REL Midwest Reference Desk

Dual Enrollment in Rural Settings

March 2015

Question

1. What research is available on dual enrollment in rural education?

Background

REL Midwest received a request for information on dual enrollment in rural education.

Following an established REL Midwest research protocol, we conducted a search for research reports as well as descriptive and policy-oriented briefs and articles on dual enrollment in rural education. The sources include federally funded organizations, additional research institutions, several educational research databases, and sites we found in a general Internet search using Google.

We also searched for appropriate organizations that could be resources on this issue. We have not done an evaluation of these organizations or the resources themselves but offer this list for your information only.

1. What research is available on dual enrollment in rural education?

Catron, R. (2001). Dual enrollment in Virginia. *New Directions for Community Colleges*, *2001*(113), 51–58.

> *From the abstract:* "This chapter traces the ten-year history of the dual enrollment program in Virginia, highlights its successes, and identifies issues that will be examined for the future. It also identifies how dual enrollment can serve the needs of rural as well as urban communities."

> *Note:* REL Midwest tries to provide publically available resources whenever possible. Although we were unable to locate a link to the full-text version of this article, we determined that it might be of interest to you. The resource may be available through university or public library systems.

Dodge, M. B. (2012). Dual enrollment in a rural environment: A descriptive quantitative study. *Community College Journal of Research and Practice, 36*(3), 220.

> *From the abstract:* "Dual enrollment is a federally funded program that offers high school students the opportunity to earn both high school and postsecondary credits for the same course. While the phenomenon of concurrent enrollment in postsecondary and

college educational programs is not new, political support and public funding has drawn focus to the policies of dual enrollment as an initiative of the No Child Left Behind (NCLB) Federal Act of 2001. This descriptive, quantitative study observed courses taken by dual enrollment students from a program seated in rural western Pennsylvania near the Allegheny foothills. Course registrations for 164 students between spring 2006 through spring 2008 semesters were examined. Implementation of NCLB guidelines for course selection and examples of how such courses have been researched were discussed. Concerns about course selection observed in other states were raised."

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Ferguson, P. A. (2014). *The efficacy of dual enrollment programs influencing the post-secondary motivations and commitments of rural secondary school students.* Doctoral dissertation, University of South Carolina–Columbia. Retrieved from http://scholarcommons.sc.edu/etd/2827

From the abstract: "Rural secondary school students are often characterized as possessing fewer of the assets necessary for college enrollment, such as role models, moderate to high income, advanced high school coursework and exposure to high skill occupations (Gibbs, 2000). However, the students may participate in secondary and post-secondary initiatives, known as dual enrollment programs, which allow secondary school students to take college courses while enrolled in high school (Alliance for Excellent Education, 2010). Though the programs provide advanced coursework, current dual enrollment research presents conflicting information about the initiative's impact on the post-secondary success of its participants (Bailey, Hughes & Karp, 2002; Bragg & Kim, n.d.; Karp & Jeong, 2008). Thus, the study examines how dual enrollment programs contribute resources and opportunities to foster the post-secondary motivations and commitments of rural secondary school students. The investigation, in a case study format, explores the structures, policies and practices of dual enrollment programs with engagement theory and social identity theory as its theoretical basis. The qualitative study includes interviews, observations and artifact reviews of dual enrollment programs at three South Carolina community colleges and includes the perspective of students, parents and program administrators. Findings of the study reveal a college-going standard, cooperative partnerships, college-going networks, high school support, financial assistance, college instructors and courses as well as a college identity-building process via significant elements of dual enrollment programs provided to rural secondary school students."

Gertge, P. A. (2008). Analyses of dual credit in rural eastern Colorado. *Community College Journal of Research and Practice, 32*(8), 549–558. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/10668920500442158#.VMwJKEf498E

From the abstract: "The purpose of this study was to analyze the available data on dual credit programs at 29 high schools served through five college centers of one community

college over a time span of nine years. This is the first study completed in Colorado examining the PSEO (Post Secondary Enrollment Options) Act that allows dual credit programs funded by the state. It investigates the variables associated with student access and selection. The results of the study suggest that the purpose of the legislation is being met. Nearly all of the selected high schools provide some dual credit courses to eligible high school students. The data also indicated that there is a strong relationship between distance education among schools linked by networks and the rate of participation."

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Harris, R., & Stovall, S. (2013). Online dual credit mathematics for rural schools. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies, 23*(5). Retrieved from http://www.tandfonline.com/doi/abs/10.1080/10511970.2012.736450#.VMwK4Ef498E

From the abstract: "Students from small rural schools (class 1A, 2A, and 3A) historically have not had access to dual credit courses for several reasons including distance from a college campus, affordability, and district teaching strength. In an effort to address these problems and to begin the college experience sooner, a new program was developed by the Mathematics Department at Stephen F. Austin State University. This program is based on the creation and delivery of two online courses in mathematics, College Algebra and Plane Trigonometry."

