

Hybrid CTE Dual Enrollment:

An Innovative Approach to Education

By Steven Chumbley II





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n his first joint address to Congress on February 24, 2009, President Obama set a goal that "by 2020, America will once again

have the highest proportion of college graduates in the world."

The president's plan called for novel strategies that promoted high school and college completion, as well as career training. When you consider some of the statistics, it is easy to see why the president and others are concerned about the nation's education crisis, as well as how the United States will fare in years to come in the global economy. For instance, less than half of new college students earn an associate degree within three years or a bachelor's degree within six years.¹ This issue is compounded when we find that there continues to be a shortage of qualified graduates for skilled labor positions within the United States.² An innovative program that has proven to address these issues is the career and technical education (CTE) dual enrollment program.

Dual enrollment programs, sometimes referred to as dual credit or concurrent enrollment, allow students to earn high school and college credit while they are taking a college course through their local four-year or community college. Though dual enrollment programs typically have been reserved for academically focused students, increasing numbers of CTE programs are providing such opportunities for their students, as well. Support for this approach is seen in a variety of national initiatives. For example, the U.S. Department of Education's College and Career Transition Initiative encourages the creation of career pathways that include dual enrollment experiences for students. This is similar to the educational goals of many states, including those of New Mexico, which this article will focus on.

Dual Enrollment: History and Research

Dual enrollment emerged in the 1970s and 1980s in response to a need to help ease the transition between high school and college, to develop vocational readiness and to reduce the time it took to obtain a college degree.³ Some states created dual enrollment programs for better relationships between high schools and colleges, to enhance K–12 efficiency, to increase rigorous college-prep curriculum for all students and to reduce remediation.⁴

Researchers JoHyun Kim and Debra Bragg⁵ conducted a tri-state five-year study that documented the benefits of dual enrollment programs. Their findings showed that more than 75 percent of students were college-ready in reading and writing after completing a dual enrollment course, and 81 percent were college-ready in math, compared to their non-dual enrolled peers. They have also found that low-income and minority students benefited from dual enrollment courses more than their peers.

Dual Enrollment: In Practice

Dual enrollment programs are collaborative efforts between high schools and colleges where high school students (usually juniors and seniors) are permitted to enroll in actual college courses, often on a college campus, rather than a collegelevel course on the high school campus, as in the case of advanced placement (AP) or International Baccalaureate. Dual enrollment programs provide students with a challenging academic experience and the opportunity to earn college credit prior to high school graduation.

Dual enrollment has also become a component of many CTE programs because its goals mirror those of a variety of CTE reforms: increasing STEM concepts being taught and raised program accountability and rigor.

As participation in dual enrollment courses expands across the country, there has been heightened attention placed on the rigor and authenticity of these courses, particularly when students are offered this credit on the high school campus, rather than on the college campus, with high school CTE teachers serving as adjuncts of the university. Over the last four years, Eastern New Mexico University (ENMU), which is the largest university

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provider of dual enrollment courses in the state of New Mexico, has tested an online/in-class hybrid model and has witnessed the success it brings to students, as well as the benefits reaped by secondary and postsecondary institutions.

Hybrid Dual Enrollment Program Model

New Mexico requires all students to take at least one dual credit/dual enrollment course or AP class to fulfill graduation requirements. Those classes that are dual credit must have been completed successfully with a grade of C or better. In the 2012–2013 school year, 79 percent of students met this criterion. It was also found that 41 percent of the students limited themselves to taking only one college course during their high school career.

The CTE dual enrollment program at ENMU has four specific goals: access, accountability, affordability and student success.

We work to provide statewide access to the program, recruiting all students, especially those who do not traditionally participate in dual enrollment, like minority and low socioeconomic-status students. Accountability is upheld through our unique online/in-class hybrid model, with the university faculty administering online content (assessments) and the secondary CTE teacher serving as a university adjunct instructor who supervises lab activities. This model keeps costs down as it allows teachers to integrate dual credit courses into their standard curriculum, and it is free for students and the school district because the courses are paid for by the state. In regard to student success, it is vital that there are established relationships with school leaders, teachers and students. We strive for student success through high school visits and positive relationships with all stakeholders.

For the model to be successful, school administrators, secondary teachers and university faculty must be in agreement on the courses offered and in what format they will be taught. A memorandum of understanding is kept on file with the high school, college and the state public

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education department. Teachers must be deemed qualified by the university faculty, have a minimum of a bachelor's degree and industry experience. Students must be at least a junior and in good academic standing (minimum 2.0 GPA). Teachers are provided with a small stipend for their efforts.

