



MOVING FORWARD

***Career Technical Education
Charrette Planning Summit 2016
Findings Report and Next Steps***

***State Center Community College District
May 2016***

**State Center Community College District
Career Technical Education Charrette Feedback**

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I. Introduction

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EXECUTIVE SUMMARY

On January 28, 2016, the State Center Community College District (SCCCD) invited key industry personnel, community leaders, educators and SCCCDC trustees to participate in the Career and Technical Education Charrette Planning Summit to consider key findings and gaps and to provide input, both general and specific, to four CTE pathways (Advanced Manufacturing, Agriculture, Business and Health Sciences). The Dual Enrollment structure, processes and opportunities were also studied.

At the Charrette, participants were asked to respond to an Environmental Scan and Planning Report, which focused on Career Technical Education (CTE), industry outlook and emerging trends in each of the four pathways and to bring their own experience and expertise to discussions. Their observations were recorded and are the basis for this Charrette Report entitled *Moving Forward*.

The ideas set forth at the Charrette will be considered by faculty and administration of the District, and must be analyzed for accuracy as well as regulatory, academic and economic feasibility. The Charrette feedback and its analysis will be invaluable to the upcoming District Strategic Planning process.

In general, there was agreement from participants that college graduates/employees need improved basic skills such as reading, writing and math, and lack soft skills such as courtesy, customer service and work ethics; these basic and soft skills should be taught across all career pathways and early in the program. Also noted was the need to work closely with K-12 districts to support increased activities to promote better understanding of CTE careers. Finally, participants agreed that CTE programs need to be better aligned with industry trends, technology and standards.

Pathway Findings

- **Advanced Manufacturing Pathway** participants identified a need to include development of troubleshooting, critical thinking and supervisory skill sets as the industry is seeing a decline in highly skilled workers due to a high number of baby boomer retirees. Advanced Manufacturing participants noted a viable crossover potential between this industry and all other pathways and suggested seminars between all four pathways to explore better integration of CTE coursework.
- **Agriculture Pathway** participants noted the need for the next generation to be educated on agriculture's increasing connection to technology and computer-based information and that curriculum should be expanded beyond traditional production agriculture. Food contamination and safety as well as irrigation and "green" industry practices were suggested for coursework as well.

- **Business Pathway** participants suggested more online or hybrid courses and noted a need for an Entrepreneurial Pathway. Participants also felt that adding courses in business ethics, marketing, financial and tax planning, information management and conflict management would benefit students. The need for a District-standardized business certificate program was also noted.
- **Health Sciences Pathway** participants cited dissatisfaction with program offerings, noting that real needs exist in home health care including Home Health Aides, Personal Care Aides, and Certified Nurse Assistants. Program offerings also need to support the industry shift to ambulatory settings outside of hospitals. Participants cited a need for a better-aligned degree articulation system between high schools, community colleges and four-year universities.
- **Dual Enrollment** participant discussion expressed concern about insufficient qualified CTE instructors at the high school level and suggested a recruitment strategy to address this issue. Participants also suggested that a transition plan be developed for dual enrollment high school students to encourage graduation from high school, and continuation of college coursework. Finally, collaboration between high schools and colleges should be established or expanded to address alignment of curricula.

Charrette Feedback

The following suggestions emerged from the State Center Community College District CTE Charrette:

1. Develop partnerships with high schools and with industry;
2. Align programs more closely, and more quickly, with industry trends;
3. Develop and implement a comprehensive marketing and communications plan; and
4. Secure resources to invest in infrastructure, including facility and equipment acquisition and repair.

It should be noted that the Charrette feedback presented in this report is based on the Environmental Scan and Planning Report presented to Charrette participants and the subsequent participant discussions at the Charrette. The feedback does not constitute formal recommendations.

BACKGROUND AND METHODOLOGY

In 2014, the State Center Community College District (SCCCD) began a strategic planning process in which four career pathways were identified as priorities for its Career Technical Education (CTE) program. The four pathways were Advanced Manufacturing, Agriculture, Business and Health Science. The pathways and industries were chosen based on their economic impact on Fresno and Madera counties, as well as the numbers of students taking courses in these career sectors in local high schools and at SCCCDC colleges and centers.

The District then approached one of its partners, the Fresno Business Council, with a request to form taskforces to study and report on each of the four CTE pathways in preparation for State Center Community College District's convening of a community CTE Charrette Planning Summit. The District's request aligned with the Fresno Business Council Board's selection of workforce development as its 2015 priority initiative. The Business Council taskforces were comprised of representatives from K-12 districts, SCCCDC community colleges, and higher education as well as local business experts from Fresno and Madera counties.

