:

- Clarify grantee roles and responsibilities, while maintaining a transparent and consistent system of accountability.
- Refine funding and grant management to improve EWD efficiency.
- Improve data and metrics used for EWD improvement and accountability.
- Build awareness of EWD, particularly for employers and community colleges.
- Increase community colleges' ability to respond quickly to employer needs.
- Refine the regional focus to encourage greater collaboration.
- Formalize a structure for sector selection that promotes a thoughtful and data-driven approach.

Conclusion

EWD is an important component of the state's career technical education, or CTE, program. Using a multi-level delivery and support system and a regional and sector-specific structure, EWD works within the broader CTE-focused effort of DWM, connecting employers with educators to promote alignment of workforce development needs and community college educational offerings. EWD has experienced pains typical of a newly restructured program, such as difficulty with clarity in grantee roles, management of grants, development of a new data system, and program awareness and marketing.

Most of the recommendations for EWD improvement largely reinforce previous ones regarding CTE, including our own at EdInsights[2] and those from the BOG task force. The CCCCO began acting on the BOG recommendations, and we expect many of ours will be addressed in this process. However, some of the recommendations require support from the state legislature and from the community colleges, not just from the CCCCO.

Finally, a better understanding of the impact of EWD and other CCC programs depends on better data. The unveiling of LaunchBoard 2.0, targeted for 2017, could present opportunities for answering key questions regarding EWD outcomes and impact. Supporting further research would allow the state, the CCCCO, and the CCC system to make more informed decisions about which investments to target; what practices have the best outcomes, biggest impacts and greatest value-adds; and where outcomes and impact are less than is expected or demanded by stakeholders.

Introduction and Context: California Aims to Meet Workforce Needs

California's dynamic economy depends on having a large and skilled workforce; consequently, the state must continually support efforts to develop new workers with up-to-date skill sets ("skilling"), retrain incumbent workers for shifts in careers ("reskilling"), and build further expertise in incumbent workers ("upskilling"). Ensuring the workforce has the training to keep up with labor market demands is difficult, given the wide range of regional and state needs and the pace of economic change in many regions. At a minimum, supporting a well-trained, well-educated workforce requires an understanding of the specific knowledge and skills necessary for any given job, the development of learning opportunities that align with those needs, and mechanisms to connect workers with that training. Often, employers know best which skills are needed in the workplace, yet high school and college instructors are the ones developing and delivering the training curricula. Unfortunately, these two groups can find it challenging to work together.

The California Community Colleges' (CCC) Economic and Workforce Development Program (EWD) was first created in 1982 and became a state statute in 1991. EWD aims to support the development of a workforce that will promote California's economic development by connecting employers and educators. The 2012 legislation that reauthorized EWD (SB 1402, Chapter 361, Statutes of 2012) established a revised program that will sunset in 2018.[3] The law makes clear that EWD should have both statewide and regional strategies and lists services suitable for EWD to provide, including convening skill panels, developing instructional packages, faculty professional development, one-on-one counseling for businesses, job training, subsidized student internships in priority industry sectors, and facility renovations.

SB 1402 also outlines performance accountability measures the California Community Colleges Chancellor's Office (CCCCO) must gather, and it requires EWD's effectiveness to be evaluated. This report summarizes the findings of that evaluation.

Our report is organized as follows: first, we describe EWD's, structure and its role in the CCC system. Next, we provide an overview of the evaluation's purpose and objectives, along with its design, methodologies, and related limitations. Then, we present findings, organizing them into three broad areas: how EWD grantees execute their roles; program outcomes; and an assessment of EWD's impact and effectiveness. We then present recommendations for program improvements; these reflect both our analyses and suggestions from EWD grantees and stakeholders. We conclude with final thoughts on EWD—its impact and implications for California's workforce and community colleges.

EWD Program Structure

SB 1402 provides a broad mission, objectives, and strategies for EWD, but the program's design and execution ultimately is left to the CCCCO. In an effort to meet the requirements set out by the legislature, the CCCCO crafted EWD's specific mission to be to "invest in California's economic growth and global competitiveness through industry-specific education, training, and services that contribute to a highly skilled and productive workforce."

EWD's new structure centers around a regional- and sector-focused service delivery structure. The CCC system uses regional consortia to bring together CTE, economic development, workforce development, and contract education programs. Each regional consortium is led by a chair who participates in activities that promote

the colleges' role in advancing economic growth. This regional focus means that EWD services are tailored specifically to each of 15 unique geographic regions of California. These areas are shown in Figure 1. In contrast a statewide focus treats the rural Mother Lode the same as urban Silicon Valley. Moreover, rather than focusing on all sectors of the economy, EWD selected 10 high growth sectors, also shown in Figure 1.[4]

EWD grantees identified these sectors of the economy as high priority due to their rapid growth, high demand for workers, and well-paying jobs. Each region selected five of the 10 sectors—three priority and two emergent—to focus on. For example, in the East Bay Region, advanced manufacturing, health, and life sciences/ biotechnology were chosen as priority sectors and advanced transportation and renewables and information and communications technology (ICT)/ digital media as emergent sectors. EWD developed a new approach to regional and sector staffing as follows (roles and services offered by the grantees are discussed further in the Findings section):

Sector navigators (SNs) serve as experts in the sectors and on community college program offerings related to those sectors. In their role, the 10 SNs coordinate and support deputy sector navigators (DSNs), who help the CCC system connect with major employers and employer groups and guide efforts to improve workforce development in their respective sectors.

Deputy sector navigators address their sectors' unique regional needs. Each of seven macro regions generally has one DSN assigned to every sector designated as priority or emergent by the micro regions. At times, however, the CCCCO provided regions with additional DSNs as needs

Figure 1. EWD Program Regions and Priority Sectors

Source: California Community Colleges' Economic and Workforce Development Website (http://cccewd.net/)

arose. For example, the CCCCO reported receiving extra funds for the global trade and logistics sector, and as a result was able to provide an extra DSN to regions that had not originally selected global trade and logistics as a priority or emergent sector. At the time of this report, there were 66 DSNs working with the community colleges, employers, and other key stakeholders in workforce training to promote EWD objectives of improving economic growth and workforce development. Working at the macro-regional level, DSNs aim to ensure alignment of employer needs, community college offerings, and career pathways.

Technical assistance providers (TAPs) provide support to help the SNs and DSNs fulfill their roles. The EWD-funded TAPs are the Centers of Excellence for Labor Market Research (CoEs), LaunchBoard, contract education, and communications/meetings. The seven CoEs serve their macro region by providing SNs and DSNs with labor market information to support data-based decision making. LaunchBoard is a data system that tracks the progression and outcomes of CCC career technical education (CTE) students, with the goal of supporting conversations about student success and continual program improvement. Contract education is supported privately by employers rather than through state funds, with community colleges providing training to employers' workers; this generally allows for training to be developed quickly and for the specific needs of the employer. Communications/meetings provide support for organizing EWD grantee meetings and events.

Industry-driven regional collaboratives (IDRCs) are short-term (two years or less) projects that address specific regional workforce needs. IDRC directors may have other roles in the CCC system, such as being EWD SNs. Currently, there are 12 IDRCs.

EWD plays a key role in the CCC's Doing What Matters for Jobs and the Economy (DWM) initiative. This initiative incorporates several CTE efforts of the CCC, such as the state-funded Career Technical Education Pathways Program (SB 70, Chapter 433, Statutes of 2012), the federal Carl D. Perkins Career and Technical Education Act of 2006, and state-funded apprenticeship programs. DWM's stated goal is to "supply in-demand skills for employers, create relevant career pathways and stackable credentials, promote student success and get Californians into open jobs." The CCCCO, in implementing EWD, integrated it into the larger DWM initiative.[5] The impact of using the DWM framework for EWD is discussed in the section on EWD strengths.

DWM Framework

1. Give priority to jobs and the economy.
    - Consider labor market needs when making budget, course, and program decisions.
    - Decide on program capacity as a region.
2. Make room for jobs and the economy.
    - Retool programs that are not working or meeting a labor market need so that students can study what matters.
3. Promote student success.
    - Adopt common metrics and skills panels in grants administered by the CCCCO.
    - Strengthen regions with new skill sets.
4. Innovate for jobs and the economy.
    - Solve complex workplace training needs so that the community college system can better deliver to employers and sectors.

Overview of Evaluation Methodology and Data

The evaluation took eight months. During that time, we created interview and survey instruments, developed a sampling plan, collected new data, received access to existing data files, transcribed interviews, and analyzed all data in an effort to answer research questions posed by the CCCCO (see Appendix C for the list of research questions). To inform the program evaluation, we analyzed qualitative data using content analyses to uncover dominant themes. Quantitative data were examined using descriptive statistics. We were unable to use inferential statistics due to data limitations (see text box for an overview of the data; see Appendix B for details on the evaluation methods and data).

While we were able to gather rich information from EWD grantees, we faced significant barriers in other aspects of the evaluation. The quick timeline of this evaluation limited our capacity to gather information from stakeholders. The design of EWD and our lack of access to relevant data forced us to make many concessions in reporting outcomes.

Estimating the impact of a program is difficult under any circumstances. In this instance, it was not possible to quantify causal impacts. First, participant-level data on EWD service recipients did not exist. Second, we could not randomly select and assign which students, faculty, staff, deans, grantees, and other participants and stakeholders would receive or be influenced by program services. Third, we only had access to aggregate data and not student-level data; there is no way to identify "EWD students" (or a comparison group of non-EWD students) in the CCC's data system, as EWD funds are not directed to specific programs or students but rather are integrated with other funding sources to support CTE programs more generally. Given these limitations, our findings should not be interpreted as impacts or effects of EWD. However, we do report perceptions of impact throughout the qualitative findings.

Data sources

DSN interviews (n=25)
SN interviews (n=10)
TAP: CoE director interviews (n=7)
TAP: IDRC interviews (n=3)
TAP: LaunchBoard interview (n=1)

DSN survey (n=41)
Regional consortia chair survey (n=8)
CTE deans survey (n=21)
Employer survey (n=40)

CCCCO Management Information System data
EWD grantees' quarterly reports (n=97)

Findings

This evaluation aimed to understand not only impact, but the processes by which EWD executed its mission. In this section, we discuss our evaluation findings. First, we discuss how EWD grantees executed their roles to meet program objectives. We focus on grantee roles, the services and activities they provided, how they coordinated with each other and non-EWD stakeholders, how they used their funding, and how they used data. Next, we present perceived outcomes for students, employers, and education and workforce organizations. We conclude with an assessment of EWD strengths and areas of challenge.

How Grantees Aimed to Meet Program Objectives: Roles, Services, Coordination, Funding, and Data Use

The following findings show how EWD grantees aimed to meet program objectives. We analyzed the grantees' roles, the services and activities they provided, how they coordinated with each other and with other EWD stakeholders, how they integrated funding from non-EWD sources, and how they used student data and labor market information. Our main findings were:

- Roles. DSNs were seen as most important in providing services, with their primary focus being (1) connecting employers and community colleges and (2) assisting in aligning curriculum.
- Services. Grantees, including DSNs, provided 2,577 services to employers and community colleges in 2013–14 and served 13,723 employers, 41,252 students, and 38,486 employees.
- Collaboration. Coordination occurred intentionally and frequently among EWD grantees and between EWD grantees and other EWD stakeholders.
- Funding. Grantees report braiding various funding sources in support of economic and workforce development.
- Data use. Grantees reported trying to use data to support decision making, but struggling to do so due to a lack of current, relevant, and accurate data.

Roles

EWD focused on 10 priority sectors and aimed to support economic development by delivering services regionally. As such, each priority sector had a statewide lead, the SN. Each of the seven regions selected sectors to focus on. The sector leads in a region were the DSNs. CoEs provided labor market information and supported labor market research efforts with and for EWD. Four TAPs provided support to different aspects of the program, such as for contract education or LaunchBoard. Finally, IDRCs focused on providing a specific program to support workforce development and training. In this section, we discuss the roles of each of the EWD grantees. Specifically, we describe the nature and quality of services provided to colleges, businesses, students, and employees. We begin with DSNs, who most directly deliver services to EWD stakeholders.

Deputy sector navigators focused mainly on connecting employers and community colleges

DSNs described their main purpose as increasing economic development and helping the economy of their regions through workforce training. They accomplished this by identifying workforce needs, recruiting students and workers for training, and working with community colleges to develop employer-valued workforce training. DSNs reported spending about 50 percent of their time on EWD (SB 1402) activities, 30 percent on CTE pathways (SB 1070) activities, 10 percent on host college tasks, and 7 percent on other activities, such as responding to emails and attending trainings. They reported that they spend, on average, 48 percent of their time working on industry activities, 42 percent on

college activities, and 10 percent on outreach to relevant organizations and high schools. Their work focused mainly on connecting employers and colleges, and on aligning curricula with workforce needs. They also spent significant time helping to advance career pathways. The DSNs reported spending time as liaisons among community colleges and serving as legislative advocates. These roles are described in greater detail below.

Connecting employers and community colleges

DSNs said their most important role was as active liaisons between the community colleges and the employers in the regions and sectors they covered. They reported connecting employers and colleges in three main ways (see Table 1):

- Building relationships between businesses and colleges by acting as intermediaries and connectors.
- Helping employers navigate community colleges in the region.
- Placing community college students into jobs.

They described meeting directly with employers to understand their labor needs (with 28 percent of their time spent building relationships with businesses and 18 percent spent providing technical assistance to businesses) and meeting directly with community colleges to communicate these needs. DSNs also reported facilitating conversations between employers and community colleges around workforce development. CTE deans saw the role of the DSN as the most useful support provided by EWD for its CTE programs.

For regions with multiple community colleges, DSNs also helped employers understand programs available in each region, so that employers wouldn't need to seek the information college by college instead. For example, DSNs reported developing curriculum committee teams to ensure consistency across the region. Unlike the regional consortia, these teams aimed to ensure that similar programs across the region provided comparable training so employers could understand a program graduate's skill set. Another DSN reported developing marketing materials for the region's community colleges. Serving as liaisons between employers and community colleges, DSNs also reported placing students into jobs. Aware of the skill

Table 1. Percent of DSNs Believing Their Services Contributed to a Highly Skilled and Productive Workforce

To Colleges		To Businesses	
Building relationships with business/ industry	92%	Connecting with colleges and education	95%
Providing professional development for faculty	81%	Providing professional development for workers	86%
Providing technical assistance to business/industry	75%	Aligning business sector with education	78%
Developing new and/or revising programs of study	58%	Providing assessments (such as business needs, technology needs, manufacturing process capability)	60%
Providing research and studies	55%	Providing research and studies	50%
Developing new and/or revising courses	47%	Creating small businesses and/or exporting modules	32%

Source: EWD Program Evaluation Survey of DSNs.

sets being developed by the programs in their sectors and regions, and aware of the demands of employers, DSNs found themselves well-positioned to help students with career placement. In their role as DSNs, they felt they represented both industry and the community colleges.

Aligning curricula

Using the expertise built from their relationships with employers, DSNs noted that one of their top services was aligning community college and employer needs. In this role, DSNs helped match curricula for students with employer-valued competencies by:

- Working collaboratively with faculty to update and revise curricula and programs.
- Providing needed resources, such as equipment, professional development, and funding, directly to faculty and departments.

Forty-seven percent of DSNs reported that guiding the development of new and/or revised courses was a very important part of the services they provided to contribute to building a highly skilled and productive workforce (see Table 1). Of the CTE deans surveyed, 56 percent said EWD assisted them in revising and improving program curricula, 44 percent said EWD helped them create new program curricula, and 12 percent said EWD aided their elimination of outdated programs. As to the services they would find helpful in aligning curriculum, 95 percent of CTE deans surveyed listed obtaining assistance in revising and improving program curriculum, and 90 percent cited getting support to create new program curriculum. However, a small number of CTE deans said these tasks were the purview of the faculty.

DSNs also provided the community colleges in their regions with resources, including equipment, software, professional development programs, and funding. Seventy-eight percent of CTE deans surveyed said EWD grantees had positively impacted CTE programs on their campuses by supporting professional development programs for faculty and staff.

Offering trainings

DSNs frequently mentioned that a key service they provided was training for instructors, students, incumbent workers, and employers. Their overall goal was to increase economic growth through workforce development, and the training content varied depending on the groups being targeted. Examples include training targeted for:

- Instructors focused on how to teach a new industry certification.
- Students seeking to develop soft skills.
- Incumbent workers asked by employers to acquire job upskilling.
- Employers hoping to grow their footprint in the region or internationally.

DSNs' work as trainers resonated most with CTE deans, who consistently noted that EWD supported professional development for faculty and staff. Deans rated improving students' preparation for jobs in their chosen fields of study as the most important skill the deans would like to improve (95 percent rated student job preparation training as "very important"; 5 percent as "important"). The deans also highly rated increasing support for students to receive more up-to-date job training and greater proficiency with current technology.

Advancing career pathways

DSNs generally stated that they helped advance career pathways from middle school to community college in two ways: (1) by working with faculty to develop curricula and (2) by creating marketing materials to build awareness of career pathways. With regard to developing curricula, they reported working with faculty at all grade levels to create curricula that promoted entry to career fields in each sector the DSNs represented. The DSNs brought together faculty from different educational levels to collaborate on creating connected pathways and formal articulation agreements. In building awareness, DSNs described information sheets that they created about jobs in their sectors. These marketing materials were used to help students beginning

in middle school to understand their career and training options and to help faculty, counselors, and advisors guide students more successfully.

Acting as liaisons among community colleges

In addition to connecting employers with community colleges, DSNs sought to facilitate collaboration among California's community colleges. DSNs said they aimed to use their knowledge of program offerings across their regions to share information among community colleges. This included information sharing about curriculum and course offerings for faculty.

