



Career and Technical Education in the San Joaquin Valley
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Offered to Spark Conversations by Mike Betts & Deborah Nankivell

It is the purpose of this paper to identify some of the complex issues behind the limits of existing approaches to Career and Technical Education (CTE), stimulate constructive, respectful community conversations, and to ultimately make recommendations for an enhanced approach. One that we believe has great promise to produce a CTE eco-system that will bring pride to educators, a qualified workforce for industry, expanded opportunities for students and job seekers, and a higher per capita income in the communities of our valley. We welcome your input and engagement as we collectively determine the most promising approach and commit to execution. For those unfamiliar, CTE is a term applied to schools, institutions, and educational programs that specialize in the skilled trades, applied sciences, modern technologies, and career preparation. In today's workplace, the term must also include social emotional development as most careers require the ability to work on a team.

Our future depends upon expansion of an approach best equipped for restoring vigor, rigor and prosperity—Career and Technical Education (CTE). Because it's the natural intersection of human and economic development, the gains can be great on many levels. To do so employers, public institutions, and communities must work together to ensure conditions that empower educators to develop capable, responsible, and committed citizens. This is true throughout much of America, but it's especially relevant in the San Joaquin Valley where too many communities struggle economically. Our challenge-- what must we do to create a world-class CTE eco-system that is lean, responsive, and provides the education and skills required by the employers of the San Joaquin Valley and attract more?

Following two years of discovery, it is our assessment that we already have many of the assets necessary to produce an effective CTE eco-system. While there is still much to learn, we have been encouraged by what we have seen and the quality of the people we have interviewed. Yet still more is attainable.

What we must do is keep building upon existing partnerships between sectors, families and students working together to create an investment worthy, public private platform built on mutual respect and a shared vision. We need a partnership with effective governance, fact-based oversight, data driven solutions and outcomes, a collaborative spirit, and a commitment to excellence. We imagine a "the buck stops here" partnership that seeks continual innovation and renewal, and pursues and demands outcomes and answers from all the key stakeholders.

Most importantly, we must change the culture around CTE. Throughout the globe, where CTE is done well it is also done within a deeply ingrained culture of commitment,

responsibility and excellence practiced by all who touch the system. Where that exists, the results are remarkable. We believe that's within our grasp, if we commit to work together to attain it; and stay with it until it's deeply ingrained within our culture as well.

In pursuit of all the above, industry and education along with other key stakeholders are all part of the solution because each of the partners has unique skills, experiences, and resources that are essential for success. None can build a winning CTE eco-system alone.

We believe the timing is right to make major progress on a CTE initiative. Industry is increasingly willing to shoulder its share of the responsibility and to collaborate with educators to forge a new way forward. Likewise, educators are anxious to work with industry so their students are prepared from the "get-go" and have the right mix of education, skills and work-experience to obtain employment with local industry.

Our community has been working for years to learn new collaborative models to address local issues. We largely already know what to do; and, what we don't know, we will figure out in progress. We are now ready to execute, to apply those skills to design and implement a world class CTE eco-system that is integrated, consistent, and effective.

Critical Elements of Success

I. A World Class CTE Eco-System is a Whole Community Responsibility

Families are a child's first teachers and ensuring that they are equipped with the knowledge to prepare their children for school will empower them to excel when they first walk through the doors. For children with challenges, finding better ways of aligning resources from nonprofits and the faith community to intervene and address deficits will benefit all parties. For too long we have relied on our educational system to heal, feed, develop, protect and guide our children in addition to educating them at high standards. Education is a whole community, life-long responsibility that must involve all residents to be successful.

II. In the San Joaquin Valley effective Industry Clusters Are Vital

With few exceptions, most companies in the San Joaquin Valley are small and midsize. They generally do not have the internal resources to effectively advocate for their industry nor participate in a range of CTE opportunities. By forming a cohesive industry cluster, companies can support one another and learn about the most effective approaches to partnerships.

To build a collaborative and supportive CTE eco-system, it is critical for both industry and education administrators and faculty to be active participants and supporters of the clusters. High-functioning clusters will build a vibrant learning community in which new ideas are incubated and aggregated, and new jobs are created. Most importantly they will help in building a strong collaborative and synergetic relationship amongst

various economic and workforce development stakeholders and the broader community.

III. English Along with Additional Languages Are the Language of Employment and Promotion

There have been various approaches to ensuring that as many as possible speak English. In most cases the ability to speak and write fluently in English and additional languages determines the level at which one will succeed in school and in the workplace in our increasingly diverse society and global marketplace. Those speaking multiple language are of increasing importance to employers in all sectors. It is vital that we assess resources currently devoted to this goal, align them, leverage them and fill any gaps remaining if we are to have a strong workforce with more personal opportunities available to all.