Finally, the State Center Community College District invited key industry personnel, community leaders, educators and SCCCDC trustees to participate in the CTE Charrette Planning Summit on January 28, 2016 to consider key findings and gaps and to offer suggestions, general and specific, to the four CTE pathways. The Dual Enrollment structure, processes and opportunities were also studied.

Career Technical Education Charrette participants were chosen based on their connection to the four CTE pathways and industries within each pathway, and were accordingly assigned to tables. Participants at two tables were also tasked with evaluating the Dual Enrollment process. Each table had a facilitator and a person assigned to electronically record the proceedings.

In preparation for the CTE Charrette, the State Center Community College District developed an Environmental Scan and Planning Report focusing on District CTE education, industry outlook and emerging trends in each of the four pathways. The report includes an appendix summarizing key findings, gap analyses and recommendations. The Planning Report was distributed to participants prior to the CTE Charrette.

At the CTE Charrette, participants were asked to respond to the report and to bring their own experience and expertise to the discussions, and record their observations. Facilitated table discussions included the following:

- Review of SCCCDC Strategic Plan's Mission, Vision and Values Statements.
- Review of current status of the Career Technical Education programs.
- Where do you see your industry moving in the next 5 to 10 years? How can those changes be addressed by the SCCCDC Career Technical Education Programs?
- What strategies need to be implemented to fill the gap between existing programs, services and facilities, and the future needs of industry and business?

After the CTE Charrette, notes from all participants were compiled and analyzed, and themes were identified. Suggestions were then developed based on participant feedback from the CTE Charrette and research presented in the Environmental Scan and Planning Report.

The next step of the planning process will be a close analysis of Charrette findings by District faculty, staff and administration for accuracy and regulatory, academic and economic feasibility. It was noted that some of the ideas offered by Charrette participants are already underway within the District.

Career Technical Education Charrette feedback, and the subsequent analysis of such, will inform the fall 2016 State Center Community College District strategic planning process. In addition, the SCCC Board of Trustees has long recognized the need to replace many of its facilities because of overcrowding (the District has seen a 9% student increase in the past year alone) and older, outdated buildings. A bond measure will be put to voters in June 2016; the CTE Charrette feedback will be taken into consideration as the Board determines priorities for use of these funds.

The Charrette feedback presented in this report is based on the Environmental Scan and Planning Report presented to Charrette participants, and subsequent participant discussions at the Charrette. This report does not constitute a formal recommendation.

II. Career Pathways

CTE Charrette Summary

CAREER PATHWAYS: GENERAL

The Charrette Planning Summit's primary focus was on the four Career Technical Education (CTE) Pathways: Advanced Manufacturing, Agriculture, Business and Health Sciences, as well as services, facilities, strengths, weaknesses and opportunities for improvement in each pathway. One group of participants, however, was asked to provide general feedback and identify issues common to all CTE areas.

Input Summary

Across all pathways, there was general agreement that college graduates/employees lack soft skills including how to answer phones, courtesy, communication, customer service and work ethic, which includes attendance as well as having an "entrepreneurial mindset." CTE Charrette participants also cited a lack of basic skills such as reading, writing and math, commenting that these should be taught early in the CTE program. Participants voiced criticism of the curriculum development process being cumbersome and slow to respond to changing industry trends.

Also noted was the need to work closely with K-12 districts to support increased activities that give students, parents and career counselors a better understanding of CTE careers through career expos, manufacturing cluster activities, college nights, guest speakers, site tours and Career Skills Challenge events.

Charrette participants in nearly all CTE pathways thought CTE should be better promoted, and that such promotion should begin as early as middle school. One group specifically noted that the monetary advantages of CTE courses and certificates, as well as industry-specific earnings projections, are unknown to students.

According to CTE Charrette participants, high school counselors frequently are not equipped to provide guidance in matching student interests and strengths to specific industries and opportunities, or make effective recommendations for appropriate CTE coursework. Participants suggested exploring ways to increase counselor knowledge of where jobs exist in each of the four industries to better assist students with their career plans.

Pathway Feedback

1. Soft skills (e.g., communication, customer service, work ethic, critical/entrepreneurial thinking) are critical to CTE Programs, and are currently found in some CTE programs.
 - a) Soft skills training and evaluation should be integrated within all CTE programs.
 - b) Emphasize soft skills earlier, at secondary level and in dual enrollment courses.

