

Examining the Intersection of Online Dual Credit and College Readiness

by John Lang, OCCRL Research Assistant

In December 2015, OCCRL published a report on dual credit policy and practice in Illinois, focusing on access and opportunity for underserved students (Zamani-Gallaher, North, & Lang, 2015). Based on interviews with 26 of 48 colleges throughout the state, we reported on a physical shift in dual credit course offerings from the community college campus to the high school campus. While courses taught on a college campus might offer high school students a fuller “college experience,” the model often translates into a financial challenge for students, especially those from underserved populations. Of the 26 colleges, 13 offered dual credit courses on the college campus, and the vast majority charged full tuition. Since high school students are not eligible for financial aid—excepting the recent pilot program by the U.S. Department of Education—the burden of tuition, fees, and materials, as well as transportation, often means barriers rather than gateways to college readiness.

Alongside and often instead of college campus offerings, we found that 24 of the colleges offered dual credit courses by way of high school instructors and classrooms. In addition to greater physical access—since students were already there—the shift to the high school campus translated into greater financial access. Twenty-one programs offered courses at no charge, and two offered reduced rates. Only one charged full tuition. To the question of access and opportunity, especially for underserved students, high school-based dual credit seems to be the answer.

Nationally and internationally, online courses are increasingly viewed as the new mode of education and as solutions to problems of access for the underserved and marginalized. In 2013, a New York Times op-ed proclaimed, “there is one big thing happening that leaves me incredibly hopeful about the future, and that is the budding revolution in global online higher education. Nothing has more potential to lift more people out of poverty—by providing them an affordable education to get a job or improve in the job they have. Nothing has more potential to unlock a billion more brains to solve the world’s biggest problems.” The editorial concluded,

“I can see a day soon where you’ll create your own college degree by taking the best online courses from the best professors from around the world... paying only the nominal fee for the certificates of completion. It will change teaching, learning, and the pathway to employment” (Friedman, 2013).

In this brief article, we will not consider online dual credit in light of the revolution that seems to be at hand. Instead, we will consider online dual credit in relation to college readiness. While the literature on online education is vast, studies that take up online dual credit are rare and only offer a partial picture of the model. Alongside the college and high school campus models, we found eight of 26 colleges offered online dual credit in some form. In most cases, a college instructor taught these courses. For Southeastern Illinois College, a rural district, the bulk of dual credit courses were delivered online. Moreover, given limited Internet access in many areas, Southeastern used high school computer labs to deliver online classes.

While online dual credit courses may increase accessibility in terms of distance or convenience, we found that financial accessibility is mixed.

Rend Lake College, another rural district, described a hybrid of “distance learning” that combined three modes of course instruction. Students from multiple school districts gathered at their respective high schools for an online course. The course instructor, a college faculty member, traveled a circuit from one high school to the next to deliver the course in person to at least one school per session. Each class session was simultaneously broadcast to the other high schools. Thus, the course combined the resources and logistics of an online and in-class course, and high school and community college.

While online dual credit courses may increase accessibility in terms of distance or convenience, we found financial accessibility is mixed. Two programs charged full tuition for online courses, and one charged \$40 more than regular college-campus tuition. One program reduced tuition by 50%, one charged a flat fee of \$25, and another did not charge tuition due to a program grant.

In recent years, the National Center for Education Evaluation and Regional Assistance conducted several studies of online education in public high schools. In a study of Iowa, 56% of participating high schools reported the use of online dual credit courses in 2012–2013 (Clements, Stafford, Pazzaglia, & Jacobs, 2015). In Wisconsin, 10% of high schools used online courses to address dual credit academic objectives (*ibid.*). In a study of New York high schools, 71% of Capital Area School Development Association high schools desired to increase their use of online dual credit courses (Clements, Zweig, & Pazzaglia, 2015). Alongside these reports, which offer a state-level picture of online dual credit, two recent studies offer an on-the-ground look at design and delivery.

In 2008, Stephen F. Austin State University (SFASU)—located not in Austin, Texas, but amid three National Forests about halfway between Dallas and Houston—launched an online dual credit program serving five 1A school districts, which was later expanded to 2A and 3A districts. The initial focus was college algebra, though trigonometry and statistics were added after the pilot year (Harris & Stovall, 2013). The need for an online dual credit solution came from all sides. At a state level, Texas introduced the requirement that all high schools offer upper-level courses in four foundational areas, including mathematics. For smaller districts, this requirement presented a problem since qualified teachers were in short supply. While SFASU had the teaching capacity, distance, travel time, and transportation costs made a centralized college campus model impracticable. Given limited Internet access in rural areas, most often dial-up, online delivery to a student's home was also an obstacle. The solution resembled the model at Southeastern Illinois College in that SFASU began delivering online dual credit taught by a college instructor and beamed directly to high school classrooms.