IV. Commitment to Accountability

While some may believe education is a right and others believe it is a personal responsibility, a common ground is accountability. Those who enter a system have a responsibility to all others and the community to aim for excellence and continuous improvement. Every sector needs qualified, committed employees. The time to demonstrate a work-ethic and learn about workplace cultures is prior to entering the workplace. Educators must play a larger role in fostering accountability, specifically merit-based placement, high standards and expectations regarding timeliness, civility, teamwork and other attributes valued in the workplace and community.

V. Employers Must Be Engaged at the Level of Design, Funding and Execution

For years we have expected the education system to single-handedly prepare a high-functioning and plentiful workforce. However, with rapid changes in every field, employers have been playing a much larger role in preparing their own workforce. With the rapid changes in technology, it has become challenging for education and industry to keep up. The equipment is expensive and changeable, curriculum updates are more rapid, and most importantly the fundamental education level to be successful in modern day workplaces is much higher and complex than traditional vocational education.

To keep up with the changes and prepare students with the appropriate skills required by industry, faculty and teachers will need to continue to update their own skills at a like rate. For that reason it is vital that instructors move in and out of industry easily and curriculum alignment be done in real time. And, industry must facilitate and engage fully in this work.

Employers must develop stable and sufficient internships, apprenticeships and other work-based learning opportunities and introduce the world of work to students beginning in the early grades. Active partnerships with educators are required to foster these opportunities. This will require “connectors” who speak both languages to be effective and to ensure good matches. These connectors are often the missing link between resources and needs. Events, classroom visits, tours—there are many ways for students to learn about the myriad of employment possibilities that fit their dreams and abilities. However, without a high-functioning team of *business and education development managers*, we will not build the sturdy, ongoing bridge that lasts beyond personalities, grants and policy changes.

Furthermore, to meet the demand of today’s workforce it is extremely important for community colleges to offer courses that are both conducive to work schedules and also provide reasonable opportunities to up-skill and re-skill as necessary for students to progress in their chosen career pathway. Colleges must prepare students with industry needed skills and short term certificates that are stackable and are available without participating in a multiyear degree programs. Having such practices is critical for students needing quick access to a quality job and juggling multiple responsibilities. A short term sequence of courses with qualifications aligned with apprenticeship opportunities are ideal, recognizing that some may decide to pursue a degree program at a later time.

Too many students drop out and then attempt to re-enter through remedial programs, missing critical developmental steps and facing a wide-range of barriers as a result. While a workable approach for many, some employers rely on a temp systems to protect themselves from bad hires, leaving some job seekers with an uncertain future and churn. To address gaps we foresee a world-class CTE eco-system that is deeply rooted in core education and connected directly with employers.

VI. *Curriculum Must Be Current, Relevant, Transferable and Uniform*

Our research also revealed that there is too little consistency amongst the CTE courses/programs offered by community colleges, thus making it challenging for both students and employers. Students who obtain CTE certificates or degrees from one community college are most likely not to receive credits from another community college. Furthermore, there is no consistency in preparation of students from one college to another for the same occupations e.g. Industrial Maintenance Mechanic. Industry expects that there is some uniformity in the preparation of students amongst colleges so they can expect some consistency when sourcing workforce from various colleges.

As mentioned earlier it is extremely important for students to have the right education and training, i.e. industry supported and approved curriculum, and qualified and experienced faculty/teachers to provide the education and training. Industry advisory boards can help update and develop new curriculum, but expects the education system

to be responsive in preparing students accordingly with the up to date curriculum with appropriate support services for students to be successful.

Furthermore, it is desired to have competency based curriculum which assures that student preparation is validated to meet the desired standards and will also serve as a feedback for the faculty to adjust the curriculum and prerequisites. Having a standard and aligned curriculum will enable the education system (K-14) to develop pathways from high schools.

VII. 24/7 Utilization of Community Assets

Given the higher costs of CTE instruction due to equipment and costs to hire qualified industry professional instructors, every opportunity to leverage public and private assets should be explored. Given the different times youth and adults are typically available for training, school-based sites, joint ventures between institutions, and public private partnerships could all be connected to make the most of community assets to free resources that can be invested in updating. Furthermore, systematic issues preventing the achievement of stated objectives must be faced with honesty, urgency, and strong action, as the cost of no-action will continue to degrade our competitiveness to compete in the global market.

Another opportunity that will require community wide participation to maximize is after-school hours. This is the time where students can be offered enhancing experiences or be left on their own. Some specific examples at different stages include:

Elementary: First Lego League Robotics.