2. Basic skills (reading, writing and math) must be intentionally incorporated into the curriculum.
 - a) Emphasize basic skills early, at secondary level and in dual enrollment courses.
 - b) Include basic skills evaluation early in CTE programs to allow students the opportunity to take appropriate basic skills courses.
3. Develop and/or maintain close industry collaboration within each CTE Pathway to ensure alignment with industry requirements and training needed.
 - a) Ensure pathways are aligned with technology requirements of pathway industries.
 - b) Consider expansion of CTE equivalency programs.
 - c) Expand availability of stackable certificates.¹
4. Ensure CTE coursework is responsive to industry needs.
 - a) Explore ways to shorten approval process for proposed CTE curriculum.
 - b) Explore partnerships with business and industry to ensure students have opportunity to learn about current industry technology and machinery in CTE programs.
5. Maintain and expand linkages between high school and community college faculty and leadership to ensure alignment with secondary and post-secondary course requirements; create opportunities for collaboration (e.g., shared resources, dual enrollment); and ensure that CTE information is shared with students and recruitment is fostered.
 - a) Explore ways to expand collaboration with secondary school faculty, counselors and leadership.
 - b) Develop strategies to ensure high school counselors are knowledgeable about industry opportunities and CTE programs available.

CAREER PATHWAY: ADVANCED MANUFACTURING

Advanced manufacturing is a family of activities that a) depends on the use and coordination of information, automation, computation, software, sensing and networking; and/or (b) makes use of cutting-edge materials and emerging capabilities enabled by the physical and biological sciences (e.g., nanotechnology, chemistry and biology). This involves new ways of manufacturing existing products, and manufacturing new products emerging from new and/or advanced technologies.² Advanced manufacturing is a viable sector for CTE as it involves skilled, well-paid labor that does not necessarily require a four-year college degree.

¹ Stackable credits or stackable certificates allow a student to apply credits from a shorter-length certificate program to a longer-term certificate and/or associate's degree.

² President's Council of Advisors on Science and Technology (PCAST), Report to the President on Ensuring American Leadership in Advanced Manufacturing, June 2011.

Input Summary

The advanced manufacturing sector identified a critical need for partnerships with industries and manufacturers to avoid technology/equipment education gaps. Training programs also need to include workforce culture, troubleshooting, critical thinking and skill sets for supervisors as industries are seeing a decline in highly skilled and experienced workers as baby boomers begin to retire over the next several years. While mentioned in all discussions, participants in the Advanced Manufacturing table groups strongly noted the need for closer working relationships between industry and the College District to ensure CTE coursework and training aligns with industry needs, technology and equipment used.

Advanced Manufacturing participants noted a crossover between this industry and all other Pathways, and suggested seminars with all four Pathways to explore ways to better integrate CTE coursework. For example, Agricultural Mechanics and Advanced Manufacturing coursework could be coordinated.

Pathway Feedback

1. Continue to assess current advanced manufacturing industry requirements related to training in specific technology beyond basic equipment.
 - a) Develop a plan for meetings with key industry leaders to assess specific education and training needs.
 - b) Collaborate with industries to use facilities/equipment through externships and cooperative agreements.
 - c) Explore ways to address the need to train students in highly-sophisticated equipment and technology used by industry. Potential solutions include:
 - i. College-specific training facilities
 - ii. District facility for a centralized training center
 - iii. Training partnerships using industry sites
 - d) Explore strategies for virtual training.
2. Continue to assess current advanced manufacturing industry requirements related to training in supervisory skills.
 - a) Collaborate with industries to create externships where industry provides training for instructor trainers.
 - b) Form partnerships with businesses for customized training for employees.
 - c) Identify union and non-union industry collaborative partners for apprenticeship programs.
3. Explore opportunities for integrating curriculum across CTE Pathways.
 - a) Convene leadership of four SCCC pathways to identify new opportunities for curricular coordination.

CAREER PATHWAY: AGRICULTURE

Fresno County is one of the most productive agricultural counties in the nation. Though viewed primarily as farming and ranching, the agriculture industry also includes the support, processing and distribution of agricultural goods. An “Agriculture Value Chain” includes nearly 200 unique industries, defined as four major areas: ³

1. *Agriculture Support and Environmental Services* includes activities contributing to the production, processing and distribution of agricultural products and services including veterinary services, forest and conservation regulatory agencies, and pest control.
2. *Agriculture Production* involves activities that make raw products including crops, vegetables, animal farming, poultry and egg production, and aquaculture.
3. *Agriculture Manufacturing* encompasses activities of food processing and safety activities, changing raw products into processed goods.
4. *Agriculture Distribution and Retail* includes activities related to the sale, administration, operation and management of agricultural goods and products.