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Holian, L., Alberg, M., Strahl, J. D., Burgette, J., & Cramer, E. (2014). *Online and distance learning in southwest Tennessee: Implementation and challenges* (REL 2015–045). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Appalachia. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/appalachia/pdf/REL_2014045.pdf

From the abstract: "The purpose of this study was to increase the understanding among members of the Southwest Tennessee Rural Education Cooperative (SWTREC), a coalition of superintendents from 12 districts (half of which are rural) surrounding Memphis, about the online and distance-learning courses offered by schools that compose the Cooperative. Data for this report were collected through an online questionnaire administered by districts in the SWTREC in April 2013 and completed by one person from each participating school. Seventeen of the twenty-one high schools within the SWTREC districts responded to the survey. More than 80 percent of responding schools reported offering online or distance-learning courses in school year 2012/13. On average,

schools provided more online than distance-learning courses, and they had higher enrollments in online courses. Both online and distance-learning courses were used to provide students with access to dual enrollment courses. Schools that offered online courses most often identified the opportunity for students to accelerate credit accumulation as a 'very important' reason for offering the courses. Technological limitations—both the availability of technology and restricted periods when technology was available—were barriers schools perceived in offering online and distance-learning courses."

Johnson, T., & Brophy, M. (2006). Dual enrollment: Measuring factors for rural high school student participation. *The Rural Educator, 28*(1), 25–32. Retrieved from http://files.eric.ed.gov/fulltext/EJ783865.pdf

From the abstract: "The purpose of this study was to explore the reasons 162 rural area high school students participate in the dual enrollment program. Dual enrollment programs allow high school students to enroll in college courses for credit prior to high school graduation with local school districts covering the cost of tuition. Participants in this study were recruited from two rural agricultural counties from Washington State attending a local college. Exploratory factor analysis revealed that dual enrollment participation was related to academics, financial, social, and choice reasons. Results showed no significant differences between 11th and 12th grade participants regarding financial and choice reasons to participate. However, statistically significant differences were found regarding academic and social reasons for participation. Implications for rural educators and recommendations for future research regarding dual enrollment programs are discussed."

O'Connor, K. B., & Justice, M. C. (2008). Evaluating dual credit enrollment at selected rural northeast Texas high schools. *Southeastern Teacher Education Journal, 1*(1). Retrieved from http://connection.ebscohost.com/c/articles/40395818/evaluating-dual-credit-enrollment-selected-rural-northeast-texas-high-schools

From the abstract: "This research study involved the identification, categorization, and comparison of effective critical incidents related to high school students' decisions to enroll or not to enroll in a dual credit college course. The method of this study followed the guidelines of John Flanagan's Critical Incident Technique. Demographic information and critical incident data were obtained via a written survey. Participants included 223 high school seniors from four northeast Texas high schools. Data analysis was conducted by categorization of themes that emerged from the effective and ineffective incidents. A total of 518 critical incidents were reported identifying 275 effective incidents recorded into six categories and 243 ineffective incidents recorded into eight categories. The top two aspects of enrolling in dual credit courses that students perceived as most effective were: Incentive and Challenges Offered and College Readiness; and similarly the top two most ineffective were: Financial Reasons and Scheduling."

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determined that it might be of interest to you. The resource may be available through university or public library systems.

Provasnik, S., KewalRamani, A., Coleman, M. M., Gilbertson, L., Herring, W., and Xie, Q. (2007). *Status of education in rural America* (NCES 2007-040). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2007/2007040.pdf

Excerpted from the report: "The percentage of public high school students in rural areas attending schools offering dual credit courses (76 percent) was lower than in towns (86 percent), but not measurably different from cities and suburbs."

Smith, D. (2007). Why expand dual-credit programs? *Community College Journal of Research and Practice, 31*(5), 371–387. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/10668920600932884#.VMvqXUf498E

From the abstract: "This study examined the relationship between participation and location of dual-credit enrollment and the educational aspirations of high school students. A total of 304 students from 5 rural Kansas high schools were surveyed. The return rate was 80.9%. Results indicated that participation in dual-credit programs had a positive and significant relationship with educational aspirations. Other independent variables that demonstrated strong predictive importance for educational aspirations were parents' educational levels and grades. The findings further indicated that concurrent enrollment location was a significant predictor of educational aspirations."

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Additional Resources

- Institute of Education Sciences. (n.d.). *The implementation of dual enrollment and dual credit programs in non-urban Kentucky school districts* (work in progress). Arlington, VA: REL Appalachia, Kentucky College and Career Readiness Alliance. Retrieved from http://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=437

  From the website description: "Kentucky has made college and career readiness the primary goal of its public education system. One of the key strategies Kentucky schools are emphasizing is providing students the opportunity to participate in college-level courses while still in high school. This study will examine the implementation of dual enrollment/dual credit (DE/DC) programs in a sample of Kentucky school districts. Research Questions:

  1. How are DE/DC programs implemented? How do the districts differ in terms of DE/DC implementation and how are they similar? Areas of focus include, but are not limited to participation policies and practices, participation rates and student

demographics, type of postsecondary institutions offering courses, types of courses offered, course scheduling, teacher selection process and teacher background, program quality evaluation, costs of and funding for DE/DC courses, and alignment of districts' DE/DE programs with state policies and recommended practices and guidelines from the research literature.