The program combined the flexibility and accessibility of localized delivery with a consistent structure built in to the program by SFASU. Students at each high school took dual credit courses as a class and as a part of their set schedules. This way, the courses could be delivered to all students at the same time via the Blackboard platform, and often with a high school teacher overseeing the students' work. The courses were divided into weekly modules consisting of .pdf lectures, homework, and quizzes. Exams were proctored on campus and graded by the university.

Harris and Stovall, who designed the program and co-authored the 2013 article, "Online Dual Credit Mathematics for Rural Schools," reported on a successful three years, from the pilot in 2008 to fall 2010. While the authors defined "success" as a C-grade or better, which may or may not be the best measure, of 119 students all but two were successful. Unfortunately, the authors did not provide a breakdown of student success by grade, from A to C. Harris and Stovall also pointed to financial accessibility as a measure of success. Instead of charging the normal \$750 for a 3-credit class, the online course charged \$150, which was covered by the school district. A student can only be successful if she or he has access, and the tuition structure helped to overcome this basic obstacle.

Not surprisingly, building a dynamic and easy-to-use online teaching environment was the biggest challenge, from platform problems to bandwidth limits to firewalls that interpreted online education as forbidden material. Perhaps more surprising, or perhaps not, were limitations of the human kind—something technology is supposed to overcome. Harris and Stovall described online courses as a "sheltered environment" that prepares students for the college experience by disembodying the educational experience. Another challenge was on the administrative side. Online dual credit is possible only through a strong partnership between the university and local high schools. The partnerships proved less durable, however, as the authors reported significant turnover in school administrators and teachers, which translated into a "break in continuity of the program from year to year." Of course, all educational endeavors experience challenges, and online dual credit is no different. What is important here is the practical experimentation with online dual credit that seems to have tackled a range of issues, including statewide requirements, limited resources at a local level, and the educational needs of students preparing for college, while also contributing to our understanding of design and delivery by flagging challenges.

From Texas we turn to Stark County, Ohio, and a recent study by the Stark Education Partnership (SEP) that asked the question that often comes to mind about online education in general: What kind of learning does it truly foster? In the SEP report, "Do Facilitated Online Dual Credit Courses Result in Deep Learning?" (2015), the question became two-fold. Does online education foster deep learning? Does facilitated teaching—combining a disembodied college

instructor with an onsite “facilitating teacher”—help students achieve that aim? The report then added a crucial ingredient to the mix. SEP described the geographic area of its study as small and rural with high rates of poverty. In many cases, the students were first-generation, lacking the cultural and familial momentum that could carry them to college. Accordingly, the concern was one of linkages: facilitated online courses to foster deep learning for underserved students as a pathway to college.

What is deep learning? For SEP, deep learning means “utilizing communication and problem-solving skills, incorporating meaningful projects, and encouraging collaboration.” To assess the results of this model, SEP surveyed 209 students, as well as instructors and facilitating teachers, in 16 school districts. The results seem promising if not resounding. Just over half of instructors and facilitating teachers reported that students were engaged in deep learning such as problem solving, collaboration, and self-directed learning. One notable exception is that 95% believed students had gained “complex knowledge” in the subject area. Student responses seem to mirror the teaching side. Fifty-six percent reported deep learning by way of collaborative essays, journaling, and research papers, among other activities, and most students appreciated the focused and intensive course of study that cut down on busy work and wasted time. Course grades seem to support a level of success, with 39% of students receiving an A and 32% receiving a B. On the other side, 11% received a D or below.

Interestingly, SEP asked a key research question: “What aspects of the online dual credit course support deep learning?” None of the survey participants seem to have identified “facilitating teaching” as a factor. Nonetheless, the details of the survey suggest that the facilitating teacher is in fact the glue that holds things together. In all, facilitating teachers identified over 30 roles they played in the classroom, including help with assignments, research guidance, group facilitation, help with presentations, ongoing encouragement, coordination between students and faculty, tech troubleshooting, and monitoring progress toward accountability.