Input Summary

A broad observation for the Agriculture Pathway was the need for the next generation to be educated on agriculture’s changing industry and its connection more to technology and computer-based information. Also noted was the need for coordination between the Agriculture Pathway and the Advanced Manufacturing and Business Pathways since there are areas of overlap in these sectors. Curriculum should be expanded beyond traditional production agriculture.

Career Technical Education Charrette participants described a critical need for expanded curriculum on food contamination and sanitation with a suggestion for a full certificate program, and to consider developing apprenticeship programs for food safety and quality assurance.

Irrigation practices should also be included in coursework, as should “green” industry practices. One group suggested “better definitions of pathways and certificates” are needed; another suggested more stackable certificates are needed. Participants also said college curriculum and industry skill standards are not aligned.

The need for local, accessible community college experience for Madera Unified School District agriculture students was affirmed.

³ California Community Colleges Centers of Excellence, Economic and Workforce Development Program, Agriculture Value Chain: Workforce Overview, California, 2014

Pathway Feedback

1. Ensure programs are responsive to current industry requirements for certificated training in food processing and safety.
 - a) Develop a facility for sanitation training.
 - b) Expand apprenticeship programs for food safety and quality assurance.
 - c) Create curriculum that bridges agricultural production and food processing.
2. Evaluate feasibility of additional certificate programs, based on labor market information. For example:
 - a) Landscape architecture/design
 - b) Wildland firefighting
 - c) Urban forestry
 - d) Ag Education pathway
 - e) Pest Control Advisor pathway
 - f) Horticulture/Urban horticulture
3. Create awareness of overlapping career opportunities between the Agriculture Pathway and Advanced Manufacturing and Business Pathways.
 - a) Develop materials to promote crossover career opportunities in welding, maintenance mechanics, and irrigation pumps.
 - b) Distribute information widely among high schools and area industry.
4. Explore ways to provide a local community college experience for all SCCC feeder high school district agricultural students.

CAREER PATHWAY: BUSINESS

As the state and region continue to recover from the Great Recession, a cautiously optimistic outlook for the Valley was expressed by a 2012 study released by California State University, Fresno's Craig School of Business. While the study's authors expect the economy to expand slowly, they concluded that firms with close ties to agriculture as well as businesses selling internationally will continue to lead the regional economy.⁴

More recent statewide data indicates that business also continues to grow. Total jobs created in the twelve-month period ending January 31, 2015 show California leading other states in job creation. In that time period, California gained 498,000 new jobs, almost 30% more than Texas and ahead of Florida and New York as well. Though solid expansion continued in the tech-heavy San Francisco Bay Area, the latest figures reflected an unforeseen jump in Southern California

⁴ *Doing What Matters for Jobs and the Economy*, Economic Workforce Development through the California Community Colleges, Regional Labor Market Profile, Central Valley Counties, 2012

employment as well in the areas of tourism, international trade, development of a regional tech sector, and construction.⁵

With a healthy job creation environment, positions requiring community college training and education will also continue to grow. These will include the fields of Business Administration and Management, Entrepreneurship, Accounting, Computer Technology, Wholesale and Retail Trade and more.

Input Summary

Input included dissatisfaction with what is being offered as coursework. Participants suggest renaming classes to be more relevant to current job titles to better align with industry needs and to increase student appeal. They suggest more online or hybrid courses as well as adding an Entrepreneurial Pathway so students can learn how to start a business. Participants also suggest adding business ethics, marketing, financial and tax planning, and information management courses as well as conflict management and create a certificate program that is standardized across the district.

Pathway Feedback

1. Ensure that programs are responsive to and aligned with current industry requirements.
 - a) Re-title CTE courses to better align with industry job titles.
 - b) Strengthen existing Entrepreneurial Pathways; coursework could include business ethics, marketing and information management.
 - c) Include global perspectives in courses to foster international business scope/reach.
 - d) Consider short-term coursework specific to areas of student skill deficiencies.

2. Increase opportunities for students to receive certificates and Associate Degrees.
 - a) Add online and/or hybrid courses.
 - b) Explore opportunities for adding Dual Enrollment college courses at high school campuses.
 - c) Standardize certificates and degree processes across the District.