Being legislative advocates

Less often, DSNs mentioned their role as policy advocates for community colleges and for their regions' sectors. Attending legislative hearings and providing feedback on bills were two activities grantees consistently reported.

Sector navigators served as experts on their sectors' needs

Sector navigators saw their role as identifying the needs of their sectors concerning sector growth and the need for skilled employees. The SNs sought to do this by:

- Being expert resources for employers, community colleges, and DSNs about sector needs by convening interest groups and working with major employers to build networks.
- Guiding and supporting DSNs through the provision of resources and information inaccessible to DSNs.
- Increasing employer awareness of the role of community colleges in workforce training through holding one-on-meetings, developing marketing materials, and attending industry events.

Industry-Driven Regional Collaboratives Focused on Specific Projects

IDRC directors described their role as ensuring success in their specific workforce training projects. However, these projects were not closely connected to the core functions of EWD's SNs and DSNs. IDRC directors interviewed also held other roles, such as SNs, which they seemed to view as their primary responsibility, as they only discussed their IDRC role when specifically prompted.

Centers of Excellence provided labor market information to grantees

CoE directors identified their role as providing technical assistance and labor market research to the California Community Colleges and EWD grantees in their regions. They sought to understand the needs of their regions by taking requests for assistance from the groups and individuals they supported and by surveying their colleges.

As labor market experts, they conducted employer surveys and focus groups and led marketing research efforts for the colleges. The goal of their analyses was to understand employment opportunities for community college students and to examine employer workforce needs.

As technical assistance providers, the CoE directors assisted faculty, CTE deans, regional consortia, EWD grantees, and other Doing What Matters for Jobs and the Economy grantees in understanding labor market information to help them close skills and training gaps. To this end, the CoE directors held workshops, presentations, and individual sessions. Their audiences were representative of the variety of stakeholder groups across these directors' regions.

LaunchBoard aimed to provide data in support of accountability and program improvement

The technical assistance providers developing LaunchBoard said their role was building a data system that will allow community colleges to have data-based conversations about the effectiveness of CTE programs, as well as make decisions based on data to improve

student outcomes both in college and in the labor market. LaunchBoard worked across CTE, including EWD, to understand data needs and provide training on using the system.

Services and Activities

In their roles described above, EWD grantees reported providing 14 different services to colleges and employers (see Tables 2 and 3 for a breakdown of all services provided by EWD grantees). In total, EWD grantees:

- Provided 2,577 services to colleges and businesses.
- Served 13,723 businesses, 41,252 students, and 38,486 employees.

These services were comprised of:

- 32,935 hours of workshops and training.
- 116,906 hours of contract education.
- 64,866 hours of performance improvement training.
- 115,146 hours of credit/non-credit instruction.

We found that the grantees were active in terms of the quantity and breadth of services they provided to colleges, students, employers, and employees. While there was a slight variation in the quantity of services provided by sectors and regions, we did not find any consistent differences that would suggest one sector provided significantly more or different services than another. However, variation was present in the types of services each grantee provided.

Table 2. Total Grantee Services to Colleges – Number of Times Grantees Provided Each Service

Grantee	Develop & Align Curriculum	Curriculum Alignment	Certificate & Program of Study Development	Career Curriculum Articulation	Faculty Professional Development	Connect to Businesses and/or Industries	Research & Studies
DSN	186	103	142	117	214	245	134
SN	37	13	17	20	38	43	23
CoE	0	0	0	0	0	0	22
IDRC	22	19	9	11	9	28	1
Contract Ed	0	0	0	0	1	1	0
Weighted Average	134	75	101	84	152	176	96
Quarterly Average	22	12	17	14	36	29	16
Total	245	135	168	148	262	317	180

Source: 2013–2014 Grantee Quarterly Reports.

Table 3. Total Grantee Services to Businesses – Number of Times Grantees Provided Each Service

Grantee	Develop Curriculum for Business	Alignment of Sector with Education	Needs Assessment	Small Business Creation and/or Exporting Modules	Professional Development for Workers	Connect with Colleges and Education	Research
DSN	97	149	159	49	130	223	96
SN	15	27	22	9	15	32	11
CoE	0	0	0	0	0	0	4
IDRC	9	8	13	0	16	23	0
Contract Ed	0	0	0	0	1	1	0
Weighted Average	69	106	113	35	93	160	67
Quarterly Average	12	18	19	6	15	27	11
Total	121	184	194	58	162	279	111

Source: 2013–2014 Grantee Quarterly Reports.

Different grantees offered a variety of services

In total, EWD grantees provided 2,577 services to all types of recipients. The most common services connected employers and colleges (402 services per year)[6] , conducted professional development (306 per year), and aligned curriculum and sectors (208 per year). SNs and DSNs provided the most services per grantee, 5.7 and 5.2 each quarter, respectively (see Table A-1).

The most common services DSNs and SNs provided to colleges were connecting them to businesses, conducting faculty professional development, and developing and aligning curriculum (see Tables 2 and 3). The most common services given to employers were helping businesses connect to colleges, assessing business needs, and connecting the business and education sectors (see Tables 3). DSNs provided the greatest number of services of all grantees, even when taking into account the large number of DSNs.

In fiscal year 2013–14, IDRC grantees provided 99 services, and the most common ones were similar to those offered by DSNs and SNs. But instead of providing professional development to colleges, IDRC grantees aligned curricula with a third party, such as state licensing boards or industry credentialing standards. Still, the bulk of the grantees' work in 2013–14 was conducting credit/non-credit classes and teaching 1,949 hours. Those teaching hours are still less than those provided during the same year by DSNs and SNs.

The two grantees that offered the most focused services were CoE (22) and contract education (4) grantees. CoE grantees focused on offering research services, while the contract education grantees aimed to provide professional development and to connect colleges and employers. However, the contract education grantees taught the highest average number of hours (5,597) and served half the employees who received EWD services.

The number of services offered varied by sector, less so by region

While most services each sector provided tended to fall into the three main categories—connecting employers and colleges, providing professional development, and aligning curriculum and sectors—some variation among sectors was present (see see Appendix A, Table A-5).

The advanced manufacturing sector provided the highest average number of services for curriculum alignment and for connecting colleges with employers, as well as for developing curriculum for businesses and conducting needs assessments. This sector also had the highest average and highest total number of workshop completions and of hours for contract education, credit/non-credit courses, and performance training. With the exception of performance training, the advanced manufacturing sector was responsible for over 90 percent of the combined hours worked by EWD grantees. The advanced transportation and renewables sector had the highest average number of services for providing research to colleges and professional development to employers. Lastly, the health sector had the highest average number of services for professional development that were used by colleges and to connect employers with colleges.

Some sector grantees were more productive than others. Both the health and the energy and utilities sectors provided the highest number of services per grantee, an average of 35. The global trade and logistics sector had one of the highest numbers of grantees among the regions (11), and the smallest number of services per grantee (27).

Given that the DSNs are located throughout California in 15 micro regions and seven macro regions, we examined regional differences (see Appendix A, Table A-6) in terms of the services they provided. We found that the number of services provided by region did not vary as much as it differed by sector. The South Central Coast provided the highest number of services per DSN (37) and also the highest average for seven different kinds of services. The two regions that provided the smallest number of services per DSN were North Coast/Inland and Greater Sacramento (25), and the Mother Lode and Central Valley (20).

Coordinating Efforts Around Economic and Workforce Development

EWD grantees spent significant time and effort coordinating among themselves and with stakeholders, including workforce agencies, employer groups, and educational institutions. Regular, formal meetings were common among DSNs by region and sector, between sector SNs and DSNs, and among various stakeholders by sector and region. In general, EWD grantees found that coordinating efforts was easier with educators than with employers. Grantees reported that employer staffing turned over quickly, making it difficult to build relationships. Additionally, they reported employers were more guarded and less open to coordination efforts than were colleges. (Further details on coordination can be found in Appendix E.)

Among EWD grantees, we found that:

- SNs and DSNs worked closely with each other to advance their sector.
- DSNs in the same sector or region had strong coordination.
- Coordination between SNs and DSNs with CoEs varied substantially.
- IDRCs built coordination around a specific project.

Coordination with entities outside EWD was also viewed as a priority and was particularly strong for other partners in the DWM initiative, such as the regional consortia. We also learned that:

- Regional consortia was a key coordinating structure for regional CTE activities.

Table 4. DSN and SN Total Number of Services by Sector

	SERVICES TO COLLEGES							SERVICES TO INDUSTRY									
Sector	**Develop & Align Curriculum**	**Curriculum Alignment**	**Certificate & Program of Study Development**	**Curriculum Articulation Along a Career Path**	**Professional Development for Faculty**	**Connect to Businesses and/or Industries**	**Research & Studies**	**Develop Curriculum for Business**	**Alignment of Sector with Education**	**Assessments (Business Needs, Technology Needs, Manufacturing Process Capability)**	**Small Business Creation and/or Exporting Modules**	**Professional Development for Workers**	**Connect with Colleges and Education**	**Research**	**Total Services**	**Average Services**	**Percentage of Total Services**
Advanced Manufacturing & Advanced Technology	20	26	21	5	23	41	14	22	18	28	8	23	35	6	290	32.22	12%
Advanced Transportation & Renewable Energy	16	7	13	6	18	19	14	11	14	11	1	17	18	6	171	34.20	7%
Agriculture, Water & Environmental Technology	20	13	19	15	24	22	12	6	17	12	0	9	16	7	192	32.00	8%
Energy (Efficiency) & Utilities	13	6	9	14	13	17	11	5	14	11	0	8	17	2	140	35.00	6%
Global Trade & Logistics	24	6	15	13	33	35	15	19	25	26	18	19	29	24	301	27.36	13%
Health	32	17	18	19	50	49	26	16	33	27	1	37	48	16	389	35.36	16%
Info & Communication Technologies/ Digital Media	38	17	31	29	34	37	23	9	21	20	1	10	37	13	320	29.09	13%
Life Sciences / Biotechnology	12	3	4	10	9	12	8	1	3	4	1	7	9	0	83	27.67	3%
Retail/Hospitality/ Tourism	12	7	4	3	13	18	11	8	12	12	0	7	16	11	134	33.50	6%
Small Business	36	14	25	23	35	38	23	16	21	33	28	9	32	26	359	29.92	15%
Total	223	116	159	137	252	288	157	113	178	184	58	146	257	111	2379	31.30	100%

Source: 2013-2014 Grantee Quarterly Reports.

- EWD grantees built on existing relationships and developed new employer relationships to coordinate workforce training.
- Linking SB 1070 and AB 1402 funds drove EWD coordination with K–12.
- CCCCO both supported and unintentionally impeded coordination through its management of grants.
- Successful coordination at community colleges hinged on several factors beyond the control of grantees.
- EWD grantees and workforce organizations regularly coordinated, but diverging performance metrics were a barrier.

Funding

EWD grantees braided together other funding sources to support economic and workforce development. Receiving SB 1070 funds or working with SB 1070 teams was commonly noted by DSNs. These funds supported DSNs' efforts to promote the sectors in their regions' K–12 career pathways. DSNs expressed that they felt successful in their work to support career pathways. They reported using Proposition 39 and CTE Enhancement Funds to pay for community colleges to collaborate together, create professional development programs, and fund equipment upgrades. One DSN noted using federal funds to pay for one-on-one training for business leaders (e.g. prepping for a trade show). CoE directors reported receiving funding from the federal Workforce Innovation and Opportunity Act (WIOA) and from California CTE Enhancement Funds. The WIOA funding supports the regional partnerships between state Workforce Investment Boards and community colleges. CoE saw CTE Enhancement Funds as an opportunity to acquire additional funding that was not for a specific task.

Data Use

SNs and DSNs reported trying to use data to help inform their decisions about services to offer and that their most common source for labor market reports were the Centers of Excellence. They most frequently accessed data to:

- Understand market trends (88 percent).
- Understand basic demographics (85 percent).
- Decide whether to add a new program (78 percent).
- Revise a program (70 percent).

According to DSNs, however, not all the data they accessed was useful in their decision-making. Most DSNs (97 percent) found CoE reports useful, while 32 percent found LaunchBoard useful (see Table 5). In interviews, grantees indicated that LaunchBoard's goal of providing student-level data to help understand student progress would be useful, but most grantees expressed frustration that LaunchBoard had struggled with data accuracy and lack of data usability.

Mixed perceptions arose about the usefulness of Centers of Excellence labor market research

SNs and DSNs reported using labor market information provided by CoE, and 97 percent of DSNs found CoE reports to be useful, but grantees interviewed also provided critical feedback on how the data's utility could be improved. It appears that some individuals at CoE were more adept than others at working with SNs and DSNs to understand their needs and deliver analyses to address those needs. SNs and DSNs said that some CoEs were unable to provide useful information or were not able to market their services well enough for SNs and DSNs to understand the usefulness of this assistance.

Table 5. Data Sources Rated as Useful or Somewhat Useful by DSNs

LaunchBoard	MIS	DataMart	Burning Glass	TAP research and reports
32%	50%	58%	62%	97%

Source: EWD Program Evaluation Survey of DSNs (n=38).

SNs and DSNs who did use CoE services reported being very satisfied with the data they received. They also said that when existing data were not sufficient, CoE worked with them to create and administer original surveys to provide them with the information they needed. They described how CoE information helped them identify labor market needs (including shortages and necessary skill sets) and to assist faculty and deans in reviewing curricula in relation to labor market needs. CoE reported that its reports led to improvements in hundreds of community college classes.

Those who identified challenges with CoE data highlighted the difficulties of obtaining data specific and recent enough to be actionable. Other data challenges included a lack of labor market data for EWD sectors not aligned with federal Standard Occupational Classification codes and problems capturing data for self-employed workers.

LaunchBoard's flawed introduction left grantees disengaged

EWD grantees reported that LaunchBoard was introduced prematurely, leaving grantees cynical about its usefulness. The premature launch revealed problems with the data system, including:

- The system was difficult to navigate.
- Some data were incomplete, dated, or irrelevant to EWD.
- The way the data were aggregated limited the analyses they could conduct and questions they could answer.
- The coding of courses was not aligned with grantees' understanding of CTE and EWD courses.[7]
- DSNs were responsible for entering data they could not access.
- Data definitions were unclear.
- DSNs did not have enough time to input data.
- DSNs had inadequate LaunchBoard training.
- The data's usefulness to SNs and DSNs was unclear.

For these reasons, DSNs almost universally said they did not use LaunchBoard. They acknowledged that LaunchBoard was a work in progress, but were hesitant to spend their limited time to log back in until it was fully developed. Others were discouraged because they had attended multiple trainings and heard LaunchBoard would be functioning soon, but were still waiting. SNs were particularly negative about LaunchBoard as a resource. They described it as not worth the money and time, particularly the time DSNs would have to spend inputting data.

Grantees looked for other data, but had unmet needs

Most grantees reported depending solely on the data provided by EWD and the colleges. Some DSNs, however, went directly to government sources of data, such as the U.S. Department of Labor, the U.S. Department of Commerce, the California Employment Development Department, and government sector-specific sources (e.g. the Visit California website for tourism data). DSNs also said they sought and received data from their employer partners.

In terms of their unmet data needs, EWD grantees stated that they needed better information to help community colleges determine what courses to offer or revise based on labor market changes. They indicated that many colleges seemed more concerned about generating revenue rather than improving the workforce. DSNs said data on labor trends and about workforce training needs could help them encourage the colleges to make curriculum changes.

Secondly, DSNs reported needing better information to understand their impact on economic and workforce development. About 70 percent said they need more data—data to specifically help them answer questions about student labor market and industry outcomes (e.g. earnings and hiring) related to the DSNs' own work.

Perceived Outcomes for Students, Employers, and Workforce Entities

In the 2013–2014 fiscal year, EWD grantees reported that 41,252 students received services. While we cannot conclude that these services helped students attain better educational outcomes, we found students performed better during this same time period. Students passed courses at higher rates, and more certificates and degrees were awarded.[8] Similar to these students, grantees reported that employers who received EWD services experienced positive outcomes. Employers surveyed who knew of the EWD program stated that they found EWD services to be useful. Yet many of the employers surveyed were unaware of the services EWD provided.

Perceived Student Outcomes

In their quarterly reports, EWD grantees reported that they placed:

- 1,135 students or trainees in jobs.
- 2,650 students into work-based learning programs, such as apprenticeships or internships.

In surveys and interviews, SNs and DSNs said their main outcome was improving students' job prospects. Grantees also said students were more aware of their career options. They claimed this was mostly due to their efforts at the high school level to market their sectors. However, half of CTE deans surveyed indicated that students were more interested in programs in specific sectors that EWD targets. This may be due to the marketing efforts of EWD, or to the growing popularity of EWD sectors that are growing and involve higher-earning and higher-demand fields. While we did not have student evidence to validate grantee perspectives, other data indicate that changes were occurring at the community colleges. For example:

- Full-time-equivalent student (FTES) enrollment was declining in CTE courses in the community colleges, and these declines also were reflected in courses identified as being in EWD sectors (we will refer to these as "EWD courses").[9]
- Students achieved higher passing rates in EWD and CTE courses.
- Students earned more associate degrees and certificates in EWD-related and CTE fields.