Middle and High School: Science Olympiad

High School: Science Olympiad and Robotics

VIII. Contract Ed for Specific Companies and Clusters

An approach to fill gaps, test curriculums and respond quickly is contract education wherein a company partners with an educational institution to fulfill a specific need. These contracts could include a mix of technical skills soft skills, and English language training where needed. Given the size of companies in the San Joaquin Valley, this approach could be expanded to fill industry sector needs.

It is also very critical to consider all possible options during the designing of the contract education course and programs so the student can obtain college credits which later can enable students to obtain college degrees or other recognized certification.

IX. Priority Registration Based Upon Merit and Work Status

Time-to-placement impacts both employers and job seekers. Students who have demonstrated commitment through grades and attendance, and those who are incumbent workers and apprentices should be given priority registration.

Currently students who enroll in CTE courses typically do not go through a pre-entry assessment and which can lower the quality of the education as a whole, while potentially prohibiting an academically strong and well prepared student from enrolling in the course.

X. *Vertical Alignment of Curriculum, Policies, Funding and Customization*

A hazard of hierarchy can create dysfunction between what is actually happening at ground level execution and what those attempting to guide the system know. Indirect communication cannot compare with direct experience. As California is a state of very diverse regions with different industry strengths and social conditions, few policies lend themselves to one size fits all although standards must be uniform. It is vital to achieve curricular alignment between K-12 and post-secondary education in order to ensure clear pathways, shared resources and convergence with Common Core. Any “world class” system will recognize these anomalies and resolve them.

XI. *Reality Check and Cultural Transformation—Advancing a European Approach*

Since the founding of the country there have been contentious conversations about the purpose of education and the principles underlying economic constructs. A seminal work by John Gardner; *“Excellence; Can We Be Equal and Excellent, Too?”* is an attempt at a rational conversation about issues many would prefer to avoid. Our refusal to confront the changing global economy, the variances of ability, motivation and performance of students and the importance of social/emotional development along with a commitment to a social contract based upon stated American values has left many communities with too many un-or-under-employed, a weakened and inadequate workforce and employers without the people they need to succeed. Not to mention the social and psychological problems which manifest from those conditions.

The Europeans, most notably the Swiss and the Germans, have a longstanding history of deeply honoring work of artisans and skilled technicians along with those who are better suited to various professions. Business, government and education, and family work together to ensure that students find the right fit and employers participate in their training. There are shared expectations and acknowledged responsibilities for all who participate in or gain from that system. A community needs excellence across all posts whether one competes in the global economy or is committed to the most compassionate care as a hospice worker.

XII. *Center for Advanced Research and Technology (CART)*

Our community is fortunate to already have an outstanding example of project based learning and the results of education and business working together. Not only that, CART is an example of two districts working together to leverage resources on behalf of the entire community. It offers a professional environment where students and staff

from very different districts serve both students and employers. CART offers an inspiration and building block.

XIII. The Change Needed Is Urgent and Critical

We believe developing a world class CTE system is the predominate opportunity of our times. It offers the best avenue for quantum advancement for our Valley, our residents, and our economy. We understand that change of this magnitude is very hard and likely disruptive. However, we contend that in the end virtually all participating stakeholders will realize substantial tangible benefit.

In this paper we have identified some early issues and opportunities; however, we know that it's just a start. There is much learning and system rationalization still to be done. Nonetheless, good, smart people from all relevant sectors have agreed to join in this effort, and substantive success is clearly attainable if we think and act together with urgency.

The stakes are too high to do otherwise.

Next Steps

Our intentions with this document are multiple. Two years ago we began an exploration of our CTE assets in our community and have been amazed by the quality, quantity and the level of commitment by those engaged. We also learned how few know about them and that they are fragmented. As a result, many are underdeveloped and underused. We see an extraordinary opportunity to align and leverage them to achieve significant impact across every critical issue. As noted above, we have come to believe that CTE is perhaps the most vital and attainable bridge there is to a prosperous, healthy and unified community.

Our next steps include:

1. Leading a strategic planning process with our educational and community partners to deepen everyone's understanding of our assets, gaps and opportunities.
2. Align major events aimed at industry cluster growth and workforce development that reflect our local economy and business opportunities in order to strengthen partnerships and unify efforts.
3. Seek feedback from all sectors to the ideas and recommendations in this paper so that we can enhance it and produce its next iteration and translation into a time and action plan with specifics for each partner and governance structure.
4. Work with our regional and state level partners via the California Stewardship Network and California Forward to foster a culture that supports CTE and empowers regional customization regarding priorities, funding, relationships and expectations where it is essential for success.
5. Craft a time and action plan laying out specific responsibilities for each partner with a governance structure to ensure accountability and resource alignment.

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