CAREER PATHWAY: HEALTH SCIENCES

According to the U.S. Bureau of Labor Statistics, the healthcare sector is comprised of three subsectors: Ambulatory Health Care Services, Nursing and Residential Care Facilities, and Hospitals. Across California, community colleges offer training for a wide variety of healthcare programs. Regional community colleges provide education and training for most of these occupations within Health Sciences: Certified Nursing Assistant, Registered Nurse, Licensed Vocational Nurse, Medical Assistant, and Medical Coding.

⁵ Lifsher, Marc, "California tops other states in job growth," *Los Angeles Times*, March 22, 2015

However, an article published by the Josiah Macy Jr. Foundation pointed out that the practice of health care is moving in a different direction from traditional care in hospital settings as health care is delivered in community clinics, neighborhood health centers as well as home health care. The field of health sciences is preparing workers for the team-based, patient-centered, community-oriented future of health care.⁶

Input Summary

Input included dissatisfaction with program offerings. Attendees requested a pre-med pathway. Attendees also expressed concern that the Medical Assistant program is unregulated and needs to be standardized. It was also noted that the health care industry requires a four-year college degree for Health Information Technology and Medical Laboratory Technician positions, and that Community Health Worker positions, which pay a sustainable wage, are not available.

Real industry need exists in home health care including Home Health Aides and Personal Care Aides as well as Certified Nurse Assistants. Other industry needs included the transition of health care to rural areas and ambulatory settings outside of hospitals.

Soft skills again are an issue in this pathway; participants noted that students do not have basic communication skills, work ethic, phone skills, courtesy, attendance and a lack of awareness of timely reporting of issues.

Pathway Feedback

1. Ensure programs are responsive to current industry requirements for positions which pay sustainable wages.
 - a) Increase focus on home health care, personal care aides, and home health aides, based on labor market information and compensation information.
 - b) Create a more aligned degree articulation system between high school, community colleges and four-year universities.
 - c) Create common metrics for high school and community college programs to reflect industry expectations for program completers.
 - d) Remove outdated programs; increase LVN program offerings.
 - e) Standardize Medical Assistant program.
 - f) Promote short-term certifications.
 - g) Review programs to align with ACA requirements.

2. Provide outreach to middle school and high school programs to:
 - a) Emphasize importance of math and science
 - b) Engage students early
 - c) Clarify Pre-Med pathway.

⁶ Josiah Macy Jr. Foundation, "Developing New Models for Clinical Education," *Macy Brief*, September 10, 2013

3. Explore potential for CTE career development of entry level health workers (e.g., Community Health Workers):
 - a) Determine industry interest in developing career ladder and supervisory CTE coursework.

DUAL ENROLLMENT

Dual Enrollment is a significant emerging trend that could have a major impact on numbers of high school students with early access to Career Technical Education community college classes. California Assembly Bill 288 was recently signed by Governor Brown to expand opportunities for high school students to be dually enrolled at community colleges pursuant to an agreement by the respective local governing boards. Dual Enrollment provides high school students the chance to enroll in courses that meet college standards, earning college and high school credit. Students may take high school courses only in designated college or career access pathways with the goal of developing a seamless transition from high school to community college. These courses must be taught by instructors who meet the minimum qualifications to teach community college classes in the same discipline for which credit is offered. Dual Enrollment courses can be offered on both high school and college campuses.

Input Summary

The Dual Enrollment option provides college course credit for high school students and increases their connection to community colleges. Because a Master's Degree is required to teach general education community college-level courses, identifying high school faculty who have Master's Degrees to teach these course may be a challenge. Suggestions to meet the challenge include offering incentives to teachers to complete their Master's Degree and expanding online class opportunities. However, it should be noted that a Master's Degree is not required for high school *CTE faculty* to teach community college-level CTE classes.

Student skills, knowledge and interests should be explored at the high school level or earlier for optimum engagement of students. Charrette participants suggested development of a transition plan to facilitate high school graduation and continuation of college. Collaboration between high schools and colleges should be established or expanded to address alignment of curricula. Although not required by dual enrollment legislation, participants identified a critical need at high schools for wraparound services that include collaboration between teachers and counselors at the high school and community college level.

Another suggestion from table groups across several pathways was the need for outcome data to be gathered and data sharing agreements to be established between SCCCD and local high school districts to track student persistence, course taking patterns, and completion rates. Further, colleges need metrics and outcome data to continuously improve pathways and align with local and regional labor market needs. As with every participant group, Charrette Dual Enrollment participants noted the need for increased promotion of the dual enrollment program, and educate students, parents and counselors.