FTES' Enrollment in CTE Courses Dropped

Over the past few years, the number of FTES in EWD courses has dropped (see Appendix A, Tables A-7 and A-8), with a 12.8 percent decline between 2010 and 2015. This decline mirrors CTE enrollment, as CTE experienced a 12.7 percent enrollment decline during the same time period. The ICT/digital media sector experienced the largest loss, 13,191 FTES (a 19 percent decrease), between 2010 and 2015. The advanced transportation and renewable energy sector had the smallest percentage loss at 6.1 percent, or a decrease of 875 FTES. Community college FTES enrollment dropped overall during those years with a 7.3 percent decline.[10]

Passing rates increased for EWD courses

We did not have data on the competencies attained by EWD participants, but we did have data on students' course passage rates. We used this as a proxy for workforce competency, since a passing grade indicates a proficient level of skill in the course completed. To create this category of proficiency, we included students who had achieved a grade of C or higher or passed a pass/fail course. From 2010 to 2015, the passing rates for EWD courses increased modestly by 2 percent. But upon further examination, we found that students in CTE fields that were not related to EWD sectors received better grades than students taking EWD courses. The course passing rate for students in CTE fields not related to EWD sectors in 2013–2014 was 81 percent (and had increased by 1.4 percent since 2010). The same year, the average passing rate for those in EWD courses was 74 percent.

EWD program awards increased

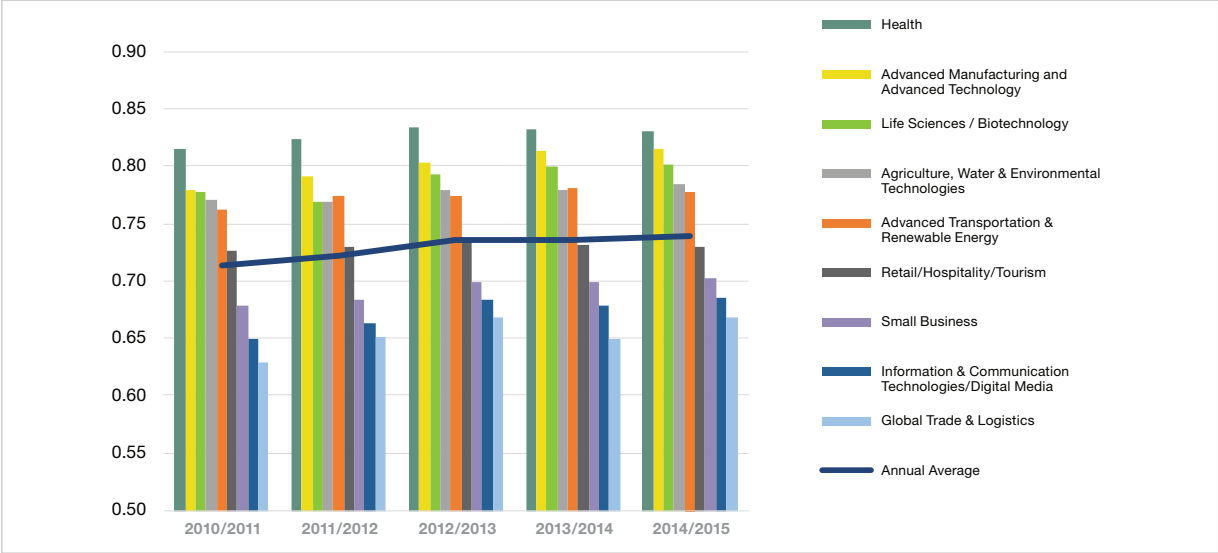
Program completion is another measure of student success. While we did not have data on students' rate of completing CTE programs, data on the number of degrees and certificates awarded indicated that since 2010, the number of chancellor's office-approved awards in EWD-related fields increased each year.[11] In fact, 22 percent (or 9,446) more awards were granted in 2014–2015 than in 2009–2010. We focused on the 2013–2014 school year, since it was the first year the DWM framework was implemented. During that year, 51,032 awards were granted. Of those awards, the majority were AA degrees (52 percent), with certificates accounting for the remaining awards. Of those awards, small business accounted for the most AA degrees awarded (39 percent). Health awarded the second most degrees (32 percent). Interestingly, health was the only sector to experience a decline in the number of AA degrees awarded. All other sectors—except for life sciences/biotechnology, in which the number of degrees awarded stayed relatively flat—experienced an increase in AA degrees awarded. Of the certificates earned in 2013–2014, 46 percent required 30 to 60 semester units (one to two years, if the student was full time), and 42 percent required 18 to 30 semester units (one semester to one year, if the student was full time). Only 4 percent of certificates earned required more than 60 semester units. We saw similar trends for awards in non-EWD CTE fields. Over the past five years, students have been earning more degrees, with the majority being AAs, followed by 30–60 unit and 18–30 unit certificates.

We cannot make causal claims that EWD helped students earn more degrees, but CTE deans reported that EWD funding had impacted student completion rates. Sixty-seven percent of the CTE deans said students were "very much" or "somewhat" more likely to complete their programs of study because of EWD funding.

Transfer and employment outcomes were unknown

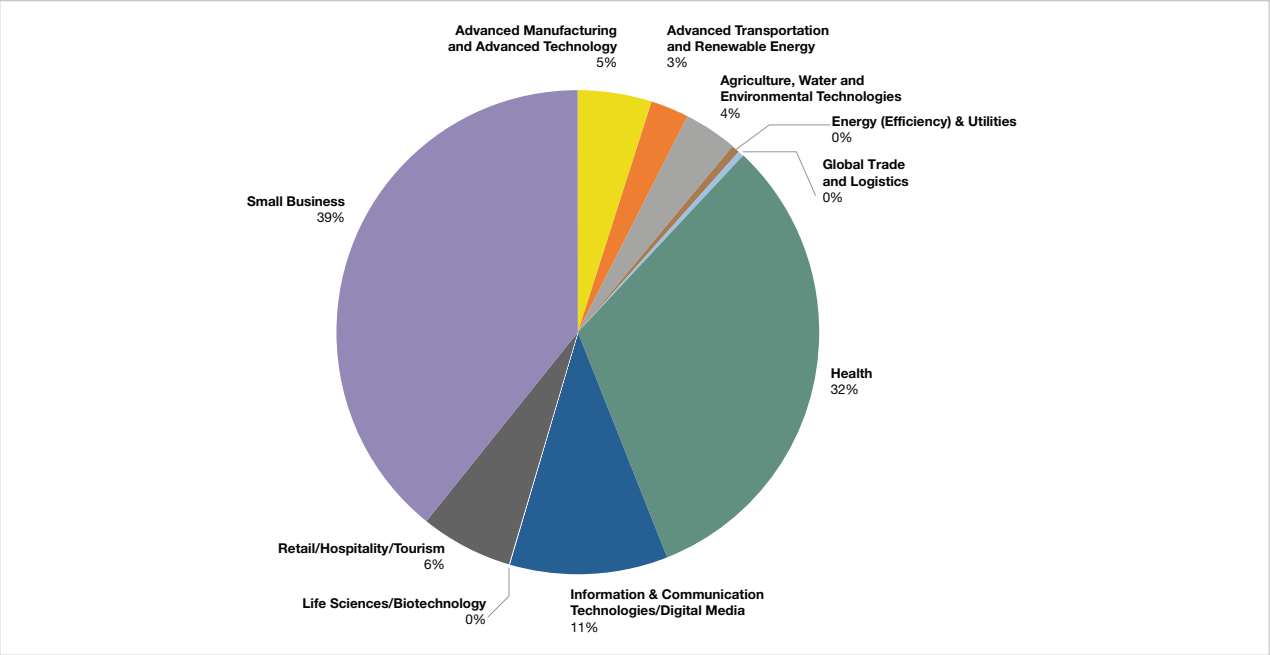
We do not know how many EWD participants were either transfer-ready or transferred to a college, since the Perkins IV Core Indicator[12] data on these two outcomes were not available for the academic year we assessed. While transfer data were available on DataMart, we were unable to isolate our proxy for the EWD student population.

Figure 2. Passing Rate for EWD Courses



Source: CCCCO MIS Data Mart.

Figure 3. 2013-2014 Associate Degrees Awarded



Source: CCCCO MIS Data Mart.

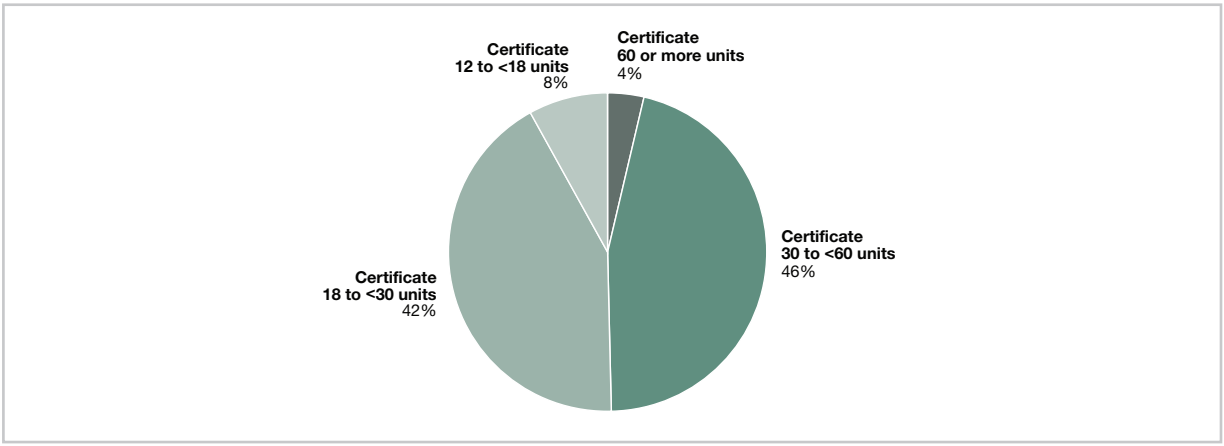
Since these data were unavailable, we also could not estimate how many student EWD participants entered employment. In their quarterly reports, grantees indicated that 1,135 people were placed in jobs. Furthermore, we did not have access to recent wage data collected by the CCCCO. The last reported year for wages earned by students who received a degree was 2008–2009, significantly before the implementation of SB 1402.

Perceived Impacts on Employers

Employers received a wide range of EWD services. Grantees reported in their quarterly reports that these services led to:

- Hiring 1,498 employees.
- Retaining 7,194 employees (i.e. employees not leaving).
- Generating $75,430,844 in revenue.
- Achieving $99,319,944 in sales.
- Developing 75 new products.
- Creating 94 new services.

Figure 4. 2013-2014 EWD-Related Certificates Awarded



Source: CCCCO MIS Data Mart

Most employers unfamiliar with EWD; however those that were familiar found EWD services useful

Thirty-two percent of employers who participated in our survey were familiar with or had heard of EWD. Thirteen percent of respondents had either participated in the program or received services, and all of these employers said EWD provided the training needed by industries in their region. The majority of this subset believed EWD would increase their current employees' skill sets, as well as provide services and programs responsive to their region's workforce needs. They also generally found the programs they selected to be useful. Employers reported that one of the biggest barriers they encountered with EWD was not knowing enough about the program (40 percent). Furthermore, 36 percent of employers believed EWD services did not align with their business needs. However, they did identify the services they would find useful to receive, including training for their employees and aligning community college courses to their business needs (see Appendix A, Table A-9). This demonstrated that employers were unaware of what EWD provides, as those were two services EWD already offered to employers.

Perceived impacts on education and workforce entities

EWD grantees and stakeholders were generally positive about the perceived effects of EWD on community colleges, employers, and California's workforce system. We found that:

- Nearly half (47 percent) of DSNs believed EWD was meeting its goal of advancing California's economic growth and global competitiveness "very well," and 50 percent reported EWD was meeting its goal "somewhat well."
- Among CTE deans, 17 percent reported that EWD had been very effective in fulfilling its mission, and 44 percent reported EWD had been somewhat effective.
- Of the regional consortia chairs, 29 percent reported that EWD had been very effective in fulfilling its mission, and the remaining 71 percent stated that EWD was somewhat effective.
- All (100 percent) of employers who participated in our survey and were aware of the EWD program said EWD was meeting its goal of advancing California's economic growth and global competitiveness "somewhat well."

Analysis of EWD Strengths and Challenges

Our analysis found that EWD had many strengths and several challenges. The strengths often stemmed from the program's design. EWD also had challenges, likely related, in large part, to the program's new structure. They may be minimized as the program matures.

EWD Strengths

Many of the strengths of the program stem from the design of its structure and focus on building relationships. According to grantees, EWD's primary strengths were:

- Improved employer-college connections through quick response to employers' needs.
- Strategic planning, a mindset of care and service, and more interaction with community college activities through DWM framework.
- Fostering camaraderie between grantees and stakeholders to build economies and workforces.
- Explicit focus on high growth sectors to better target job skill needs.
- Constructing and increasing the visibility of career pathways in K–12.
- A goal of continuous improvement through metrics and workshops.

Improved employer-college connections through quick response to employers' needs
Grantees noted that EWD was responsive to employer needs, both long term and short term. Since those needs are dynamic, grantees stressed that they must be able to move quickly to assist. While they frequently could not respond as fast as employers desired, grantees said they were more responsive to employers than were the community colleges, and therefore played a key role in connecting their sectors' colleges with businesses seeking workers with the right skills.

Strategic planning, a mindset of care and service, and more interaction with community college activities through DWM framework
EWD grantees felt the Doing What Matters for Jobs and the Economy program, with its goal of closing the skills gap by preparing students to enter and stay in the job market, provided a much-needed strategic framework that helped them organize and prioritize their objectives, an emphasis on thoughtful planning, care and service for their regions, and encouragement to cast off ineffective practices. Grantees also noted that employers were more responsive to being involved in a project titled "Doing What Matters for Jobs and the Economy." The grantees also approved of the shift in EWD's emphasis from economic development, business growth, and incumbent workers to faculty development, curricula, and student success.

Fostering camaraderie between grantees and stakeholders to build economies and workforces
One of the biggest strengths noted about the EWD program was the people. Grantees and stakeholders alike appreciated the camaraderie fostered by EWD that was creating a partnership of individuals and groups working together to build regional economies and workforces. This focus on teamwork to improve outcomes was singled out as a driving force in EWD.

Explicit focus on high growth sectors to better target job skill needs
Grantees reported that EWD's focus on key sectors to target and better understand the unique job skills those sectors require enabled them to reap greater returns for students, workers, and regional economies. They felt this approach, compared to placing a broad focus on CTE in its entirety, led to better outcomes.

Constructing and increasing the visibility of career pathways in K–12
Grantees said that EWD provided a plan that made connecting with K–12 students, especially those in middle and high schools, a priority. This plan included promoting career awareness to adolescents, reaching out to their teachers, counselors and principals, and other activities to build pipelines from K–12 to higher education and to the workplace. The linking of other grants, like SB 1070 and California Career Pathways Trust funds, further allowed EWD grantees to spend time coordinating with high schools about workforce development.

Goal of continuous improvement through metrics and workshops
Grantees underscored the importance of EWD's focus on continuous improvement, saying the program's structure was new and would continue to require fine tuning. They said they were dedicated to examining metrics and data to find ways to improve their work. Some grantees were holding workshops to further their skills.

Areas of Challenge

Most of the challenges we found can be traced to the newness of the EWD program structure and grantee roles. These challenges were:

- Lack of clarity about DSNs' roles and accountability, which impeded DSN-stakeholder relations.
- Complicated funding and grant management, a barrier for grantees.
- Difficult data collection logistics for grantees.

- Lack of employer and community college awareness about EWD activities and services.
- Community colleges' rigid structure, a barrier to grantees' objectives.
- A strict regional focus, complicating DSNs' ability to adequately serve.
- Frustration over the selection process for priority and emergent sectors.

Lack of clarity about DSNs' roles and accountability, which impeded DSN-stakeholder relations

While praising the flexibility of the DSN role, grantees, regional consortia chairs, and CTE deans expressed concern about the lack of clarity about what DSNs were supposed to do and to whom they were responsible and accountable. As a result, stakeholders were unsure how to work with DSNs. CTE deans said this issue was one of the main challenges facing EWD.

Hosting EWD grantees at colleges contributed to this confusion. While DSNs reported two major benefits to being located at a college—62 percent said they gained understanding about how colleges function and 59 percent of them said it enabled them to work better with their host colleges—several drawbacks existed. Almost a quarter of DSNs stated that being stationed at a host college caused the following drawbacks:

- Confusion over to whom they report.
- Limited ability to hire staff.
- Requests by the host college to complete tasks outside the grant's scope.

A handful of DSNs expressed frustration over not being able to spend money on regional work, as their host colleges would only allow them to spend money on college-related activities there. CTE deans surveyed also consistently said they saw DSNs spending significant amounts of time serving their host colleges, to the detriment of other colleges in their regions.

Difficult funding and grant management, a barrier for grantees

EWD grantees expressed frustration over how grant funding was managed, citing:

- Differences in policies and procedures for each community college that hosts or manages a grant or sub-grant contract.
- Inconsistencies and errors in grant paperwork.
- Inconsistencies in work plan approvals across grantees.
- Different reporting requirements and processes for the variety of CCCCO-managed grants.
- Late receipt of grant paperwork and funds.
- Single-year grants that require re-application each year.

EWD funds must be distributed by a host college and were overseen by the CCCCO.[13] Each host college had different processes for hiring, spending, and reporting, and grantees reported that CCCCO grant staff were inconsistent in their management of grants. Grantees also found it frustrating to receive funding through host colleges. This method forced them to maneuver through multiple processes—each school has its own—for receiving these funds. Moreover, when the grantee provided supports for another college in the region, the grantee had to go through the contracting process with two colleges – the host college plus the other college in the region that was receiving support. The CCCCO additionally had different reporting requirements for each grant, so EWD grantees who received multiple grants (like all DSNs who received both SB 1402 and SB 1070 grants) had to report on each separately. Grantees found the different reporting websites and processes for each grant to be frustrating and time-consuming.

Combined with the missed deadlines experienced by those processing the grants and paperwork, grantees spent significant amounts of time dealing with the bureaucracy of contracts and grants,

rather than on providing services to support the EWD mission. Moreover, grantees reported that these delays, which sometimes lasted months, required them to scramble to spend their single-year grant funds before their contracts ended. They added that these year-long grants discouraged them from making larger, longer-term investments in economic and workforce development.