The study also highlights a limit to online dual credit, even by way of facilitated teaching, as a path to college readiness for underserved and first-generation students. One question asked in the study was, “What strengths do students have that may contribute to their success in online dual credit courses?” Based on responses by college faculty and facilitating teachers, SEP reported that “in order to engage in deep learning at the college level in online dual credit courses students need to exhibit some foundational capabilities.” These include maturity, independence, motivation, and background knowledge. In a sense, then, deep learning requires deep-learning readiness, which is its own kind of deep learning. The former helps students in college-level courses to prepare for college; the latter helps students to succeed in college-level dual credit courses.

The problem the study acknowledges is that a student’s repertoire does not always include “college knowledge” to begin with. The danger is that online dual credit courses will be both sheltering and bewildering for students who are not ready, setting them up for failure rather than success as a question of deep learning, grades, or any other measure. How, then, to prepare students for deep learning by preparing them with foundational capabilities? This question merely points to the limits of the model in question and the study of it. The facilitated teaching model is not designed to add those foundation capabilities if a student enters without them. In one sense, this is simply a reminder that only some students will be ready for a college-level course, no matter their circumstances. However, it also returns us to the



While “dual credit” is a comparatively stable concept, the meaning of “online” education is wildly far-reaching and constantly changing.

basic concern of the study, which is helping undeserved students to advance on to successful college careers. Here, the dual-instructor dual credit model seems to be vital but not sufficient in the face of myriad educational and other obstacles that students face.

The studies above suggest the promise of online dual credit and highlight the need for more research on design and delivery, best practices, and problems. For OCCRL, the survey points to the need for an in-depth study of online dual credit in Illinois as a way to contribute to the currently slim literature on the topic. We conclude with an obvious observation that might be helpful to make. While "dual credit" is a comparatively stable concept, the meaning of "online" education is wildly far-reaching and constantly changing. In the mid-1980s, online education was a question for library sciences. Take for example an article in *Library Journal* titled, "Online Bibliographic Searching: A Pilot Project" (Kachel, 1986), which included a photo of students using an Apple IIe. The moral of the story here is that once upon a time "online research" was a research question that needed to be piloted.

One of the first online programs at a high school was in travel and tourism. A 1997 article, "High Schools Go Online for Travel and Tourism Training," reported on a "collaborative effort between Lake Worth Independent School District and American Airlines Travel Academy" that helped "students to qualify for a wide variety of

jobs in travel and tourism" (Driessen, 1997). In this case, "online" meant direct access from the high school to the airline reservation system to give students hands-on experience. The article declared the program to be a "genuine breakthrough in school-to-work training... in the world's biggest and fastest-growing industry," namely the industry of travel agents.

It seems safe to say that what we call "online" education promises to be outdated almost immediately. Someday, researchers will look back and note that students once had to plug computers into the wall, whereas now they can plug themselves into the computer. The college faculty used to instruct from the college campus. Now the instructor is artificial intelligence (AI) that lives virtually everywhere. The facilitating teacher is a facilitating robot that moves from student to student. In fact, the researchers will probably be computers too. For now, however, our concern is college and career readiness in a global economy, especially for underserved, marginalized, and first-generation students. Given a brief look at online dual credit as a solution to educational and financial access, the approach is deserving of a great deal more research and study to formulate and fine-tune its design and delivery.

References

- Clements, M., Stafford, E., Pazzaglia, A. M., & Jacobs, P. (2015). *Online course use in Iowa and Wisconsin public high schools: The results of two statewide surveys*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2015065.pdf
- Clements, M., Zweig, J., & Pazzaglia, A. M. (2015). *Online course use in New York high schools: Results from a survey in the Greater Capital Region*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from <http://files.eric.ed.gov/fulltext/ED555633.pdf>
- Driessen, K. (1997). High schools go online for travel and tourism training. *Tech Directions*, 57(4), 20.
- Friedman, T. L. (2013, January 26). *Revolution Hits the Universities*. New York, NY: New York Times.
- Harris, R. J., & Stovall, S. T. (2013). Online dual credit mathematics for rural schools. *Primus*, 23(5), 434–440.
- Kachel, D. E. (1986). Online bibliographic searching: a pilot project. *Library Journal*, 111(8), 28.
- Stark Education Partnership (2015). *Do facilitated online dual credit classes result in deep learning?* Canton, OH: Author. Retrieved from <http://eric.ed.gov/?id=ED556125>
- Zamani-Gallaher, E.M., North, J.L., & Lang, J. (2015, December). *At the crossroad of access and opportunity: Funding and dual credit participation in Illinois*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from <http://occrll.illinois.edu/docs/librariesprovider4/dual-credit/crossroads.pdf>