Pathway Feedback

1. Engage students early:
 - a) Increase marketing of dual enrollment program to middle and high school students.
 - b) Promote dual enrollment to students, parents, teachers and counselors.
 - c) Create a well-defined transition plan that meets college course requirements.
 - d) Expand college orientation to improve students' understanding of the impact of taking college coursework at the high school level.

2. Develop increased program collaboration and support:
 - a) Increase knowledge of dual enrollment among advisors and counselors.
 - b) Provide wraparound services to students.
 - c) Improve recordkeeping and data tracking.
 - d) Identify data sharing agreements between high schools and SCCCD for Dual Enrollment students.

3. Identify and increase pool of teachers qualified to teach college courses at high school level:
 - a) Develop strategy to recruit more credentialed community college teachers to teach Dual Enrollment courses.
 - b) Explore ways to incentivize high school staff to complete a Master's degree program in preparation for credentialing to teach SCCCD Dual Enrollment general education courses.⁷

⁷ It should be noted that a Master's Degree is not required for high school *CTE faculty* to teach community college-level CTE courses.

III. Moving Forward

Our Next Steps

Four primary themes emerged from State Center Community College District stakeholder suggestions at the CTE Charrette:

1. Develop **partnerships** with high schools and with industry;
2. Align **programs**, including technology taught, more closely, and more quickly, with industry trends; and
3. Develop and implement a comprehensive **marketing and communications plan**.
4. Secure resources to invest in the District's **infrastructure**, including facility and equipment building and repair.

The next step of the planning process will be a close analysis of Charrette findings by District faculty, staff and administration for accuracy and regulatory, academic and economic feasibility. It was noted that some of the ideas offered by Charrette participants are already underway within the District. The Charrette feedback and its analysis will be invaluable to the upcoming District Strategic Planning process.

STEPS TO CONSIDER NOW

Partnerships

The District could establish structures to ensure ongoing conversations occur with high schools, with industry and among the District's Career and Technical Education Pathways. Participants suggested the establishment of a District CTE Advisory Council that includes all four Pathways to address the multiple issues arising from the CTE Charrette, such as the following:

- Are SCCCD's curricular areas relevant to industry?
- What opportunities exist for industry training?
- Are there other opportunities for coordination, e.g., shared equipment, externships, supervisor coursework?
- Are there gaps between industry needs and existing curriculum that should be eliminated?
- What are the basic skills and soft skills needed, and what is lacking in students exiting from Certificate and Degree programs?
- What opportunities exist for Dual Enrollment programs expanding into new high schools?
- What are the gaps and opportunities for better integration between the four Pathways, e.g., Agricultural Mechanics and Advanced Manufacturing?
- How can the District best communicate CTE information and opportunities to middle schools, high schools and their communities?

The establishment of a District CTE Advisory Council will also lead to increased engagement from partners, which will naturally improve awareness of CTE offerings.

Pathway Programs

Using the suggestions of the Advisory Councils and the CTE Charrette Feedback as starting points, the colleges could undertake a study of the noted specific program considerations. Several CTE Charrette table groups expressed frustration with the cumbersome nature of curricular responses to industry changes. The SCCCD colleges have already implemented processes to shorten the approval process from the District level, and will continue to examine ways to shorten approval of curricular changes for CTE programs.

FUTURE PLANNING AND IMPLEMENTATION

Marketing and Communications Plan

Career Technical Education Charrette feedback noted that the lack of clear and consistent marketing and communication has led to missed opportunities for students to consider and enter into a career and technical education pathway. A plan to market the availability of career and technical education to industry, students, counselors, school leaders, and to the community would be beneficial. Implementation of this plan will require the allocation of District resources, but the resulting program increases will benefit both students and the District, and will ultimately generate additional revenue.

Infrastructure

Dedication to strengthening and sustaining the District's human and physical resources will be required as the District moves forward. As enrollment increases and courses are realigned and expanded, the human resources needed to sustain those expansions and changes can be added incrementally.

Physical resources, however, will need to be improved for the District to thrive. Many of the facilities in the District are aging and in urgent need of repair and replacement. New facilities need to be constructed to meet growth and changing needs. Participants frequently noted equipment and technology used by industry cannot be taught without those resources.

As previously stated, if voters approve the June 14, 2016 Bond Measure, the District will have finances to invest in infrastructure. The District's Strategic Planning Process, scheduled for fall 2016, will provide valuable direction for prioritizing the District's facility needs.

BOARD OF GOVERNORS – CALIFORNIA COMMUNITY COLLEGES
Task Force on Workforce, Job Creation, and a Strong Economy – 2015

REPORT AND RECOMMENDATIONS

Excerpted from Executive Summary; suggestions for execution in full report.