Challenging data collection logistics for grantees

Grantees noted the EWD program's focus on data and metrics and said it underscored an emphasis on data-driven decision-making and accountability, but added that data limitations and lack of clarity about metrics made it difficult for grantees to understand what services should be provided and how EWD was performing. They reported:

- Being asked to provide the same data to multiple data systems.
- The requirement to input data they could not access.
- Unclear definitions about variables in the data.
- Data that often were inaccurate and inconsistent.
- Metrics so numerous that it was difficult to understand which were most important.

Grantees also said it was difficult to quantify the benefits and impacts of EWD, particularly around employment.

In particular, DSNs said they sometimes had to submit the same data in quarterly reports to the CCCCO as well as to LaunchBoard. They reported other difficulties inputting data. They were concerned that they were being held responsible for inputting student-level data they could not access. Finally, DSNs said they were not given enough information about data definitions to ensure they were providing the correct data.

Moreover, not only DSNs, but all grantees reported that LaunchBoard was not ready for use and was poorly introduced. They specifically noted concerns about the accuracy and consistency of the data they were trying to work with. Grantees also said the large number of metrics – including momentum points and leading indicators—were difficult to analyze, which made it difficult for them to decide where to focus their time.

Lack of employer and community college awareness about EWD activities and services

Employers surveyed noted a limited awareness among them about EWD programs and services. Further signaling a need to build program awareness was the fact that services the employers reported wanting to receive were similar to the ones the EWD program already provided.

SNs and DSNs also reported that many community college faculty, staff, and administrators were not aware, in general, of EWD and of their specific roles as SNs and DSNs. This made grantees' work on the campuses more difficult, and they spent significant time with people having to explain the EWD Program. They said many stakeholders were lukewarm about EWD's role with community colleges since they hadn't received communication about the program. Some DSNs noted that Doing What Matters for Jobs and the Economy messaging was excellent at the state level, but that it had not effectively reached the campuses or regional consortia.

Community colleges' rigid structure, a barrier to grantee objectives

Community colleges are at the core of EWD, but grantees felt they were, at times, barriers to the program's effectiveness. The issues cited were that community colleges:

- Responded and made changes slowly.
- Had faculty and staff unwilling or unable to revise courses.

- Were hampered by their rigid structure, processes, and bureaucracy.
- Lacked an understanding of EWD.
- Were hesitant to join the EWD program.
- Operated autonomously, not under CCCCO's direction.

Of the DSNs surveyed, 34 percent of them reported barriers to coordinating with community colleges (see Table 6). Grantees indicated that the colleges were slow to respond and make changes. Their rigid structure, along with some faculty who were unwilling or unable to revise courses, made it difficult to make suggested EWD changes quickly. Grantees said this led employers to stop working with the community colleges and instead to turn to private colleges, which could more quickly revise curricula and offer new programs.

As noted earlier in this report, grantees felt that a lack of awareness at community colleges of EWD inhibited the grantees' ability to connect with those colleges. Grantees also said the colleges were concerned with their own individual agendas and not regional needs, and that they each operated independently, governed by their own boards of trustees and not by the CCCCO.

Grantees felt the community colleges' autonomy ultimately required them to take on greater responsibilities because the CCCCO could not require the colleges to act. For example, DSNs reported having to enter student-level data into LaunchBoard even though the colleges, not the DSNs, were the ones with access to these data.

In seeking to overcome these challenges, several grantees said they built strong relationships with CTE deans who understood EWD goals, and that these deans were influential in facilitating change on their community college campuses. These changes included supporting curricular revisions, providing faculty professional development, and upgrading classroom technology. However, not all colleges had CTE deans who could impact campus processes.

A strict, regional focus, complicating DSNs' ability to adequately serve

While grantees acknowledged the value of EWD's regionally-oriented structure, they noted that the region's geographic borders presented some challenges and may need refinement. This regional structure enabled the program to be more effective by:

- Recognizing the different needs of regions.
- Promoting coordination among stakeholders in the region.
- Fostering innovation through the ability within a region to act quickly and test ideas on a small scale.

The regional focus promoted coordination on shared goals and objectives among a region's community colleges, employers, and stakeholders, and it also recognized that individual regions have different needs. Regional consortia chairs commonly attributed the success of their regions to high levels of collaboration, activity, and engagement. These structured collaborations often led to greater cohesiveness and cooperation among partners and improved results.

Additionally, this regionalization allowed for new ideas to be tested on a smaller scale and for innovations to be launched more quickly. It also further enabled explicit connections to state and federal workforce programs that are regionally structured, such as Workforce Innovation and Opportunity programs and Workforce Investment Boards. By collaborating with other programs that shared the same goals, grantees furthered their impact on economic and workforce development. The result of these key connections was well-described by one DSN as the creation of a "regional capacity development program." But this structure also presented weaknesses:

- Different stakeholder groups, such as K–12 districts, had their own districts and boundaries that did not always fit easily into EWD regions.

Table 6. Percent of DSNs Experiencing Barriers in Providing Services

Barriers	Experienced with Colleges (n=37)	Experienced with Businesses (n=38)
There is not enough funding to provide services at the level of quality I'd like.	47%	37%
There is not enough time to provide services at the level of quality I'd like.	37%	32%
It has been hard to coordinate with them.	34%	16%
I have not experienced any barriers.	18%	32%
They are spread too far apart geographically.	18%	13%
They are not interested in receiving my assistance.	18%	5%
I do not have the necessary tools to provide services at the level of quality I'd like.	5%	18%

Source: EWD Program Evaluation Survey of DSNs

- Grantees found it challenging to serve vast regions and territories with a large number of community colleges.
- DSNs often had to cross regional boundaries to additionally serve adjacent territories lacking a DSN in a particular priority or emergent sector.

Grantees and CTE deans noted that the regional strategy needs refinement. Unlike cities, counties, and districts, regions are not officially designated. As such, regional boundaries may differ from entity to entity. DSNs serving regions designated by EWD may be faced with needs from stakeholders outside of that region. For example, when adjacent regions with shared economies selected different sectors, DSNs whose work covered one region but not the other were frequently called upon to assist.

The size of regions was also highlighted as a barrier by grantees, CTE deans, and regional consortia chairs. They said large regions left grantees struggling to serve all of the colleges and programs in that region. In the CTE deans' survey, 72 percent of deans agreed this was a primary challenge facing EWD. Moreover, CTE deans consistently said they did not have interaction with many of the DSNs and did not feel the DSNs were spending equitable amounts of time with each college in a region. Regional consortia chairs said that a large geography made it difficult for key stakeholders who were not centrally located to convene and unite on shared issues.

Confusion over the selection process for priority and emergent sectors

EWD grantees reported concerns about the processes for selecting priority and emergent sectors, and the lack of EWD buy-in by stakeholders. These concerns were that:

- The selection process was too rushed.
- Employers were not at the table when selections were made.
- There was a lack of transparency, and perceived inequality, in the CCCCO's process of placing additional DSNs in regions.
- Many regions did not use criteria or data in selecting sectors.

- Votes for sectors were based on self-interest rather than on promoting the region's economic growth.
- The 10 sector options were sub-optimal.
- EWD should focus on all employer needs.

Priority and emergent sectors were chosen at regional consortia meetings. The CCCCO provided suggestions on how regions should select sectors, but ultimately regional consortia made their own decisions about which sectors to select.[14] When the popular vote was taken without criteria, grantees reported that regional consortia members tended to vote in their own interests – for the sectors that best suited their own programs or for the larger programs at their campuses. Some grantees expressed concern that employers were not at the table to help make these sector selections. Regardless of the process used, grantees were troubled by the fast speed of the process. They felt there was little, if any, lead time to study the sectors and labor market needs.

Grantees also worried that the number of priority and emergent sectors kept changing. In the end, grantees reported being unsatisfied with how many sectors each region had received. They said some regions needed an additional sector, but could not have one because they had reached the maximum of five sectors per region. While the EWD sectors were based on existing state sectors, grantees noted that not all sectors were industries. Examples they provided of such sectors were the small business and the global trade and logistics sectors. The structures and processes needed by such sectors differed from those that worked for industries and were more comparable to those required by other sectors in EWD regions. This situation prompted grantees to promote discussion about new ways to think about curricular alignment, career pathways, and workforce development, in general, in order to help find ways to better identify and serve all sectors in their territories.

Grantees also stated that current sectors excluded public service sectors, like public safety and education. They reported that these exclusions seemed to be taken for granted, but that public sector occupations that met the same criteria as private sector occupations should be given equal consideration.

Relatedly, 70 percent of the regional consortia chairs and 78 percent of the CTE deans who were surveyed felt the limited focus on priority and emergent sectors, rather than all major sectors, was a challenge facing EWD. Moreover, when CTE deans were asked what improvements they would recommend, 76 percent of them identified having DSNs for all industry sectors, not just sectors identified as priority or emergent.

Recommendations for EWD Program Improvement

Across all participants we interviewed and surveyed, stakeholders generally believed the Economic and Workforce Development Program (EWD) has been successful in contributing to a highly skilled and productive workforce. The structure of the program under the Doing What Matters (DWM) framework is relatively new, and this is reflected in participants' statements of the program's effectiveness, impact, strengths, and weaknesses. While some of the issues highlighted will likely work themselves out as the program matures, we have identified several broad areas that should be targeted to improve the program's success. Our recommendations include:

- Clarify grantee roles and responsibilities, while maintaining a transparent and consistent system of accountability.
- Refine funding and grant management to improve EWD efficiency.
- Improve data and metrics used for EWD improvement and accountability.
- Build awareness of EWD, particularly for employers and community colleges.
- Increase community colleges' ability to respond quickly to employer needs.
- Refine the program's regional focus to encourage greater collaboration.
- Formalize a structure for sector selection that promotes a thoughtful and data-driven approach.

Many of our recommendations align with those of the CCC Board of Governors' (BOG) Task Force on Workforce, Job Creation and a Strong Economy (for a comparison of both sets of recommendations, see Appendix A, Table A-10). The CCCCO has begun addressing its recommendations. It is not certain, that ours, which are specific to EWD, will be addressed in the course of the BOG task force's work, but we believe it is feasible that they could be acted upon at the same time. One aspect of grant management that we recommend is not included in the BOG task force recommendations: creating a single portal for all grants managed by the CCCCO. As such, we will discuss this recommendation here in greater detail than the others. We also will suggest specific actions for addressing challenges facing EWD.

Clarify Grantee Roles and Responsibilities, while Maintaining a Transparent and Consistent System of Accountability

Clarify EWD Grantee Roles, Accountability, Responsibility

The CCCCO needs to make clear the role of the EWD grantees, especially the DSNs, including what they are responsible for and to whom they are accountable. The information needs to be communicated to EWD grantees, along with the stakeholders. Of particular importance is to define the relationship between grantees and their host colleges. Are host colleges merely fiscal agents for the grantees' grant? Or do they have input on the grantees' day-to-day activities beyond ensuring the grant contract is fulfilled? Moreover, the CCCCO must ensure that the host colleges are not overstepping their authority by requiring EWD grantees to perform tasks for them beyond the grantees' contracted responsibilities. We recommend the CCCCO explore alternate structures, such as a joint powers authority, that free colleges from having to host EWD grantees. Additionally, the CCCCO currently depends on SNs to provide feedback on DSN services and on-the-ground activities, but DSNs report that SNs' ability to understand and accurately

represent them and their activities varies. The CCCCO should make clear that the responsibility of SNs is to understand and accurately represent DSNs on statewide task forces.

Decrease Discrepancies Between What DSNs Are Allowed to Do and Pay for

In increasing clarity on grantee roles and responsibilities, the CCCCO and host colleges need to maintain clear, consistent, and transparent guidelines on allowable grant activities. This may require revamping the training and guidelines that grant analysts use to make decisions about approvals to ensure decisions are less susceptible to interpretation. The CCCCO and host colleges also should consider implementing an appeals process for grantees to address any inconsistencies identified in approvals.

Improve Grant Accountability

The CCCCO has many metrics in place for the EWD program, and contracts lay out grantees' roles and responsibilities. However, some grantees expressed concern that not all grantees were spending grant funds as the EWD grant stipulates, yet there was no system or process in place to hold grantees accountable. We recommend the CCCCO investigate these claims and implement an accountability system that will capture these lapses and take corrective action to assist grantees in conforming to grant requirements. A possible solution could be the risk-based monitoring system the CCCCO uses for the Perkins grants. This system may alleviate some of the issues since it provides greater calibration and guidance and depends on a more organized scheme of critical flags that automatically trigger even further support and monitoring. We recommend the CCCCO consider a similar model for EWD.

Refine Funding and Grant Management to Improve EWD Efficiency

Provide Consistent Multi-Year Funding

We recommend providing EWD grantees with multi-year funding to encourage long-term planning and projects. The year-by-year funding process is an ineffective method of providing funds for larger projects. EWD grantees reported this annual funding process was often a barrier to innovative, long-range projects. Moreover, it forced them to navigate bureaucratic grant contracting processes annually. In these processes, the grantees often faced delays and errors and had to manage them, taking time away from their delivery of grant services.

Create a Single Portal for All Grants Managed by the CCCCO

Grantees reported spending significant amounts of time uploading data and accountability reports to various systems for CCCCO grants. Not only are many of the metrics redundant, but grantees have to spend time learning and uploading similar reports to separate systems all managed by the CCCCO. We understand the CCCCO receives funds from different sources, yet we recommend investing time in understanding how the grant system could be simplified for grantees. We believe a change will also assist the CCCCO in managing grants.

Improve Data and Metrics Used for EWD Improvement and Accountability

Regional consortia chairs noted "improve data available to EWD grant recipients" as their top recommendation for EWD improvement (86 percent). It will take a concerted effort from grantees, colleges, and the CCCCO to ensure data are not only current, but that data systems are easy to use and help to discern impacts.

Hone in on Fewer Key Metrics

EWD uses 33 common metrics, which leave grantees overwhelmed about what is important and spending significant amounts of time trying to collect data on metrics beyond their control. We recommend EWD hone in on fewer metrics, but ensure they are at the core of the program's mission. These metrics should be clear, measurable, and easily-collected performance measures.

Align Accountability and Performance Metrics to Program Mission

EWD's mission is focused on the economy and workforce development, but many accountability and performance metrics concern student performance, which EWD grantees felt they had no control over and did not explicitly connect to the program mission. We recommend making clearer connections between EWD grantees and student performance and increasing alignment of accountability and performance metrics to the mission of EWD.

Make Data Accessible to Grantees

The CCCCO needs to make high quality data accessible to grantees. DSNs reported being responsible for inputting student level data into LaunchBoard, but not having access to the data they were being held responsible for inputting. Furthermore, EWD grantees stated being held responsible for student outcomes even though they did not have data they could analyze to understand their impact on students.

Access to LaunchBoard Should Be Limited Until it is Ready for Prime Time

Grantees were expected to use LaunchBoard before it was complete. Grantees' poor experience with the incomplete system left them disinterested in using the system. We recommend completing the LaunchBoard system before having grantees enter data and begin using it. At that point, it must be ensured that grantees have proper training to use the data, that it is clear who is responsible for entering data, and that data definitions exist to provide consistency across colleges and over time.

Make More Training on Understanding and Using Labor Market Information Available

While some grantees had strong research backgrounds, others desired more training on how to make use of labor market information. These grantees felt they had too little knowledge to even solicit the help of the Centers of Excellence. We recommend making more training available and making CoE technical assistance services more approachable.

Make Clear the Role of CoE to Support DSNs

Some DSNs were unclear about the specific services that CoE provided. We recommend CoE create a form that describes its different services so that CoE DSNs know how CoE can support them.

Help Measure the Impact of the Programs

Grantees felt left alone in figuring out how to measure the impact of their services. They wanted more support and guidance in understanding how this could be done. We recommend the CCCCO develop metrics and mechanisms that grantees can adapt for their own use in estimating the impact of their services.

Build Awareness of EWD, Particularly for Employers and Community Colleges

The CCCCO needs to lead the effort to build awareness of EWD. Senior officials must market the program to employers and community colleges and provide grantees with greater capacity and resources to enable them to market it, too. Marketing efforts to the colleges should focus on promoting the importance of career technical education and of economic and workforce development, in general, along with EWD, in particular. There should be more information shared about EWD staff roles and responsibilities,

especially among CTE deans, chief instructional officers, and chief executive officers. Increasing clarity on grantee roles will assist in this effort. Marketing to employers should focus on what EWD is and how it can help employers. We found that employers seek the types of services that EWD provides. Co-marketing EWD with other community college efforts in CTE, such as SB 1070-funded efforts, or with DWM efforts, may prove more effective than marketing EWD alone.

Increase Community Colleges' Ability to Respond Quickly to Employer Needs

Work to Speed Up Curriculum Development and Review Processes

A common complaint was how long it took to create a new course or program or to revise existing courses. The CCCCO could revise its own part of the curriculum and program review process and assist campuses and regions in streamlining their curriculum review and approval processes. Additionally, addressing issues concerning community college faculty and administrator awareness, understanding, and buy-in of EWD may help speed changes to curricula. Grantees noted that some faculty, because of their lack of EWD buy-in, were unwilling to work with SNs,, which made it difficult to revise courses quickly.

Refine the Program's Regional Focus to Encourage Greater Collaboration

For Large Regions, Provide Enough DSNs to Adequately Meet Program Objectives

Regions with large numbers of colleges should be reduced to a more manageable size or be provided with more DSNs. While macro regions have been broken into micro regions, DSNs are still responsible for supporting the needs of the macro region. It is not realistic for one or two DSNs to support nearly 30 community colleges' needs.