2. What barriers to and successes of DE/DC program implementation have the districts experienced, and what strategies have they used to overcome barriers or facilitate success?"

Note: This study is currently in progress; its release is slated for summer 2015.

- Karp, M., Stanley, M., & Wallinger, L. (2012, September 24). Increasing access to college preparatory courses in rural communities through dual enrollment [Webinar]. Arlington, VA: REL Appalachia. Retrieved from http://www.relappalachia.org/events/increasing-access-to-college-preparatory-courses-in-rural-communities-through-dual-enrollment/

From the website description: "REL Appalachia hosted an informative presentation on the latest research pertaining to dual enrollment programs and their relationship to high school graduation, college enrollment, and college retention. The panel included both dual enrollment research experts and school administrators with hands-on experience in dual enrollment programs. The presenter discussed common challenges that can arise in the implementation of dual enrollment programs and strategies for addressing those challenges; they also responded to questions from the audience. The interactive session focused on resources available to school districts to support their dual enrollment efforts."

Note: The website contains a link to the webinar. *Education Week*'s blog focusing on rural education also covered and summarized the webinar, which you can access at http://blogs.edweek.org/edweek/rural_education/2012/10/dual_enrollment_increases_students_access_to_college_courses_in_rural_communities.html

- Zinth, J. (2014). *Dual enrollment: A strategy to improve college-going and college completion among rural students*. Retrieved from http://www.ecs.org/clearinghouse/01/12/61/11261.pdf

From the summary: "Research shows that students who participate in dual enrollment are more likely than their peers to finish high school, enter college and complete a degree. This means dual enrollment can greatly benefit students in rural areas, which report lower college-going and postsecondary attainment rates than other locales.

However, rural areas face unique challenges in providing high-quality dual enrollment programs:
  o Securing qualified instructors, either high school teachers who have the qualifications to lead college-level courses or postsecondary instructors.

- o Covering program costs, as many rural districts face declines in enrollment and the funding that follows students in many states.

- o Addressing program logistics, including the challenges of offering a course to a small number of students and offering career/technical education coursework when high schools may not have the latest technical equipment but the nearest community college is a long drive away.

This report will discuss how states are rising to these challenges, including these examples:

- o A public–private partnership in Ohio includes funding to help eight colleges and universities create and administer an 18-month master's degree with a teacher-friendly schedule.

- o Texas authorizes workforce investment funds to support dual enrollment programs targeted to address the needs of high-demand fields.

- o Ten states authorize a course to be offered at a location other than a high school or college, easing travel burdens. This includes Illinois and Wyoming.

- o A final section will address the opportunities posed by delivering dual enrollment."

Additional Organizations to Consult

- The National Research Center on Rural Education Support (NRCRES) http://www.nrcres.org/index.html

  From the website description: "NRCRES has conducted a focused program of research that addresses significant problems in rural education. More than 40% of all American schools are in rural areas and 30% of all students attend rural schools. The research and development work of NRCRES sought solutions to improve the quality of rural education, including the following issues:

  - o retention of qualified teachers

  - o student achievement and dropout

  - o availability of and access to opportunities for Advanced Placement courses

  - o improvement in teacher quality through professional development"

Keywords and Search Strings Used in the Search

- dual enrollment AND rural schools

- dual enrollment AND rural education

- dual credit AND rural schools

- dual credit AND rural education

Search of Databases and Websites

Institute of Education Sciences sources: Institute of Education Sciences (IES), Regional Educational Laboratory (REL) Program, National Center for Education Statistics (NCES), National Center for Education Research (NCER), National Center for Education Evaluation and Regional Assistance (NCES)

Other federally funded sites: The National Research Center on Rural Education Support (NRCRES)

Additional data resources: Education Development Center, ERIC, EBSCO databases, ProQuest, Google Scholar, Google

Criteria for Inclusion

When Reference Desk researchers review resources, they consider—among other things—four factors:

- *Date of the publication:* The most current information is included, except in the case of nationally known seminal resources.

- *Source and funder of the report/study/brief/article:* We gave priority to sources funded by IES, national entities, and certain other vetted sources known for strict attention to research protocols.

- *Methodology:* Randomized controlled trial studies, surveys, self-assessments, literature reviews, policy briefs. We generally give priority for inclusion to randomized controlled trial study findings, but the reader should consider at least the following factors when basing decisions on these resources: numbers of participants (just a few? thousands?); selection (Did the participants volunteer for the study, or were they chosen?); representation (Were findings generalized from a homogeneous or a diverse pool of participants? Was the study sample representative of the population as a whole?).

- *Existing knowledge base:* Although we strive to include vetted resources, there are times when the research base is slim or nonexistent. In these cases, we have included the best resources we could find, which may include, for example, newspaper articles, interviews with content specialists, and organization websites.