Currently, ENMU offers dual credit using the hybrid/in-class model for six CTE courses: Introduction to Metal Fabrication, Rural Buildings Construction, Principles of Engines and Power Units, Introduction to Animal Science, Dairy Science and Introduction to Horticulture. ENMU faculty supply a course syllabus, lab manual and course content handbook—just as if students were taking a course on campus at the university. Secondary CTE instructors teach their own material, which is supplemented by material from the university representative. When possible, the university faculty will make visits to the high school to work with the instructors and students currently taking a dual enrollment course.

Every summer, ENMU offers a professional development workshop for participating instructors in order to foster and maintain a good relationship between the university and secondary instructors. To ensure program rigor, university instructors and high school teachers work together to make sure students are performing their own work and are putting forth the required effort.



April 2015 Techniques 31

Fast Track to Learning

Student assessments are developed by the university instructor and are completed online through the university blackboard system, which increases student accountability and upholds the high standards of the university. This method also introduces students to the online course system offered at the university, establishes a relationship with university faculty and provides the CTE instructor with updated curriculum.

Researchers have found that programs with the hybrid course model have a high probability of success because teachers deliver the same rigorous college content while considering the pedagogical strategies that may be better suited to engaging secondary students.⁶

Credit

Students participating in ENMU's CTE hybrid dual enrollment program can earn up to 18 hours of college credit. The credit they earn is not limited to being applied to one institution; they can use the earned credits at ENMU or transfer them to any university in the country. We have not encountered a single university that has not accepted the credit earned through this program.

Additionally, the credit they earn can be used toward a degree or as elective credits. The program not only prepares them for the rigors of postsecondary education, but it also cuts down on the total number of hours needed in order to earn a degree. In some cases this allows students to begin taking upper-division courses sooner than their peers, exposing them to instructors and courses in their intended major earlier on.

Program Impact

Since the fall of 2010, the number of students participating in the CTE dual enrollment program has increased more than 400 percent, which demonstrates student interest and the value of the program (Table 1). We saw the largest increase in enrollment during the 2013–2014 school year, the year after the university began offering the hybrid course model. We also saw greater administrator and counselor support for the program due to increased course accountability. The table also illustrates statewide participation of schools with CTE programs.

Teachers who have worked with this program cite several benefits, including encouraging students to stay in school, an increased interest in postsecondary education, increased program appeal and community reputation. The CTE dual enrollment program has also been shown to assist in student recruitment and the improvement of student work, and it has encouraged teachers to stay up to date with current industry trends, as well. The program also helps teachers and schools maintain a positive relationship with institutions of higher learning-both a beneficial outcome and a requirement under state school accountability standards in many cases.

While the strengths and benefits of

the program have been identified, areas that merit program improvement exist, as well. The most prominent areas for improvement are in students learning how to access online assessments, aligning laboratory activities to match online assessments and ensuring secondary programs have the needed resources in regard to technology.

The program itself, as well as the courses that are being offered and in what format they are offered, are continually changing and adapting to best serve the needs of the students, secondary schools and the university. Program leaders must continually work to make the necessary pedagogical, program and course content changes. These changes should include input from all stakeholders—university dual enrollment program directors, campus administrators, counselors, parents and students. **Tech**

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ENDNOTES

- National Center for Education Statistics. (2011). *The condition of education 2011.* Washington, DC: U.S. Department of Education.
- Speroni, C. (2011a). Determinants of students' success: The role of advanced placement and dual enrollment programs. An NCPR working paper. New York, NY: National Center for Postsecondary Research. Retrieved from: http:// files.eric.ed.gov/fulltext/ED527528.pdf
- Bailey, T. R., & Karp, M. M. (2003). Promoting college access and success: A review of creditbased transition programs. Washington, DC: U.S. Department of Education. Retrieved from: http:// files.eric.ed.gov/fulltext/ED482497.pdf
- Krueger, C. (2006). Dual enrollment: Policy issues confronting state policymakers. Policy Brief. Denver, CO: Education Commission of the States. Retrieved from: http://ecs.org/ clearinghouse/67/87/6787.pdf
- Kim, J., & Bragg, D. D. (2008). The impact of dual and articulated credit on college readiness and retention in four community colleges. *Career and Technical Education Research*, 33(2), 133–158.
- Hughes, K. L., Karp, M. M., Fermin, B. J., & Bailey, T.R. (2005). *Pathways to college access and success*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education. Retrieved from: www2.ed.gov/about/ offices/list/ovae/pi/cclo/cbtrans/finalreport.pdf

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Table 1. ENMU CTE Dual Enrollment

Year	No. of Students Enrolled	No. of Schools Enrolled	Percentage of State Programs Enrolled
2010-2011	347	24	28.9
2011–2012	537	27	32.5
2012-2013	808	25	30.1
2013-2014	1253	34	40.9
2014-2015	1414	36	43.3

32 Techniques April 2015