Similarly, in a region that is geographically large, a single DSN cannot easily visit all the community colleges and economic areas in that territory. Given that such a major part of the DSN's role is connecting employers with colleges, it is essential that the DSN be able to spend significant amounts of time within each college's community. If the region has distinct economic zones, we recommend splitting it into smaller regions with their own DSNs, In large regions without those zones, we recommend multiple DSNs be strategically located across the region. These DSNs would work together and separately to support local communities and the entire region.

In both instances, we recommend the CCCCO map backward from the outcomes it seeks to determine what level of services and activities are needed. The CCCCO then should project how many more DSNs would be necessary, and how much additional funding is needed from the state for these extra grantees, or if resources could be allocated from elsewhere in the program.

Factor Demands from Neighboring Regions into DSN Workloads

DSNs who cover a sector that a neighboring region decided not to include as a priority or emergent sector were called upon to support that neighboring region's economic and workforce development needs. Unless EWD decides to cover all sectors, we recommend that DSNs' workloads be taken into account when considering these additional demands of their time.

Allow a Program to be Developed and Offered by a District or Group of Colleges Instead of by Just One College

EWD's regional focus aims to break down silos and have community colleges coordinate with each other. At times, one college may have courses that another college does not, despite the two colleges being geographically close or offering courses online. The ability for colleges to incorporate each other's courses into their programs would be an efficient way to promote student success and increase the number of certificates awarded.

This requirement, that a single college offer a program, is in the California Education Code and, thus must be revised by the legislature.

Formalize a Structure for Sector Selection that Promotes a Thoughtful and Data-Driven Approach

Grantees, CTE deans, and regional consortia chairs expressed concerns about priority and emergent sectors. CTE deans and regional consortia chairs did not support the focus on a small number of sectors rather than on all sectors. Grantees reported that priority and emergent sectors were chosen in an inconsistent, interest-driven process. It is unclear if this is accurate, but it is clear that the sector selection process left many grantees and stakeholders dissatisfied. The CCCCO should formalize a structure for sector selection that promotes a thoughtful and data-driven approach. Furthermore, the CCCCO should ensure that regions understand and follow that process.

Address Issues in the Sector Selection Process

Grantees and stakeholders reported several challenges in the sector selection process. Commonly cited issues were:

- Self-interest drives sector selection.
- Labor market data were not consistently used.
- Employers were not at the table.
- Lack of clarity and constant changes in the number of sectors was allowed.
- Public sector careers were excluded.

The CCCCO should provide stronger guidelines, greater support, and at least some requirements for how priority and emergent sectors are identified and foster a clear decision-making process. Requirements could include the use of criteria and labor market information, along with a clear decision-making process. Alternatively, the CCCCO could take a larger role by setting the criteria to be used, providing the labor market information to be considered, and determining the process by which the decision would be made.

Conclusion

EWD is an important component of the state's career technical education program. It connects employers with educators to promote alignment of workforce development needs and community college educational offerings. EWD fits into the umbrella DWM framework created by the CCCCO in an effort to motivate a coherent strategy in supporting California's dynamic economy.

EWD Program Design was Well Received as a Means of Structuring and Unifying Activities

The structure of EWD helped to unify program processes, activities, and services to support economic and workforce development across the state, as reported by grantees and stakeholders. They consistently noted these key components of the program's design:

- Regional focus.
- Multi-level delivery and support system.
- Focus on coordinating with stakeholders.

EWD's regional focus acknowledges the diversity of local needs across the state while also supporting coordination between colleges and within local labor markets. The second component, the delivery and support system, recognized regional, state, sector-specific, and technical service needs. It also provided layered coverage of economic and workforce needs while supporting specialization and broader needs. EWD's explicit focus on bringing together stakeholders with shared interests and its willingness to break down barriers to promote coordination was the third major design element of EWD that was well received. Together, these key components provide a foundation that EWD should utilize to improve and hone its processes and outcomes.

Program Challenges Reflected the Realities of a Newly Restructured Program

The challenges identified by grantees and stakeholders largely reflect the realities of a newly restructured program. The issues relate to the trials of implementation and include clarity in grantee roles, the management of grants, development of a new data system, and program awareness and marketing. A focus on continual program improvement, combined with resources to address these issues, will diminish these challenges. State investment in CTE, along with the CCC system's attention to identifying and smoothing implementation issues, will greatly improve the program's effectiveness.

Most of our findings and recommendations reinforce previous recommendations regarding CTE, including our own at EdInsights[15] and those of the CCC BOG Task Force on Workforce, Job Creation and a Strong Economy. The CCCCO begun acting on the BOG recommendations, and we expect that many of ours will be addressed in this process. However, some of our recommendations require support from the state legislature and from the colleges themselves, not just from the CCCCO.

The limited scope of our evaluation provides a starting point for further analyses. We probed the perceptions of grantees in-depth, however, we could not build a rich understanding of the perceptions of many important EWD and CTE stakeholders, such as employers, faculty, and students. A sophisticated analysis of the impact and outcomes of EWD were beyond the scope of our work. This was due to both time constraints and the lack of student-level data. The unveiling of LaunchBoard 2.0 (targeted for 2017) could present opportunities for answering key questions regarding EWD outcomes and impact, such as:

- What practices have the best outcomes, biggest impact, and greatest value-add?
- Where are outcomes, impact, and value-add less than expected or demanded?
- Where do investments need to be targeted?

Moreover, these questions could be answered by region, by statewide sector, and by region and sector combined. Since the revised version of LaunchBoard that is currently being created ("LaunchBoard 2.0") aims to integrate efforts across the CCC system and from other stakeholders, further analyses using LaunchBoard 2.0 data could aid understanding of how coordination and collaboration might promote student success and economic development.

In our recommendations, we propose exploring new structures and means of managing the EWD program and other related CTE efforts. Further research on how structures like a joint powers authority can be used to more efficiently manage and administer grants would assist the CCCCO in executing its mission and achieving its goals. Supporting further research in these and other areas would allow the state, the CCCCO, and the CCC system to make better decisions based on data and evidence.

Career technical education, including economic and workforce development, has been a growing priority in California. The state has increased investments in K–12, higher education, and workforce agencies. The CCC system has promoted the importance of CTE. The CCCCO has crafted the Doing What Matters for Jobs and the Economy strategy to align and make sense of numerous grants to assist CTE in a linked and concerted effort to support the state's economy. Positive changes to EWD structure, its role in DWM, and the increasing importance of CTE demonstrate a growing promise to support students and workers in growing California's economy.

Appendices

Appendix A. Tables and Figures

Table A-1. Services, People Served, and Hours by Grantee Type

Grantee Type	# of Services	Service/ Grantee	Services/ Grantee/ Quarter	# of People Served	People/ Grantee	# of Hours	Hours/ Grantee
IDRC (n=12)	168	14	2.3	1,688	141	2,988	249
CoE (n=7)	26	4	0.7	0	0	0	0
SN (1 n=0)	335	34	5.7	3,540	354	22,604	2,260
DSN (n=66)	2,044	31	5.2	55,235	837	265,713	4,026
Contract Ed (n=1)	4	4	0.7	19,275	19,275	5,597	5,597
Weighted Avg	1,463	27	4.5	38,755	831	185,464	3,093
Total	2,577			79,738		296,902	

Source: 2013–2014 Grantee Quarterly Reports.

Table A-2. Number of Overall Services Provided per Grantee by Sector

Sector	Develop & Align Curriculum	Curriculum Alignment	Certificate & Program of Study Development	Career Curriculum Articulation	Faculty Professional Development	Connect to Businesses and/or Industries	Research & Studies
Advanced Manufacturing & Advanced Technology	2.5	3.0	2.6	0.6	2.6	4.6	1.3
Advanced Transportation & Renewable Energy	3.3	1.0	2.8	1.5	3.8	4.0	3.0
Agriculture, Water & Environmental Technology	3.2	2.6	3.4	2.6	4.0	3.4	2.2
Energy (Efficiency) & Utilities	2.7	2.0	1.3	3.0	2.7	4.0	2.0
Global Trade & Logistics	2.2	0.5	1.5	1.3	3.0	3.1	1.5
Health	2.7	1.5	1.8	1.7	4.5	4.4	2.1
Info & Communication Technologies/ Digital Media	3.4	1.5	2.8	2.7	3.1	3.4	2.1
Life Sciences / Biotechnology	4.0	0.5	1.5	3.5	2.5	4.0	2.5
Retail/ Hospitality/ Tourism	2.3	2.3	0.7	0.3	3.0	4.3	3.3
Small Business	2.8	1.2	2.1	1.7	2.7	3.0	2.1
Annual Average	23.1	12.2	17.9	14.4	27.0	30.1	16.1
Quarterly Average	3.8	2.0	3.0	2.4	4.5	5.0	2.7

Source: 2013–2014 Grantee Quarterly Reports.

Table A-3. SN Total Services to Colleges by Sector - Number of Times SNs Provided Each Service

Sector	Develop & Align Curriculum	Curriculum Alignment	Certificate & Program of Study Development	Career Curriculum Articulation	Faculty Professional Development	Connect to Businesses and/or Industries	Research & Studies	Total
Advanced Manufacturing & Advanced Technology	0	2	0	0	2	4	4	12
Advanced Transportation & Renewable Energy	3	3	2	0	3	3	2	16
Agriculture, Water & Environmental Technology	5	1	2	4	5	5	0	22
Energy (Efficiency) & Utilities	2	1	0	0	3	4	0	10
Global Trade & Logistics	5	2	0	2	5	5	5	24
Health	5	0	5	5	5	5	5	30
Info & Communication Technologies/ Digital Media	4	2	1	3	4	4	3	21
Life Sciences/ Biotechnology	5	0	2	2	4	5	1	19
Retail/Hospitality/ Tourism	4	0	2	2	4	5	1	18
Small Business	4	2	3	2	3	3	2	19
Total	37	13	17	20	38	43	23	191
Range	5	3	5	5	3	2	5	20

Source: 2013–2014 Grantee Quarterly Reports.

Table A-4. DSN Average Number of Services Provided to Businesses by Sector

Sector	Develop Curriculum for Business	Alignment of Sector with Education	Needs Assessment	Small Business Creation and/or Exporting Modules	Professional Development for Workers	Connect with Colleges and Education	Research
Advanced Manufacturing & Advanced Technology	2.8	1.9	3.1	1.0	2.6	3.9	0.3
Advanced Transportation & Renewable Energy	2.0	2.8	2.0	0.3	3.8	3.8	1.3
Agriculture, Water & Environmental Technology	1.2	2.8	2.4	0.0	1.8	2.6	1.4
Energy (Efficiency) & Utilities	1.7	3.0	2.0	0.0	1.0	4.0	0.7
Global Trade & Logistics	1.6	2.5	2.4	1.5	1.6	2.6	2.2
Health	1.5	3.2	2.6	0.1	3.6	4.7	1.5
Info & Communication Technologies/ Digital Media	0.7	1.7	1.8	0.1	1.0	3.4	1.0
Life Sciences / Biotechnology	0.0	1.5	0.5	0.0	2.5	2.0	0.0
Retail/Hospitality/ Tourism	2.3	2.3	3.0	0.0	2.0	3.7	2.3
Small Business	1.0	1.5	2.7	2.1	0.8	2.7	2.4
Weighted Average	11.7	18.2	20.4	7.4	15.6	28.0	12.9
Quarterly Average	2.0	3.0	3.4	1.2	2.6	4.7	2.2

Source: 2013–2014 Grantee Quarterly Reports.

Table A-5. SN Total Number of Services Provided to Businesses by Sector

Sector	Develop Curriculum for Business	Alignment of Sector with Education	Needs Assessment	Small Business Creation and/or Exporting Modules	Professional Development for Workers	Connect with Colleges and Education	Research	Total
Advanced Manufacturing & Advanced Technology	0	3	3	0	2	4	4	16
Advanced Transportation & Renewable Energy	3	3	3	0	2	3	1	15
Agriculture, Water & Environmental Technology	0	3	0	0	0	3	0	6
Energy (Efficiency) & Utilities	0	5	5	0	5	5	0	20
Global Trade & Logistics	3	0	2	3	3	3	2	16
Health	1	1	1	0	1	1	1	6
Info & Communication Technologies/ Digital Media	2	4	2	0	0	3	3	14
Life Sciences / Biotechnology	1	0	3	1	2	5	0	12
Retail/Hospitality/ Tourism	1	5	3	0	1	5	4	19
Small Business	5	5	3	5	0	2	0	20
Total	16	29	25	9	16	34	15	144
Range	5	5	5	5	5	4	4	14

Source: 2013–2014 Grantee Quarterly Reports.

Table A-6. DSN Share of Services Provided to Colleges and Businesses by Macro Region

Macro Region	# of DSNs	Total Services	% of Services	Service per DSN
A (North Coast/Inland and Greater Sac)	11	276	14%	25
B (Bay Area and Monterey/Santa Cruz)	14	249	12%	36
C (Mother Lode and Central Valley)	7	142	7%	20
D (South Central Coast)	6	220	11%	37
E (San Diego/Imperial)	7	228	11%	33
F (Inland Empire)	7	492	24%	35
G (LA and Orange County)	14	437	21%	31

Source: 2013–2014 Grantee Quarterly Reports.

Table A-7. EWD Course FTES

Sector	2010/2011	2011/2012	2012/2013	2013–2014	2014/2015
Advanced Manufacturing & Advanced Technology	26,918	25,243	24,206	24,558	24,569
Advanced Transportation & Renewable energy	14,360	13,833	13,353	13,486	13,485
Agriculture, Water & Environmental Technology	9,564	8,915	8,514	8,556	8,415
Energy (Efficiency) & Utilities	2,790	2,863	2,622	2,686	2,423
Global Trade & Logistics	601	628	644	590	520
Health	55,219	51,726	48,970	49,267	48,734
Info & Communication Technologies / Digital Media	69,026	63,100	58,194	57,423	55,835
Life Sciences / Biotechnology	10	10	8	8	9
Retail / Hospitality / Tourism	22,586	20,607	18,778	18,618	18,009
Small Business	76,699	69,866	67,223	69,588	70,311
Total	277,772	256,789	242,510	244,780	242,312

Source: CCCCO MIS Data Mart.

Table A-8. EWD FTES Change

Sector	2010 to 2015	Percent Change
Advanced Manufacturing & Advanced Technology	-2,349	9%
Advanced Transportation & Renewable Energy	-8745	6%
Agriculture, Water & Environmental Technologies	-1,148	12%
Energy (Efficiency) & Utilities	-367	13%
Global Trade & Logistics	-81	13%
Health	-6,486	12%
Info & Communication Technologies / Digital Media	-13,191	19%
Life Sciences / Biotechnology	-1	7%
Retail/Hospitality/Tourism	-4,577	20%
Small Business	-6,388	8%
Total	-35,461	13%

Source: CCCCO MIS Data Mart.

Table A-9. Employer Responses to "What services would be useful?"

What services would you find useful for your business or industry?	
Help for my business with training for my workers.	53%
Help align courses offered at the community colleges with my business needs.	50%
Provide data and research to help improve my business.	30%
Conduct an assessment of my business needs.	17%
Conduct an assessment of my technology needs.	13%
There are no services that I would find useful.	13%
Conduct an assessment of my manufacturing process capability.	10%

Source: EWD Program Evaluation Survey of Employers (n=30).

Table A-10. Comparison of EWD Program Recommendations to BOG Task Force Recommendations

EWD Program Evaluation Recommendations	BOG Task Force Recommendations
Clarify grantee roles and responsibilities, while maintaining a transparent and consistent system of accountability	17. Strengthen communication, coordination, and decision-making between regional CTE efforts and the colleges to meet regional labor market needs.
Clarify EWD grantee roles, accountability, responsibility	17a. Clarify the role and fiscal management structure of the regional consortia, sector navigators, deputy sector navigators, and technical assistance providers and their relationships with the CCCCO and the colleges.
Decrease discrepancies between what DSNs are allowed to do and pay for	
Improve grant accountability	
Refine funding and grant management to improve EWD efficiency	See below for specific recommendations
Provide consistent multi-year funding	22. Establish a sustained funding source to increase community colleges' capacity to create, adapt, and maintain quality CTE courses and programs that are responsive to regional labor market needs. 23. Create a predictable, targeted, and sustained funding stream that leverages multiple local, state, and federal CTE and workforce funds to support an infrastructure for collaboration at the state, regional, and local levels; establish regional funding of program start-up and innovation; and develop other coordination activities.
Create a single portal for all grants managed by the CCCCO	Not covered by any BOG task force recommendations
Improve data and metrics used for EWD improvement and accountability	4a. Develop, streamline, and align common outcome metrics for all state-funded CTE programs and ensure that they are compatible with federal reporting requirements. 5b. Explore barriers, both real and perceived, to sharing data, and create new incentives for the timely sharing of data. 6a. Provide labor market, workforce outcome, and student demographic data/information that are easily accessible and usable.
Hone in on fewer key metrics	
Align accountability and performance metrics to program mission	
Make data accessible to grantees	
Access to LaunchBoard should be limited until it is ready for prime time	6c. Provide technical assistance, data visualization tools, and analysis tools to colleges for the use of labor market and student outcome data.