STUDENT SUCCESS

Community college students need a broader range of support services than traditional, four-year, post-secondary students. Both populations are challenged by the need to identify a viable career path, but a greater percentage of community college students are first-generation and are prone to experience major impediments to completing their education. The Strong Workforce Task Force recommends a series of actions to raise awareness of and support for career exploration and planning starting in high school, to collaborate with education and workforce partners to enhance support services, and to increase financial support for community college CTE students.

1. Broaden and enhance career exploration and planning, work-based learning opportunities, and other supports for students. (K-12, Industry)
2. Improve CTE student progress and outcomes. (K-12, Industry, Parents, Community)

CAREER PATHWAYS

Career pathways provide a seamless sequence of academic and CTE coursework across K-12 and postsecondary education. The Strong Workforce Task Force recommends creating pathways and curricula driven by industry and labor market needs, contextualizing basic skills and workplace readiness skills into pathway curricula, developing model CTE curricula and ensuring that career pathways meet the needs of non-traditional students.

3. Develop and broadly publicize industry-informed career pathways that prepare students for jobs needed within the regional labor market. (K-12, Industry, Media)

WORKFORCE DATA AND OUTCOMES

Colleges need robust metrics and outcome data in order to continuously improve pathways within career technical education, identify which programs employers' value, and align their program and course offerings to local and regional labor market needs. The Strong Workforce Task Force recommends building on current community college initiatives measuring student progress to align common metrics among all workforce programs; to increase the ability of governmental entities to share employment, licensing, certification, and wage outcome information; and to improve the quality and accessibility of student outcome and labor market data.

4. Create common workforce metrics for all state-funded CTE programs and expand the definition of student success to better reflect the wide array of CTE outcomes of community college students. (State, Community Colleges, Industry)
5. Establish a student identifier for high school students and those enrolled in postsecondary education and training programs to enable California to track workforce progress and outcomes for students across institutions and programs. (State, Education)
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.

CURRICULUM

A rapidly changing labor market and diverse student body present a series of challenges and opportunities for career technical education. Faculty strive to keep courses and programs current with appropriate levels of academic rigor, yet lengthy local- and state-level approval processes can delay curriculum development and revision. The Strong Workforce Task Force supports clarifying and streamlining curriculum development and approval processes, achieving better alignment of curricula with the needs of business and industry, and improving articulation across institutions to support portability and completion in our increasingly mobile society.

7. Evaluate, strengthen, and revise the curriculum development process to ensure alignment from education to employment.
8. Evaluate, revise and resource the local, regional, and statewide CTE curriculum approval process to ensure timely, responsive, and streamlined curriculum approval.
9. Improve program review, evaluation, and revision processes to ensure program relevance to students, business, and industry as reflected in labor market data.
10. Facilitate curricular portability across institutions.
11. Develop, identify and disseminate effective CTE practices.
12. Clarify practices and address issues of course repetition for CTE courses when course content evolves to meet changes in skill requirements.

CTE FACULTY

Education and work experience requirements for hiring CTE faculty and salary differentials in highly paid fields may limit a college's ability to recruit a qualified pool of faculty for CTE courses and programs. The Strong Workforce Task Force recommends a range of activities to increase the pool of CTE faculty including developing pipelines for industry professionals to teach in community colleges, enhancing professional development opportunities for current faculty to maintain currency in industry standards, and exploring solutions for attracting industry experts to community college teaching from high-salaried fields.

13. Increase the pool of qualified CTE instructors by addressing CTE faculty recruitment and hiring practices.
14. Consider options for meeting minimum qualifications to better integrate industry professionals who possess significant experience into CTE instructional programs.
15. Enhance professional development opportunities for CTE faculty to maintain industry and program relevance.
16. Explore solutions to attract industry professionals in high-salaried occupations to become CTE faculty in community colleges.

REGIONAL COORDINATION

State-, federal-, and foundation-funded initiatives to address regional workforce and economic development often have similar and overlapping goals that may result in a fragmentation of efforts, duplication of services, and confusion to both students and employers. Successful integration of these initiatives can result in effective practices to meet student, job seeker, and regional economic needs. The Strong Workforce Task Force recommends enhancing the regional CTE framework within the community college system to improve coordination and provide greater alignment with the colleges' overall governance and reporting structures. The task force also endorses developing robust regional partnerships among community college, industry, and other workforce and economic development entities to improve CTE program delivery and responsiveness to regional and industry labor market needs.

