

# IMPROVE INSTRUCTIONAL PRACTICES & DEVELOP 21ST CENTURY SKILLS WITH DATA

By John Foster & Marie Perotti

# IN THE LAND OF THE GOLDEN BEAR, WORKPLACE SKILLS HAVE GAINED PROMINENCE IN EDUCATION.

Though workplace skills aren't represented on the state flag, they are an important factor in the state's ability to compete in the global competition for a skilled workforce.

Coachella Valley Unified School District (CVUSD) sits a little east of Anaheim, California, and district leadership is taking steps to ensure that students are workplace ready! They are getting serious not only because of relatively recent state legislation — to identify college and career indicators (CCI) — nor because of the impact of Perkins V, but because they honestly believe in the career and technical education (CTE) mission, and they want their students to achieve success. College and career indicators were established to deter-

mine what constitutes college readiness and place a greater emphasis on workplace readiness, thus helping California ensure a skilled workforce. These indicators measure workplace readiness through completion of career and technical education (CTE) pathways, and the state is looking to add certifications and work-based learning internships.

# The Importance of Data Collection to Change Instructional Practices

In 2010, California's CTE mentor teacher program, CTE TEACH, began training teachers to use data to drive instruction in the classroom and track skill attainment of industry competencies for program improvement (Foster, Hodes & Pritz, 2019a). CTE TEACH found that substantial numbers of new CTE teachers were leaving the profession around

the three-year mark. Further research found that this was occurring primarily because of the lack of a professional network, so they paired mentors with new teachers in a variety of locations throughout the state. In addition to the mentoring efforts, CTE TEACH postulated that instruction of these new teachers, and of programs in general, could be enhanced by utilizing objective third-party data to inform instructional practices. The data utilized was based on national standards and was obtained through credentialing assessments.

CTE TEACH also discovered research being conducted by the National Research Center for Career and Technical Education (NRCCTE) regarding data-driven instructional improvement. Members of the CTE TEACH staff were trained in utilizing strategies referred to by the acronym CTEDDI (career and technical educators using data-driven improvement) (Foster, Hodes & Pritz, 2019b). Through these efforts, educators began to understand the importance of data collection to change instructional practices, and how this connects to the collection of data as it relates to the new CCI model.

Currently, Coachella Valley is working to align to the new CCI model by training teachers on what data to collect, how to use that data for program improvement and benchmarking, and ensuring it is consistently collected. Many CTE programs at CVUSD are high-quality model programs, however, proving it through objective third-party metrics has not been consistent. To remedy the situation, effective in the 2018-19 school year, teachers at CVUSD are required to report the number of students who successfully complete an internship, including the number of hours, the number of students who took a national credentialing test and the number who passed. In addition to pass rates, a breakdown of the data — including information on standards and competencies — was included. While this information seems simple to collect on the surface, it

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requires a targeted approach to ensure that data is being collected consistently and accurately, and that it is uploaded into the state's database.

## **Developing 21st Century Skills**

During the 2018–19 school year, CVUSD utilized a workplace readiness credential entitled "21st Century Skills for Workplace Success" with approximately 100 students across two specific groups of students: CTE concentrators and AVID students. AVID, which stands for Advancement via Individual Determination, is a college readiness program designed to help students develop the skills they need to be successful in college. The program places special emphasis on growing writing, critical thinking, teamwork, organization and reading skills and typically targets students in the middle range of academic performance. The CTE students selected were part of a California Partnership Academy program which targets at-risk students. All of the CTE students had completed a 15 week job shadowing experience.

The credentials, digital badges and, college credit provided great recognition for the individual students involved, and the data received by CVUSD was equally important. Though the administration of this credential was meant to establish a benchmark for improvement, CVUSD students, on average, scored above the criterion-referenced mean established by industry experts. More specifically, CVUSD noted that in the areas of "work ethics" and "positive attitude," their students were aligned with the national averages in those areas. Their goal in the coming years is to excel in not only those areas, but all of the standards encompassed by the 21st century credential.

Assessment data from both student groups was evaluated and, to the surprise of many, the AVID students who did not receive career exposure through classroom instruction and job shadowing performed very well on the assessment. In follow up discussions with teachers, AVID students are taught to dissect questions and, through process of elimination, utilize critical thinking skills to help them navigate material they are unfamiliar with; critical thinking itself is a measure of workplace readiness. The CTE students overall performed well on areas of the test that measure career readiness but we learned, academically, some of the students had difficulty navigating some of the vocabulary and scored lower in areas pertaining to reading and math. It may be worth noting, the CTE student group had many students categorized as English language learners.

Under the new Strengthening Career and Technical Education for the 21st Century Act, referred to as Perkins V, if funding is spent on credentialing exams, the results of the exam must become part of a student's grade; additionally, the data from all students taking the exam must be accessible for use in program improvement efforts. The data can be used as part of the local needs assessment process and can be utilized to assist in professional development and teacher retention! CVUSD leadership understands the value of administering third-party, nationally standardized credentialing assessments to all students in the program, not just those who show aptitude. This can become challenging when students enter and exit CTE programs for a variety of reasons; it is difficult to assess all students when they are often at different levels of skill set based upon many factors.

Nevertheless, CVUSD is committed to utilizing objective data in a longitudinal analysis not just because it can help meet state and federal regulatory requirements, but because it recognizes student achievement and provides a pathway to improving instruction.

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### REFERENCES

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