EWD Program Evaluation Recommendations	BOG Task Force Recommendations
Make more training on understanding and using labor market information available	6c. Provide technical assistance, data visualization tools, and analysis tools to colleges for the use of labor market and student outcome data. 6a. Provide labor market, workforce outcome, and student demographic data/information that are easily accessible and usable.
Make clear the role of CoE to support DSNs	
Help measure the impact of the programs	6. Improve the quality, accessibility, and utility of student outcome and labor market data to support students, educators, colleges, regions, employers, local workforce investment boards, and the state in CTE program development and improvement efforts. 9. Improve program review, evaluation, and revision processes to ensure program relevance to students, business, and industry as reflected in labor market data.
Build awareness of EWD, particularly for employers and community colleges	21. Create a sustained, public outreach campaign to industry, high school students, counselors, parents, faculty, staff, and the community at large to promote career development and attainment and the value of career technical education.
Increase community colleges' ability to respond quickly to employer needs	
Work to speed up curriculum development and review process	8. Evaluate, revise, and resource the local, regional, and statewide CTE curriculum approval process to ensure timely, responsive, and streamlined curriculum approval.
Refine the program's regional focus to encourage greater collaboration	17b. Ensure that the CTE regional framework is designed to do the following: 1) Designate labor market-driven priority and emergent sectors in coordination with employers, workforce boards, and economic development entities. 2) Coordinate colleges within the region to meet business and industry needs. 3) Convene discussions about development of common CTE entry pathways and industry-valued credentials based on regional industry needs. 4) Share best practices on regional coordination, communication, and decision-making. 5) Conduct joint marketing, and facilitate asset and equipment sharing. 6) Support joint professional development of faculty to respond to evolving skill needs of industry sectors. 7) Provide other needs and strategies as prioritized by the region.

EWD Program Evaluation Recommendations	BOG Task Force Recommendations
For large regions, provide enough DSNs to adequately meet program objectives	23. Create a predictable, targeted, and sustained funding stream that leverages multiple local, state, and federal CTE and workforce funds to support an infrastructure for collaboration at the state, regional, and local levels; establish regional funding of program start-up and innovation; and develop other coordination activities.
Factor demands by neighboring regions into DSN workloads	23. Create a predictable, targeted, and sustained funding stream that leverages multiple local, state, and federal CTE and workforce funds to support an infrastructure for collaboration at the state, regional, and local levels; establish regional funding of program start-up and innovation; and develop other coordination activities. 17a. Clarify the role and fiscal management structure of the regional consortia, sector navigators, deputy sector navigators, and technical assistance providers and their relationships with the CCCCO and the colleges.
Allow a program to be developed and offered by a district or group of colleges instead of by just one college	10. Facilitate curricular portability across institutions. 18. Clarify and modify, as appropriate, state regulations to allow colleges to regionalize course articulation along career pathways utilizing regional or state curriculum models.
Formalize a structure for sector selection that promotes a thoughtful and data-driven approach	7a. Create consistent mechanisms for improved regional engagement of business and industry in the curriculum development process.
Address issues in the sector selection process	

Table A-11. 2013–2014 Certificates Awarded

	60+ units	30 to < 60 units	18 to < 30 units	12 to < 18 units	Total
Advanced Manufacturing and Advanced Technology	43	1,600	1,479	147	3,269
Advanced Transportation & Renewable energy	25	1,134	1,195	361	2,715
Agriculture, Water & Environmental Technology	36	242	635	38	951
Energy (Efficiency) & Utilities	0	357	457	19	833
Global Trade & Logistics	3	16	68	3	90
Health	719	2,469	1,035	229	4,452
Info & Communication Technologies / Digital Media	0	1,296	1,337	476	3,109
Life Sciences / Biotechnology	3	7	3	18	31
Retail / Hospitality / Tourism	61	1,479	835	45	2,420
Small Business	14	2,695	3,362	647	6,718

Source: CCCCO MIS Data Mart.

Table A-12. Number of Students Placed in Jobs and in Internships by Grantee Type

Grantee Type	# of Students placed in Jobs	# of Students in Internships
Contract Ed	0	0
DSN	1,090	2,415
IDRC	21	79
SN	24	156
CoE	0	0
Total	1,135	2,650

Source: 2013–2014 Grantee Quarterly Reports.

Table A-13. Number of Employees Hired and Retained by Grantee Type

Grantee Type	# of Employees Hired	# of Employees Retained
Contract Ed	0	0
DSN	1,454	6,561
IDRC	24	146
SN	20	487
CoE	0	0
Total	1,498	7,194

Source: 2013–2014 Grantee Quarterly Reports.

Table A-14. Amount of Revenue Generated and Increased Sales by Grantee Type

Grantee Type	Revenue Generated	Increased Sales
Contract Ed	$0	$0
DSN	$75,068,044	$64,716,231
IDRC	$0	$0
SN	$362,800	$34,603,713
CoE	$0	$0
Total	$75,430,844	$99,319,944

Source: 2013–2014 Grantee Quarterly Reports.

Table A-15. Number of Products and Services Developed by Grantee Type

Grantee Type	# of Products Developed	# of Services Developed
Contract Ed	0	0
DSN	59	76
IDRC	6	5
SN	10	13
CoE	0	0
Total	75	94

Source: 2013–2014 Grantee Quarterly Reports.

Table A-16. Sectors with Highest Average Number of Service to Colleges

Develop & Align Curriculum	Life Sciences/Biotech (4.0)
Curriculum Alignment	Advanced Manufacturing (2.9)
Certificate & Program of Study Development	Agriculture, Water & Environmental (3.2)
Career Curriculum Articulation	Small Business (12.0)
Faculty Professional Development	Health (4.6)
Connect to Businesses and/or Industries	Small Business (12.0)
Research & Studies	Advanced Transportation and Renewables (2.8)

Source: 2013–2014 Grantee Quarterly Reports.

Table A-17. Sectors with Highest Average Number of Service to Employers

Develop Curriculum for Business	Advanced Manufacturing (2.4)
Alignment of Sector with Education	Energy and Utilities (3.5)
Business Needs Assessment	Advanced Manufacturing (3.1)
Small Business Creation and/or Exporting Modules	Small Business (2.3)
Professional Development for Workers	Advanced Transportation and Renewables (3.4)
Connect with Colleges and Education	Health (4.4)
Research	Retail/Hospitality/Tourism (2.8)

Source: 2013–2014 Grantee Quarterly Reports.

Table A-18. DSN Share of Services to Colleges and Businesses by Sector

Sector	# of DSNs	Total Services	% of Services	Year Average	Quarterly Average
SERVICES TO COLLEGES					
Advanced Manufacturing & Advanced Technology	8	138	12%	17.3	2.9
Advanced Transportation & Renewable Energy	4	77	7%	19.3	3.2
Agriculture, Water & Environmental Technology	5	107	9%	21.4	3.6
Energy (Efficiency) & Utilities	3	53	5%	17.7	2.9
Global Trade & Logistics	10	131	11%	13.1	2.2
Health	10	187	16%	18.7	3.1
Info & Communication Technologies / Digital Media	10	190	17%	19.0	3.2
Life Sciences / Biotechnology	2	37	3%	18.5	3.1
Retail / Hospitality / Tourism	3	49	4%	16.3	2.7
Small Business	11	172	15%	15.6	2.6
SERVICES TO BUSINESSES					
Advanced Manufacturing & Advanced Technology	8	124	14%	15.5	2.6
Advanced Transportation & Renewable Energy	4	63	7%	15.8	2.6
Agriculture, Water & Environmental Technology	5	61	7%	12.2	2.0
Energy (Efficiency) & Utilities	3	37	4%	12.3	2.1
Global Trade & Logistics	10	144	16%	14.4	2.4
Health	10	172	19%	17.2	2.9
Info & Communication Technologies / Digital Media	10	97	11%	9.7	1.6
Life Sciences / Biotechnology	2	13	1%	6.5	1.1
Retail / Hospitality / Tourism	3	47	5%	15.7	2.6
Small Business	11	145	16%	13.2	2.2

Source: 2013–2014 Grantee Quarterly Reports.

Table A-19. DSN Outcomes and Impacts

Outcomes and Impacts	Sector with Highest Average	Weighted Average (all sectors)	Quarterly Average (all sectors)
# of Businesses Served	Small Business (450.3)	1,705.9	284.3
# of Students Served	Health (1,648.2)	5,341.6	890.3
# of Employees Served	Health (511.3)	2,041.1	340.2
# of Workshops/Trainings	Advanced Manufacturing & Advanced Technology (1,771.5)	3,835.4	639.2
# of Hours for Contract Education	Advanced Manufacturing & Advanced Technology (12,896.4)	13,153.3	2,192.2
# of Hours for Performance Improvement Training	Advanced Manufacturing & Advanced Technology (3,253.1)	5,420.6	903.4
# of Hours of Credit/ Non-credit Instruction	Advanced Manufacturing & Advanced Technology (13,102.5)	13,349.9	2,225.0
# Placed in Jobs	Advanced Manufacturing & Advanced Technology (47.9)	130.73	21.8
# Participated in Work-based learning	Agriculture, Water & Environmental Technology (150.6)	238.98	39.8
# of People Hired	Small Business (81.3)	224.6	37.4
# of Employees Retained	Advanced Manufacturing & Advanced Technology (262.3)	833.3	138.9

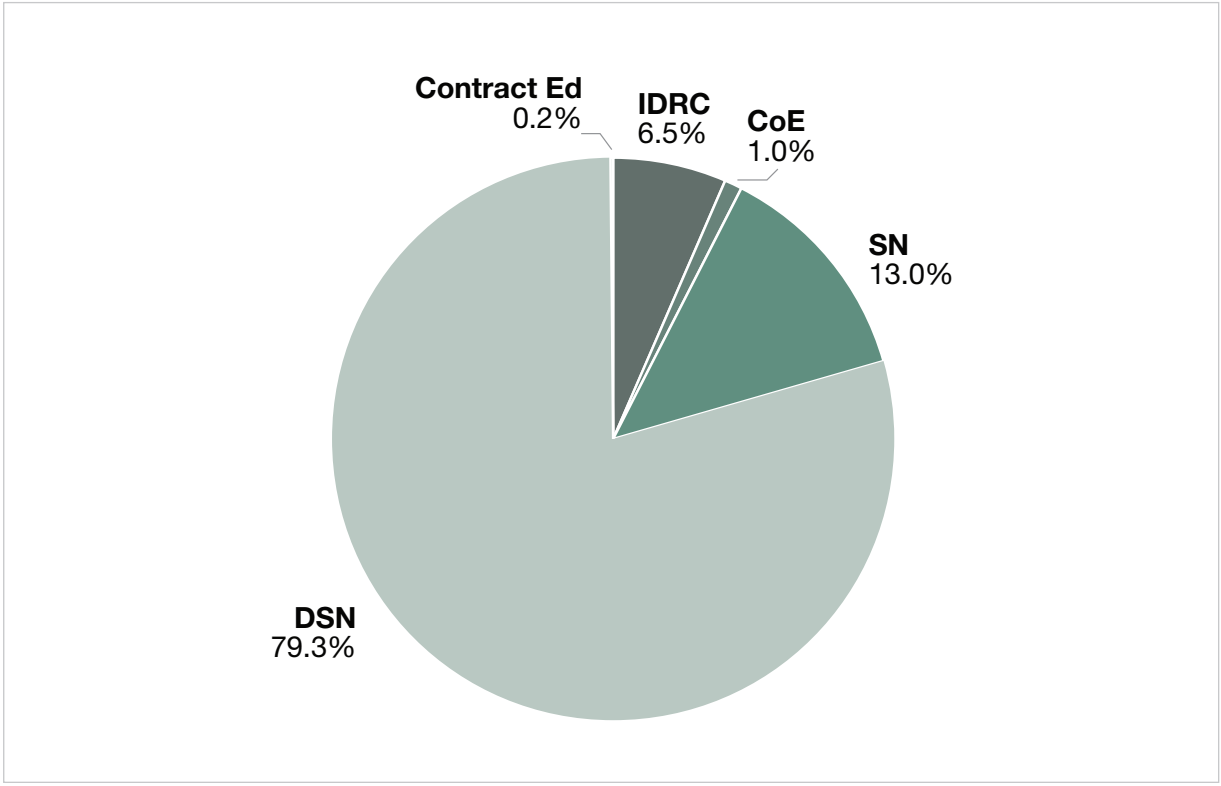
Source: 2013–2014 Grantee Quarterly Reports.

Table A-20. SN Outcomes

Outcomes and Impacts	Sector with Highest Share	Total	Average (all sectors)	Qtrly Average (all sectors)
# of Businesses Served	Health (49%)	1,547	154.7	38.7
# of Students Served	Agriculture, Water & Environmental Technology (49%)	452	45.2	11.3
# of Employees Served	Heath (82%)	3,088	308.8	77.2
# of Workshops/Trainings	Health (96%)	2,653	265.3	66.3
# of Hours for Contract Education	Life Sciences / Biotechnology (100%)	48	4.8	1.2
# of Hours for Performance Improvement Training	Health (99%)	20,724	2,072.4	518.1
# of Hours of Credit/ Non-credit Instruction	Life Sciences / Biotechnology (100%)	1832	183.2	45.8
# Placed in Jobs	Life Sciences / Biotechnology (100%)	24	2.4	0.6
# Participated in Work-based learning	Life Sciences / Biotechnology (99%)	155	15.5	3.9
# of People Hired	Life Sciences / Biotechnology (100%)	20	2.0	0.5
# of Employees Retained	Heath (97%)	487	48.7	12.2

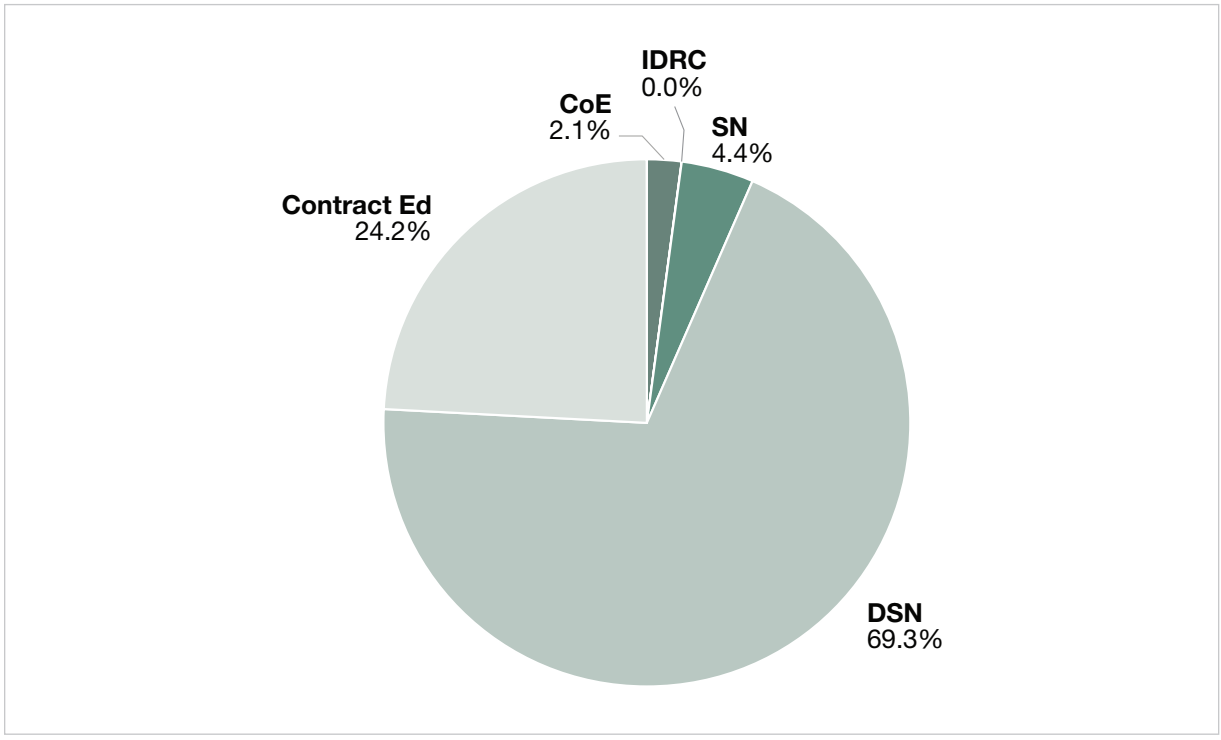
Source: 2013–2014 Grantee Quarterly Reports.

Figure A-1. Percent of Services Provided by Grantee Type



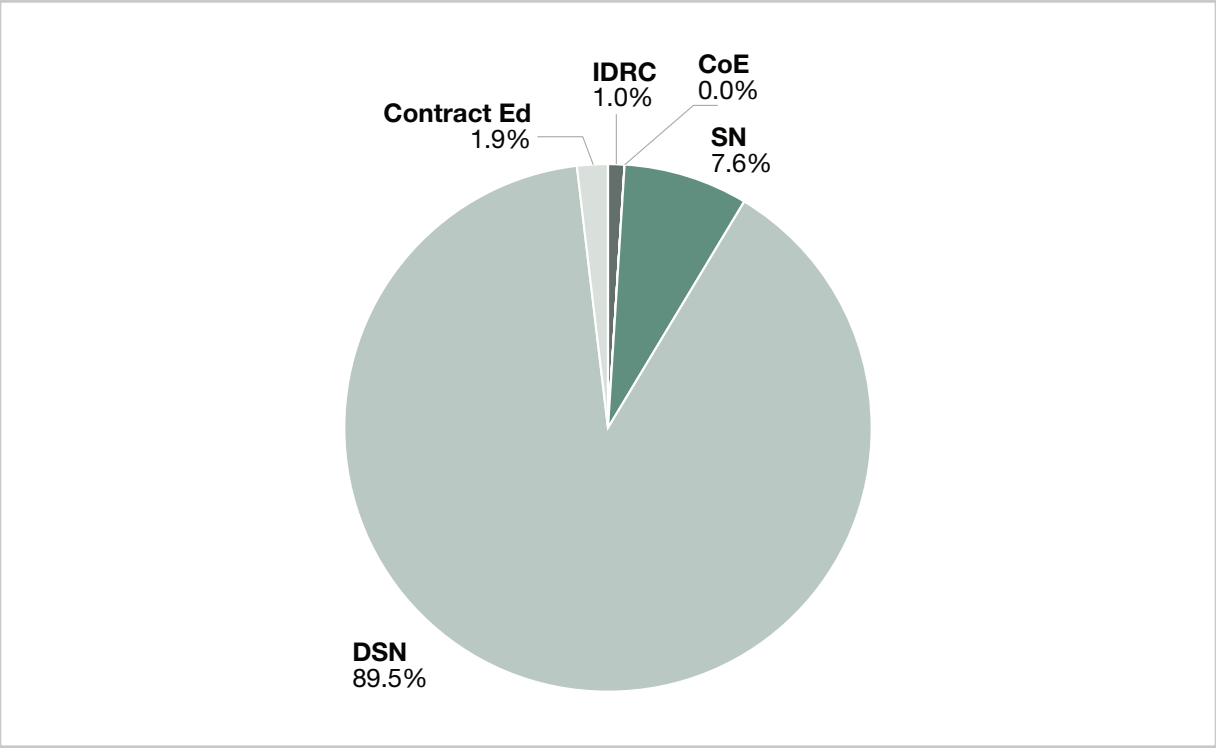
Source: 2013-2014 Grantee Quarterly Reports.