17. Strengthen communication, coordination, and decision-making between regional CTE efforts and the colleges to meet regional labor market needs.
18. Clarify and modify, as appropriate, state regulations to allow colleges to regionalize course articulation along career pathways utilizing regional or state curriculum models.
19. Develop regional leadership and operational partnerships among community college, industry, labor, and other workforce and economic development entities to improve the delivery of all CTE efforts.
20. Develop robust connections between community colleges, business and industry representatives, labor and other regional workforce development partners to align college programs with regional and industry needs and provide support for CTE programs.
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 and technical education.

FUNDING

Career technical education courses are funded at the same level as general education, lecture-based courses; however, these programs have higher startup and operating costs, high costs for equipment and specialized facilities, increased needs for professional development, and more frequent curriculum revision and program review. To ensure that CTE courses keep pace with the increasing demand for middle skill jobs, the Strong Workforce Task Force recommends a

series of funding strategies that include establishing a supplemental funding source targeted to support high-cost courses and programs, creating a funding stream to support regional and local infrastructure and coordination, and leveraging public workforce funding streams to support training efforts for priority sectors in regions.

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.
24. Review, analyze, and modify, as needed, laws and regulations related to student fees for disposable and consumable materials and CTE facilities.
25. Create incentives and streamline processes to maximize public and private investment in support of CTE programs.

CONCLUSION

The recommendations of the Task Force on Workforce, Job Creation, and a Strong Economy are the result of months of deliberations based on input from a wide variety of sources reflecting agreement from both internal and external stakeholders of the community college system. Some recommendations may require changes in statute or regulation, while others can be accomplished within the existing structure and parameters of the system. In all cases, these recommendations enhance career technical education and workforce training to meet the demands of the economy and the labor market, thus benefitting individuals, communities, and the entire state.

To ensure the economic prosperity of the state and its diverse population, California must address the issues and recommendations identified by the task force. This requires a broad-based commitment from the entire community college system, education and workforce partners, business and industry, and state policymakers so more Californians can acquire the education, skills, and work experience to participate in a strong and vibrant economy.

**Career Technical Education Programs Offered
by State Center Community College District**

Link: <http://www.scccd.edu/index.aspx?page=405>

State Center Community College District
MOVING FORWARD:
Career Technical Education Charrette
RESOURCE LIST

The following newspaper articles, government and industry publications and trade journals have been invaluable in providing data to inform the participants in the State Center Community College District 2016 CTE Charrette Planning Summit.

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http://www.coecc.net/environmental_scans/ag_scan_cv_11.pdf
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<http://www.latimes.com/business/la-fi-capitol-business-beat-20150323-story.html>
5. *Developing New Models for Clinical Education*, Macy Brief, Josiah Macy Jr. Foundation, September 10, 2013. http://www.macyfoundation.org/docs/issue_briefs/Macy_brief_New_Models-Clinical-Education_09102013.pdf
6. *Integrating Earning College Credit in High School into Accountability Systems*, Achieve/Jobs for the Future, August 2015.
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12. *Employer Survey Results, Advanced Manufacturing*, Los Angeles County, Orange County, Central Valley, December 2013, California Community Colleges Centers of Excellence, Economic and Workforce Development Program. http://www.coecc.net/Environmental_Scans/mfg_survey_social_13.pdf
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14. California Agricultural Bulletin, 1st quarter, 2014, Employment Development Department, State of California. <http://www.labormarketinfo.edd.ca.gov/file/agric/2014-1cab.pdf>
15. California County-Level Economic Forecast, 2013-2040, Department of Transportation. http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic_files/2013/Revised_Full_Report.pdf
16. *A Sunny Outlook for Jobs in the Golden State*, Chris Kirkham, Los Angeles Times, October 3, 2015. <http://www.latimes.com/business/la-fi-california-economy-20151004-story.html>
17. *Doing What Matters for Jobs and the Economy*, Healthcare Sector Profile, June 2012. http://www.coecc.net/documents/dwm_health_sector_CA_12.pdf
18. Economic Overview and Program Gap Analysis, EMSI, October 2015
19. *Doing What Matters for Jobs and the Economy*, Advanced Manufacturing Sector Profile, 2012. http://www.coecc.net/documents/dwm_sector_adv_mfg_13.pdf
20. Central Valley AgPlus Food and Beverage Manufacturing Consortium, April 1, 2015. http://valleyvision.org/sites/files/pdf/agplus_portfolio_final_5.22.15.pdf

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