Figure A-2. Percent of People Served by Grantee Type



Source: 2013-2014 Grantee Quarterly Reports.

Figure A-3. Percent of People Served by Grantee Type



Source: 2013-2014 Grantee Quarterly Reports.

Appendix B. Description of Evaluation Requirements

Objectives of the Evaluation for the Legislature and the CCCCO

The reauthorization of EWD (SB 1402) required the CCCCO to contract for an independent evaluation of the program (Chapter 361, Section 2, Part 52.5, Chapter 7. 88650.5). The CCCCO sought an evaluator to address a specific list of questions for use by the legislature in considering future funding for the program and by the CCCCO staff in making improvements to the EWD Program (see Appendix C for specific questions). The objectives outlined in the CCCCO solicitation were:

1. Assess the effectiveness of the totality of grant projects funded through EWD.
2. Assess EWD's contributions to the Doing What Matters for Jobs and the Economy framework.
3. Investigate challenges and promising practices of serving K–12 schools, community colleges, industry, students, and workers through EWD and its grantees.
4. Document and assess outcomes achieved through EWD.
5. Gauge the effectiveness of the program in achieving the intent of SB 1402, Lieu.
6. Produce an evaluation report suitable for submission to the legislature.

The Education Insights Center (EdInsights) at Sacramento State University was awarded the contract for the evaluation. Working with the CCCCO, EdInsights designed an evaluation study to meet the purpose and objectives of the Request for Proposals from the CCCCO, given the short timeframe of the study and the limitations of available data.

Data Collection and Analysis

The objectives of this evaluation were to conduct a process study (examining perceptions, experiences, efforts, and roles of EWD grantees) and an outcomes study (reporting counts on who has participated in program services and activities), leading to an assessment of the program (overall evaluation of EWD's impact on community colleges, industry, and the workforce systems) to provide the legislature and CCCCO with an understanding of the functioning of EWD. The evaluation combined interview, survey, and administrative data on students, grantees, employers, and other EWD stakeholders to develop a robust picture of the program and its outcomes.

Overview of evaluation methods, data, and limitations

The evaluation used a mixed-methods approach, incorporating both qualitative and quantitative data. The process study examined the roles of EWD grantees, including such issues as their experiences coordinating stakeholders and with data collection and use. The outcomes study was intended to capture the impact of EWD funding on student and employer outcomes. However, a traditional outcomes study in which participant outcomes are compared to a control group of non-participants was not feasible, given that EWD's design did not include a control group. Since EWD grantees tended to braid several sources of funding to support CTE programs, and since EWD funds did not flow directly to CTE programs, there was no way to isolate the effects of EWD funding on students or programs, and there was no way to compare students who benefit from EWD funds versus those who do not. Therefore, it was not possible to use control groups or quasi-experimental design. Instead, we analyzed descriptive statistics (from CCCCO Management Information System data) and stakeholders' perceptions about key program-related issues and outcomes.

To best understand EWD, we used multiple sources of data and multiple methods to analyze the EWD program and assess stakeholders' perceptions of it. For the process study, we used qualitative (e.g., semi-structured interviews) and quantitative (e.g., surveys) methods to answer questions about the roles and contributions of EWD grantees (e.g., SNs, DSNs, TAPs, and IDRCs) under the Doing What Matters

framework; coordination efforts among the grantees and with stakeholders; and experiences with data collection and use among grantees. We conducted interviews and/or surveyed all EWD grantees.

For the outcomes study, we utilized qualitative (e.g., semi-structured interviews) and quantitative (e.g., surveys, administrative data, reports) methods to answer questions about perceptions of the overall effectiveness of EWD—its strengths and weaknesses, use of services and outcomes, and recommendations for improvement. Due to the design of the program, we were limited in the types of analysis we could conduct. EWD services have been linked with other services with shared objectives, so it was impossible to disentangle the outcomes of one program from another. EWD programs aimed to support all students in a sector and region, which left us without a control group that we could use to compare the outcomes of EWD students. Also, since these grants have been in place in some form since 1991, we could not rigorously compare student outcomes prior to EWD to outcomes with the EWD program in place. As such, this left us without the ability to make causal inferences about EWD's impact or outcomes. However, after receiving access to data from the CCCCO (quarterly expenditure and progress reports and student MIS data), we were able to report limited descriptive statistics on student characteristics, enrollment in CTE programs in EWD-related sectors, and completion numbers (such as program awards). Also, we captured grantees' perceptions of the overall effectiveness and impact of EWD funds on student outcomes—and the perceptions of colleges using the services and resources provided by the grantees—through interviews and surveys of grantees, CTE deans, regional consortia chairs, and employers.

We transcribed the interviews and used content analyses to uncover dominant themes to inform the program evaluation. We also analyzed the survey content data to examine patterns in the data.

Data sources

To build as accurate an understanding of EWD as possible, we used both quantitative and qualitative data and analytical methods on grantees, students, employers, and other stakeholders.

Qualitative data and analysis

The qualitative data and analysis were based on 45 total interviews with all classifications of EWD grantees, and qualitative responses to surveys administered to DSNs, regional consortia chairs, CTE deans, and employers. We solicited interviews with all sector navigators, IDRC directors, and TAPs (except the contract education technical assistance providers, as we were not able to get their contact information). We solicited interviews with a sample of 30 out of 66 DSNs. The sample was based on regional and sector coverage to increase the generalizability of our interview findings. We received responses from and interviewed all 10 SNs, three IDRC directors, and all TAPs solicited. Of the 30 DSNs solicited, we interviewed the 25 that volunteered to participate. As such, we conducted a total of 45 interviews (10 SNs, 25 DSNs, 7 CoE directors, 3 IDRC directors, and two TAPs).
All interviews were approximately an hour long, followed a semi-structured interview protocol, and were conducted by the same interviewer. The interview protocols focused on questions regarding the grantees' role, the services they provided, their use of data, and their assessment of EWD's impact on economic and workforce development. All interviews were transcribed and coded to uncover dominant themes.
We also include open-ended questions in our surveys of DSNs, regional consortia chairs, CTE deans, and employers (see below for more information on the surveys). We coded these responses to reveal themes within and across participant groups.

Quantitative data and analysis

To build a more generalizable understanding based on our preliminary qualitative research findings, we conducted surveys of DSNs, regional consortia chairs, CTE deans, and employers. All surveys were conducted online, and all invitations were sent via email with a link to the survey.

Surveys of DSNs

For the DSN survey, we emailed DSNs directly, asking for their participation in the online survey. Forty-one of the 66 DSNs responded, and 38 completed the entire survey. We asked DSNs about their role in EWD, how they coordinate with stakeholders, their successes and challenges, their use of data, their impact, and recommendations for program improvement.

Surveys of regional consortia chairs

The survey of regional consortia chairs asked about collaboration in their regions, including successes, challenges, and supports that enable success; EWD's strengths and weaknesses; EWD's effectiveness; and recommendations for EWD improvement. The survey was administered online. Participants for the survey were recruited by CCCCO staff, who sent email on behalf of EdInsights to solicit the chairs' participation. Eight of the 10 regional consortia chairs participated in the survey.

Surveys of CTE deans

The online survey of CTE deans asked about their experiences with the EWD program. We sought to understand their priorities and goals for their CTE programs, their familiarity with EWD, EWD's impact on their programs, EWD's strengths and weaknesses, and the deans' recommendations for improving EWD. The CCCCO sent a message to an email listserv of CTE deans with a link to the survey to recruit participants. Twenty-one CTE deans participated in the survey.

Surveys of employers

We administered an online survey to employers across the state. Local employer groups, trade associations, and workforce agencies throughout California sent an email to their employer mailing lists asking for their participation in our survey. Since we did not have access to those mailing lists, we do not know how many requests those entities sent, nor do we know who our respondents were, beyond sector and region. We received 40 responses with 33 completed surveys. We targeted employers widely to capture a more representative sample of them. We surveyed employers who had and had not received services from EWD to minimize bias and to understand how those who had never heard of EWD would view the services the program provides.

CCCCO Management Information System data

To estimate use of EWD services and student outcomes, we used CCCCO MIS data. One of the largest limitations of these data were that the data simply did not exist to answer some of our research questions. For example, there is no systemic participant-level data collected on EWD services. To organize the data, we received a list from the CCCCO of all courses that mapped to the Taxonomy of Program (TOP) codes related to EWD and the DWM sectors. The CCCCO reported that there were a total of 203 courses. While some courses were deemed to span multiple sectors, for the purposes of our analysis, we only used the primary sector for each course.

EWD quarterly reports

We analyzed all 2013–2014 grantee quarterly data provided to us by the CCCCO. The 97 EWD grantees—SNs (n=10), DSNs (n=66), IDRCs (n=12), TAPs (n=7), contract education (n=1) and TAP coordinator (n=1)—submitted a basic report that provided a snapshot of their grant activities and outcomes. This report is a fillable PDF, where grantees select boxes for the services they provided to colleges and/or businesses and enter figures for the number of people served, number of trainings conducted, and revenue generated for businesses, among other items (see Appendix D for a sample of the quarterly report template).

The CCCCO provided us an Excel report of the grantee activity as aggregate data (yearly) and disaggregate quarterly data (six quarters in total, because some expenditures occurred late due to delays or grant extensions but were a part of 2013–14 fiscal year funding). While all grantees submitted at least one quarterly report, only seven grantees submitted reports for all six quarters. For the purposes of the evaluation analyses, we used yearly data. One of the biggest limitations about the data was that we do not have unduplicated data, meaning grantees could have served the same businesses each quarter, and may have only served 3,420 businesses, as opposed to 13,723. We dealt with the issue by reporting both yearly and quarterly data, but we believe the quarterly data better represents the number of businesses, students, and employees served by EWD.

Another caveat is that the data were self-reported. The CCCCO did not provide grantees with a tracking tool, thus leaving grantees to create their own (and it is not clear if all grantees did so). The end result is that the accuracy of the data are questionable. Grantees could have under- and/or over-reported activities and outcomes each quarter.

Lastly, there are some issues with the report itself. First, grantees are only allowed to state if they offered a service or not. They could have worked with colleges on multiple certificates or programs of study, but that information cannot be captured, since all grantees can do is select the box stating they provided that service. Another issue is the grant activity categories have not been defined by the CCCCO, so there is potential for grantees to assign different meanings to each category, thus not providing a true representation of EWD activities. For example, how are "Total # of Completions (i.e., workshops, training, etc.)" and "Total Hours of Performance Improvement Training" different? Did grantees know the difference?

Even with caveats and limitations, we can start to understand how the CCCCO and others are implementing the Economic Workforce Development Program (EWD) and Doing What Matters (DWM).

The first step in analyzing the data was to run high-level descriptive statistics for all grantee activities in 2013–2014. We totaled all data for the individual grantee activity categories created by the CCCCO. We only collapsed categories related to the number of services to colleges and businesses, which each contained eight subcategories (such as developing and aligning curriculum to the workforce's needs, providing professional development to faculty and conducting needs assessments for businesses).

Limitations

This evaluation faced major limitations in estimating outcomes and with quantitative data. Since we had no comparison group, ability to control for selection bias, and access to student-level data, we were not able to make any estimations of causality or impact. Additionally, in providing figures related to program use, services, and outcomes, we were forced to make many concessions due to the lack of accurate and consistent data.

As with any study, there were data limitations. With regard to the quantitative data, we had access to two sources of data: the quarterly reports that the grantees completed and the MIS data from the CCCCO. Both datasets were used with heavy caveats, which we discuss next.

With the quarterly reports that grantees completed, the data provided were self-reported by the grantees, and there was not a formal reporting or auditing structure in place. These structures would help ensure the validity and accuracy of the data.

With the MIS data, it was impossible to identify who was an "EWD student." To address this issue, we used a proxy by mapping key courses related to EWD sectors to TOP codes. We only used the courses that mapped in our analysis. We received this mapping from the CCCCO. In total, the CCCCO reported

that there were 203 courses in the CCC system. While some courses were deemed to span multiple sectors, for the purposes of our analysis we only used the primary sector for each course. If a student took a single course classified in one of the EWD sectors, that student is included in our analyses.

Estimating the impact of a program is difficult under any circumstances. In this instance, to quantify any causal impact was impossible. First, systemic, participant-level data on recipients of EWD services did not exist. Second, we had no way to control for selection bias, or that students, faculty, staff, deans, grantees, and employers made decisions strategically and for reasons that were not unobservable to us. Third, we only had access to aggregate data and not student level data. As such, we could not attempt any type of modeling that would allow for causal inferences. Given these limitations, we report the data we had access to with the emphasis that none of these figures should be interpreted as impacts or effects. The closest we can get to understanding causality is in our qualitative research when asking about perceptions of impact.

Appendix C. Questions the CCCCO Sought to be Answered by the Evaluation

Process study

Role of EWD grantees

- What are the roles and contributions of each of the EWD grantees in the DWM system?
- What are the nature and quality of services provided to colleges, businesses, students, and employees by EWD grantees?
- How are grantees contributing to structural and policy changes?
- What levels of coordination exist between DWN grantees (including those funded by EWD and other CCCCO grants)?
- How does this coordination work?
- What are some barriers to effective coordination?
- What are some of the successful strategies used to promote successful coordination?
- Specifically, how do SNs work with DSNs in their industry sectors?
- What kinds of assistance do SNs provide?
- What are some challenges in successful SN-DSN coordination?
- What are some promising practices?
- What assistance or guidance do grantees in the field need from the chancellor's office?

Coordination with stakeholders

- To what degree do EWD grantees connect to K–12 schools, community colleges, industry, and workforce and economic development systems and programs (e.g., Workforce Investment Boards)?
- What kind of connections are these, and how are they made?
- What are some of the benefits of these connections?
- What are some challenges and successes grantees had in creating and maintaining connections with each type of entity?
- What are some best practices for connecting with each type of entity?

Assessment and use of data

- How is labor market information produced by the Centers of Excellence being used by EWD grantees and other stakeholders, including employers and colleges?
- How useful do grantees and stakeholders find the labor market information provided?
- What are some recommendations for improvement of labor market information from the Centers of Excellence?
- What potential does this labor market information have for future use?
- How is LaunchBoard being used by EWD grantees and others?
- Who is using these tools?
- Are (and if so, how are) these tools being used to inform decisions by EWD grantees, community colleges, and the chancellor's office?
- What are some challenges users have had with using LaunchBoard and the data tools?
- What are some ways that LaunchBoard and the data tools have been successfully employed by EWD grantees, community colleges, and the chancellor's office?

Outcomes study*

Student and worker outcomes

- How many students and workers have received education or workforce training services funded by EWD?
- What are the program completion outcomes of students and workers receiving education or workforce training services under EWD?

- What are the skills or competencies attained by these participants?
- How many participants complete their program of study?
- How many participants received a certificate or degree?
- What are the educational progression outcomes of students and workers receiving education or workforce training services under EWD?
- How many students continued their educations at a community college?
- How many participants were transfer-ready?
- How many transferred to a four-year institution?
- If entering, re-entering, or continuing in the labor force, what are the employment outcomes for EWD students and workers?
- How many of these participants enter employment?
- If so, what wages are they earning?

Employer and business outcomes

- How many businesses were served under EWD?
- What types of services were provided by each grantee (e.g., assessments, professional development for workers, etc.)?
- What are the effects on employers or businesses of receiving EWD-funded services?

Program assessment

- How has the EWD (via the DWM framework) affected the community colleges, industry, and the workforce system in California?
- Has EWD contributed to system change and capacity-building in the California Community College system? If so, how?
- What supports are necessary to encourage system change and capacity-building?
- What are the strengths and weaknesses of EWD?
- What are specific recommendations for strategies to improve the effectiveness of EWD?

*Note: We attempted to answer the outcomes study questions with quantitative data when possible, but much of the information came from qualitative data. When using the qualitative data, the outcomes study answered questions such as, "How many students and workers do stakeholders believe have received education or workforce training services funded by EWD?" and, "What do stakeholders think are the program completion outcomes of students and workers receiving education or workforce training services under EWD?"

Appendix D. Sample Quarterly Report

Sector Navigator and Deputy Sector Navigator Quarterly Progress Report

I. Summary of activities conducted during the quarter (Each item must be complete in order for the form to certify. If an item does not apply this quarter, please respond with "0".)

1. Type of service provided to colleges and employers (check all that apply)

a) For Colleges	b) For business owners/managers:
☐ Develop and Align Curriculum (LI 1)	☐ Develop curriculum for business (LI 1)
☐ Curriculum alignment with Third Party (LI 3)	☐ Alignment of sector with education (LI 1)
☐ Certificate & Program of Study Development (LI 2 and 4)	☐ Assessments (business needs, technology needs, manufacturing process capability)
☐ Curriculum articulation along a career path (LI 5)	☐ Small Business Creation and/or exporting modules (LI 7)
☐ Professional Development for Faculty (LI 6)	☐ Professional Development of workers (LI 6)
☐ Connect to businesses and/or industries	☐ Connect with Colleges and education
☐ Research and Studies	☐ Research
☐ None	☐ None
Other. Description:	Other. Description:

Employer/Employee/Student Outcomes

2. Number of businesses served:
3. Number of students served:
4. Number of employees served:
5. Total number of completions (i.e. workshops, training, etc.)
6. Total hours of contract education:
7. Total hours of performance improvement training:
8. Total hours of credit/non-credit instruction:
9. How many were placed in jobs?
10. How many participated in work based learning (i.e. an apprenticeship, internship, etc.)?

Quantitative Impact on Businesses

For each of the following, quantify the impact on the business(es) receiving services under the EWD Program during this quarter.

11. How many people were hired?
12. How many employees were retained?
13. How much new revenue generated?
14. Amount of increase in sales:
15. Were there new products developed? ◯ No ◯ Yes
16. Were there new services developed? ◯ No ◯ Yes

II. Reasons for lack of progress toward attainment of program improvements (Limited to 5000 characters)

III. Reasons for expenditures falling below guideline (Limited to 5000 characters)

IV. Provide an explanation for major budget changes (Limited to 8000 characters)

V. Narrative of activities conducted in quarter (Limited to 5000 characters)

Appendix E. Details on Coordinating Efforts around Economic and Workforce Development

In this appendix, we provide greater details on the main findings presented in the body of the report. Detailed findings on internal coordination are presented first; detailed findings on external coordination are presented second. Within each of these sections, we organize our findings by stakeholder.

Internal coordination

Coordination between EWD grantees was at the heart of the structure of the program. In this section, we discuss our key findings on internal coordination:

- SNs and DSNs worked closely together to advance their sectors.
- DSNs in the same sector or region had strong coordination.
- Coordination between SNs and DSNs with CoEs varied substantially.
- IDRCs built coordination around a specific project.

SNs and DSNs worked closely together to advance their sectors

SNs and DSNs are at the core of the EWD program, and their coordination is essential to reaching the program's goals efficiently. This is reflected in the DSN survey, where DSNs reported meeting frequently with their SNs (92 percent met on a weekly or monthly basis), typically via conference calls. Strengths of the coordination between SNs and DSNs included:

- Use by SNs of their statewide expertise, information, and resources to support and guide DSNs.
- Hands-on work by SNs and DSNs in the provision of EWD services.

One of the most commonly cited supports provided by SNs built on SNs' statewide focus. This statewide focus gave them the ability to understand the services and resources offered in each region across the state. SNs, then, would share information and resources from one region with all DSNs statewide. This sharing of resources and practices would be done informally and formally. DSNs also reported that SNs provided DSNs with extra funding to support certain efforts.

SNs reported being highly involved with DSNs in the direct provision of services. These services ranged from trainings to workshops. A shared focus on EWD metrics led SNs to help DSNs provide services.

Achieving successful coordination between SNs and DSNs faced some challenges, according to DSNs. DSNs reported that:

- SNs did not listen to the expertise and information that DSNs provided.
- Not all SNs had enough expertise to lead their sectors' statewide efforts.

Two challenges to successful SN-DSN coordination were apparent. First, DSNs expressed that communication and knowledge seemed to only flow from SNs to DSNs. DSNs desired a forum for SNs to hear from them. Second, DSNs expressed concern and disenchantment about SNs, saying they were not experts in their sectors or only understood or focused on small segments of their sectors. These SNs were not as able to support DSNs' efforts because they did not understand the specific and unique needs of developing the workforce in their sectors.

DSNs in the same sector or region had strong coordination

DSNs within sectors and DSNs within regions reported coordinating frequently. DSNs worked with each other to share ideas, brainstorm solutions to barriers, and build networks. These relationships were coordinated by different entities. Within sectors, SNs facilitated coordination among DSNs. Within regions, regional consortia chairs and the DSNs facilitated coordination.

One challenge mentioned was the lack of coordination between DSNs from different sectors and regions. DSNs expressed an interest in learning from DSNs in other sectors and regions. DSNs requested having a statewide DSN meeting with DSNs from all sectors and regions to share effective practices. Such a meeting would promote coordination among DSNs from different sectors and regions.

Coordination between SNs/DSNs and CoEs varied substantially

SNs, DSNs, and CoEs reported working together in a variety of ways – some with high levels of coordination and others with little or none. Regardless of the level of coordination reported, SNs and DSNs commonly noted how busy CoEs were and that this affected the willingness of SNs and DSNs to request labor market information from CoEs.

In more coordinated efforts, SNs, DSNs, and CoEs worked collaboratively to understand their regions and sectors' labor market needs. Examples of these collaborations were of CoEs:

- Working closely to understand the specific labor market data needs of SNs and DSNs.
- Creating new surveys to gather data that did not previously exist.
- Conducting analyses of existing data to best answer labor market questions.
- Providing labor market information as requested by SNs and DSNs.
- Proactively sharing labor market information with SNs and DSNs.

Those that reported a lack of coordination noted these barriers:

- SNs and DSNs did not having enough funding to pay for CoE services.
- SNs and DSNs reported that their CoEs did not reach out to them and that with the CoEs being out of sight, the SNs and DSNs were effectively out of mind.

IDRCs built coordination around a specific project

EWD grantees noted that IDRCs' projects were another way for stakeholders to collaborate formally. An IDRC project would focus on solving a specific issue in workforce development and involve bringing together relevant stakeholders. However, IDRCs did not seem to be central mechanisms for coordination, since their scope was limited, and grantees only mentioned IDRCs when questions were asked specifically about them.

External coordination

In this section, we discuss our key findings regarding coordination with other DWM entities, K–12, workforce development organizations, and employers and their associations:

- Regional consortia served as a key coordinating structure for regional CTE activities.
- EWD grantees built on old and developed new employer relationships to collaborate on workforce training.
- Braiding of SB 1070 and AB 1402 funds drove EWD coordination with K–12.
- The CCCCO both supported and unintentionally impeded coordination through its management of grants.
- Successful coordination at community colleges hinged on several factors beyond the control of grantees.
- EWD grantees and workforce organizations regularly coordinated, but diverging performance metrics served as a barrier.

Regional consortia served as a key coordinating structure for regional CTE activities

Regional consortia were consistently mentioned as an important and principal structure for coordination, which confirms their role as a way for regional CTE stakeholders to meet and discuss key regional issues. Regional consortia

promoted coordination through regular and formal meetings. They reported joint marketing efforts, serving on WIB committees and on county-wide and regional workforce development groups, and collaborating on developing and delivering programs, workshops, and conferences. They also reported working together on grants.

All regional consortia chairs surveyed reported that DSNs, CoEs, and CTE faculty and staff were actively involved in their consortia. Most also reported that other EWD grantees (such as SNs and IDRCs) and K–12 representatives were actively involved. Half reported that employers and WIBs were actively involved.

While regional consortia were key structures in supporting coordination, it was noted that community colleges make the ultimate decision about CTE issues. Regional consortia were viewed as merely providing guidance and not having decision-making ability. Another reported barrier to effective coordination was that only those who attended meetings had their voices heard, and heard only by the others in attendance. As such, the coordinating reach of the regional consortia was largely limited to stakeholders engaged in them.

EWD grantees built upon old and developed new employer relationships to coordinate on workforce training

EWD grantees reported using their existing relationships, cold calls, and networking events to connect and coordinate with employers and employer organizations. They reported coordinating with employers and employer organizations to identify workforce training needs and develop workshops and courses to address those needs.

Most (92 percent) of DSNs reported their relationships with employers were useful, and they reported meeting frequently with employer groups and businesses (89 percent of DSNs surveyed met with them on a weekly or monthly basis). In coordinating with employer groups, trade associations, and their sectors, in general, SNs and DSNs reported depending on their existing relationships and networks, cold calling sector leaders, attending industry-based events and conferences, and participating in informal sector-related "meetups." SNs and DSNs also reported creating their own advisory boards with employers and other sector stakeholders in an effort to make more formal connections.

SNs and DSNs worked with employer groups to identify training needs, then worked with them to develop coursework to address these needs. They then offered the courses either directly to students and workers or to community colleges to deliver. The relationships between SNs and DSNs sometimes were made more formal through the use of Memorandums of Understanding and Cooperative Agreements.

Braiding of Career Technical Education Pathways Program and EWD Funds Drove Coordination with K–12

Largely due to Career Technical Education Pathways Program (SB 1070; Senate Bill 1070, Chapter 433, Statutes of 2012), funding that was braided with EWD, DSNs reported coordinating with K–12 schools frequently.[16] They found SB 1070 meetings to be useful in coordinating, but did not find CTE advisory board meetings to be as effective.

DSNs met regularly with K–12 schools; 84 percent reported meeting at least monthly. DSNs that reported building middle and high school career pathways as a part of their role used SB 1070 meetings and advisory board meetings as their main ways to coordinate with K–12. DSNs reported that SB 1070 meetings happened regularly statewide and were a key way to connect with K–12 and to learn more strategies for building and maintaining those connections. Attending existing CTE advisory boards that include both community colleges and K–12 representatives was

reported as less effective, as the DSN role in those board meetings was minimal. Adult education (Assembly Bill 86, Chapter 48, Statutes 2013) meetings were also used to make connections, but were rarely mentioned by grantees.

CCCCO both supported and unintentionally impeded coordination through its management of grants

EWD grantees did not report coordinating with the CCCCO, however they did note how the CCCCO role in managing the EWD grants impacted their ability to coordinate with other entities. While grantees consistently stated that the CCCCO had been responsive and supportive, inconsistencies in approvals for grantees' use of funds and inconsistent communication regarding the role of grantees plagued their ability to effectively coordinate with other stakeholders. Grantees reported that they felt that policies were, at times, created on the fly and that different grant monitors approved certain activities while other grant monitors denied the same activities. These inconsistencies, grantees said, made coordination difficult.

Successful coordination at community colleges hinged on several factors beyond the control of grantees

EWD grantees reported making connections to and coordinating with community colleges in a variety of ways—including providing professional development for faculty, upgrading equipment for labs, assisting with revising curriculum, and providing labor market information and marketing research. SNs and DSNs reported making connections with community colleges by attending events where community college faculty and administrators would be in attendance, by cold calling faculty, and through pre-existing relationships and networks. Regional consortia and the California Community College Association of Occupational Education were also reported as being important in connecting EWD grantees with community college faculty and administrators.

Grantees found that the success of their coordination efforts hinged on several things:

- Community college stakeholders being aware of EWD and understanding their role in supporting workforce development.
- Grantees being hosted at a particular community college (this also led to their isolation from other colleges in their regions).
- Smaller regions that made visiting each college logistically easy.
- Colleges that were attuned to CTE programs and goals.
- Colleges with familiar governance structures for EWD and CTE

Awareness of EWD varied

SNs' and DSNs' attempts to connect and coordinate with community colleges and employers were more successful when college stakeholders had already heard of EWD and understood the roles of SNs and DSNs. This information, they felt, came most effectively from the CCCCO, which would build awareness among community college administrators who then would communicate with their faculty about EWD.

Host colleges presented challenges to grantees

The hosting of EWD grantees on community college campuses could play a key role in supporting coordination between EWD grantees and the host campuses. But grantees also reported that this relationship led to their isolation from the non-host campuses in their regions. Some grantees reported having responsibilities to their host campuses in addition to their role as EWD grantees. These responsibilities helped to build the grantees' connections to their hosts, but, they noted, took away from their time there to work on EWD projects.

Large region size prevented adequate coverage

Coordination between DSNs and the colleges in their regions was difficult for DSNs with large regions – both those with a large number

of colleges in their regions and those with geographically large regions. DSNs in large regions reported not being able to spend time with every college in their region even though they sought to.

College focus on CTE was inconsistent

Grantees also reported that they had difficulty building connections with colleges that were not as attuned to CTE (and, of course, those that did not offer programs in that sector). DSNs reported a wide range in the level of focus on CTE. CTE deans and faculty were found to understand the goals and objectives of EWD, however, it was not clear to grantees if non-CTE administrators understood or "even cared" about EWD. SNs and DSNs attempted to overcome this by identifying supportive faculty and administrators on campuses and having them build bridges to other faculty. But they found it difficult to get these supportive campus-level stakeholders to the table.

Variation existed in the structure of colleges around CTE governance

The varied structure of the community colleges was another barrier for DSNs to overcome. While most EWD sectors were considered CTE, some were not. This meant that the courses and programs had separate processes for program revisions and different requirements (if any) for the integration of employers on advisory boards. Grantees also noted that some colleges had a CTE dean that would oversee CTE programs on the campus. Grantees reported that having a CTE dean made coordination easier because the CTE dean would serve a contact person and would also represent the CTE programs in the regional consortia. In fact, 94 percent of CTE deans surveyed had reported meeting with an EWD grantee. Some community colleges had EWD deans and directors (distinct from CTE deans). It was not clear why some had CTE deans, EWD deans and EWD directors, and others did not.

EWD grantees and workforce organizations regularly coordinated, but diverging performance metrics served as a barrier

Due to legal requirements and shared goals, EWD grantees coordinated with workforce and economic development organizations in a variety of ways. However, different performance metrics were often a barrier to more effective coordination.

EWD grantees noted that they were required to coordinate with their local Workforce Investment Boards (WIBs) and that these WIBs were similarly required to work with grantees. As a result, they frequently attempted to coordinate. Some of these agencies were involved in the SB 1070 grants, creating a formal connection for DSNs also involved in the SB 1070 grants. Some SNs and DSNs reported sitting on the local WIB and SB 1070 advisory boards. SNs and DSNs said they usually made connections with workforce and economic develop systems and programs by attending their meetings and cold calling.

SNs and DSNs reported working with these organizations in a variety of ways. Given their broadly aligned goals, nearly all SNs and DSNs reported spending a lot of time with them on advisory boards and in meetings. Many SNs and DSNs said they put on joint programs and training, conducted labor market surveys together, and collaborated on SB 1070 activities.

Specific to Workforce Investment Boards (WIBs), SNs and DSNs noted that they faced big differences in how collaborative the different agencies in their region were. They also indicated that it was difficult to get traction with the WIBs because their specific outcome metrics were different. The SNs and DSNs reported that their metrics were more focused on the community college momentum points and leading indicators, such as retention in a CTE pathway or completion of a CTE award. WIBs, on the other hand, were focused on entering and maintaining employment and earnings after six months.

Notes

1 As measured by receiving a C or better in the course.

2 For EdInsights' analyses and recommendations regarding CTE, please visit http://edinsightscenter.org/Publications/ctl/CategoryView/mid/421/categoryId/23/Career-and-Technical-Education

3 SB 1402 took effect January 1, 2013, revising previous legislation authorizing the EWD program. For the full text, see http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201120120SB1402

4 For more information on EWD's priority sectors, refer to http://cccewd.net/industry_programs.cfm.

5 For more information about the DWM initiative, see http://doingwhatmatters.cccco.edu

6 Annual numbers calculated by adding figures reported in the quarterly reports for the 2013–2014 fiscal year.

7 Courses are classified by their Taxonomy of Programs (TOP) code. At times, courses that were considered CTE were not classified as CTE.

8 Students who earned a course grade of C or better were considered to have passed the course.

9 See Appendix B for a description on how we identified EWD courses. Furthermore, only credit courses were included in our analysis.

10 During this time frame, the community college system experienced severe budget cuts, which could be a reason for the FTES' decline. Furthermore, CTE courses tend to be more expensive for students (i.e. higher equipment and material costs), so this also could explain the higher decline in FTES. However, we do not have data to support these conclusions.

11 Chancellor's office approval is required for associate degrees or certificates of achievement for at least 18 semester units and is optional for certificates of achievement for 12–18 semester units. Colleges can offer certificates for fewer than 12 units, or certificates for 12–18 units that have not been approved by the CCCCO, but such certificates cannot be referred to as certificates of achievement or be listed on student transcripts.

12 Congress mandated that community colleges report outcomes for the Carl D. Perkins Career and Technical Education Act of 2006, a federal program that funds states for the improvement of secondary and postsecondary CTE programs. The indicators were established "to assess the effectiveness of the state in achieving statewide progress in vocational and technical education, and to optimize the return of investment of Federal funds in vocational and technical education activities," pursuant to section 113(a) of Perkins IV.

13 Why do colleges host EWD grantees? Colleges host EWD grantees because the EWD funds are from the state's Proposition 98 allocation. State practice for Proposition 98 funds has been to directly allocate them to community college districts, and has generally excluded programs run directly by state agencies, like the CCCCO. While this distinction can be blurry when the state agency provides the service on behalf of the colleges, and there have been exceptions to this, the reality is that directly allocating the funds to the colleges ensures that the funds come out of the Proposition 98 share.

14 The CCCCO provided this 2-page document with suggestions on how to select priority and emergent sectors: http://doingwhatmatters.cccco.edu/portals/6/docs/RFA/Selecting%20Priority%20and%20Emergent%20Sectors%20100412.pdf

15 For EdInsights' analyses and recommendations regarding CTE, please visit http://edinsightscenter.org/Publications/ctl/CategoryView/mid/421/categoryId/23/Career-and-Technical-Education

16 Career Technical Education Pathways Program (Chapter 433, Statutes of 2012), or SB 1070, requires the chancellor of the California Community Colleges and the superintendent of public instruction to coordinate on improving career pathways between high schools and community colleges. For bill text, see http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB1070

This publication was supported by a subaward agreement with the Butte-Glenn Community College District under Prime Agreement Number 14-181-001 from the California Community Colleges Chancellor's Office. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the Butte-Glenn Community College District or those of the California Community Colleges Chancellor's Office.